| Your (Half Yearly Compliance Report) has been Submitted with following details | |
|---|---|
| **Proposal No** | IA/UP/IND3/267961/2022 |
| **Compliance ID** | 127147374 |
| **Compliance Number(For Tracking)** | EC/M/COMPLIANCE/127147374/2025 |
| **Reporting Year** | 2025 |
| **Reporting Period** | 01 Jun(01 Oct - 31 Mar) |
| **Submission Date** | 17-05-2025 |
| **RO/SRO Name** | Shri Ashok Kumar Sinha |
| **RO/SRO Email** | tg035@ifs.nic.in |
| **State** | UTTAR PRADESH |
| **RO/SRO Office Address** | Integrated Regional Offices Lucknow |
| **Note:-** SMS and E-Mail has been sent to Shri Ashok Kumar Sinha, UTTAR PRADESH with Notification to Project Proponent. | |

**GIL/ENV/2025-26/21** **17 May 2025**

**To,**

**The Ministry of Environment, Forest and Climate Change,**
**Regional Office (Central Zone),**
**Kendriya Bhawan, 5th Floor,**
**Sector "H", Aliganj,**
**Lucknow – 226020**

**Kind Attn: Director, MOEF& CC**

**Subject: Compliance Status of Environment Clearance accorded by Ministry of Environment, Forests & Climate Change, Government of India, New Delhi.**

Reference:

1. Environment Clearance Project for Expansion of Membrane Cell Technology based Caustic Soda Plant from 145 MTPD to 255 MTPD vide Clearance letter No- J-1101/51/2005-1A II (I) dtd. 13.10.2005

2. Environment Clearance Project for Expansion of Membrane Cell Technology based Caustic Soda Plant from 255 TPD to 365 TPD vide Clearance Letter No. J-11011/284/2006 – IA II (I) dtd. 21.05.2007

Respected Sir,

This is in reference to above-mentioned Environmental Clearance letter received from MoEF&CC, please note that we are complying all stipulated conditions. We are attaching herewith the descriptive reports (As per Annexure-1 & Annexure-2) on the status of compliance to conditions of Environment Clearance for the period **1st October 2024 to 31th March 2025.**

We hope you will find the above in order.

Yours Faithfully,

*For,* **Grasim Industries Limited,**
**Chemical Division, Renukoot**

V.K Yadav

**Dr. Vinay Kumar Yadav**
**Head – Environment & Sustainability**

**Grasim Industries Limited**
Chemical Division Renukoot
P.O.: Renukoot - 231 217,
Distt.: Sonebhadra (U.P.) India

Telephone +91- 5446 - 252044/55/75
Fax +91- 5446 - 252088

Website www.grasim.com
E-mail grasim.renukoot@adityabirla.com
CIN L17124MP1947PLC000410
PAN AAACG4464B

Regd. Office - Birlagram, Nagda - 456331, M.P., India

## Annexure-1

Environment Clearance Compliance - Project Code **IV/ENV/UP/IND-70/184/2005,** for Expansion of Membrane Cell Technology based Caustic Soda Plant from 145 MTPD to 255 MTPD vide Clearance Letter No. J-1101/51/2005-1A II (I) dtd. 13.10.2005.

Period of Compliance Report : **1st October 2024 to 31th March 2025**

**Specific Conditions:**

| Sr. No. | Conditions | Compliance Status |
|---|---|---|
| 1. | The gaseous emissions ($SO_2$, $NO_x$, $Cl_2$ & HCl) particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. | All the gaseous emission like $SO_2$, NOx, Cl2 & HCl and PM from various process units of the plant is within the limits as prescribed by the Pollution Control Board. Last One Year Stack monitoring report is attached, this monitoring done by 3rd Party.<br>Unit has also installed continuous online monitoring system for emissions testing of above parameters and real time data transfer on CPCB server on continuous basis.<br>**Annexure 1** –Stacks monitoring report done by 3rd party. |
| 2. | Ambient air quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level concentration are anticipated in consultation with the SPCB and data submitted to the Ministry. | Ambient Air Monitoring at 04 locations within premises has been done by 3rd Party. CAAQMS is installed for on-line ambient air quality monitoring at Renukeshwar Temple. Report submitted Quarterly to ministry.<br>**Annexure 2**–Monthly Ambient Air Quality monitoring report done by 3rd party. |
| 3. | The effluent generation after expansion shall not exceed 0.80 m3/ton of the product. The treated effluent shall conform to the standards stipulated by the UPPCB while granting NOC to the expansion project and for discharge in inland surface water. The company shall make efforts to maximize the use of treated effluent for green belt development within the plant complex to minimize the discharge of treated effluent into Dongia Nallah. Further, efforts shall be made by maximizing optimal re-use and recycle of treated effluent in processes and utilities to reduce the fresh water. | The effluent generation is below 0.80 $m^3$/ton of product. All effluent is treated through full fledge ETP along with RO, MEE and ATFD system.<br>Unit has already achieved and implemented Zero liquid discharge facility at site and real time data transferred on CPCB server on continuous basis through online Flow meter and PTZ camera installed at final discharge point. ***Kindly refer Annexure 3*** |
| 4. | The vent gases from chlorine absorber of sodium hydrochloride plant and HCl acid plant shall be controlled at source by effective absorption system so that Chlorine concentration in the vent gases shall not exceed 5 ppm. The vent gases shall be discharged from the stacks of adequate height for effective dispersion. | Sodium hypo-chlorite vent gases are monitored and controlled effectively at source and vent gases concentration are below the specified limits. The gases are being dispersed through the stacks more than 30-meter height.<br>Unit has also installed continuous online monitoring system for Chlorine & HCl and real time data transfer on CPCB server on continuous basis. ***Kindly refer Annexure 1*** |

Uk yadav

| | | |
|---|---|---|
| 5. | The solid waste including ETP sludge shall be disposed off in the landfill site approved by the State Control Pollution Board. Any further extension or creation of new secured landfill facility shall be as per the CPCB guidelines. | We have disposed all Hazardous waste, authorized by UPPCB though Common TSDF of Bharat Oil and U.P. Waste Management Ltd. during the period as per rules.<br><br>**Annexure 4** – Form - 3 is attached for FY 2024-25. |
| 6. | The company shall seek permission from the State Irrigation Department to draw water from the Rihand reservoir. | The water withdrawal from Rihand Reservoir is as per agreement with UP Jal Vidyut Nigam Ltd. |
| 7. | The company shall develop rainwater-harvesting structures to harvest the runoff water from the rooftop and by laying a separate storm water drainage system for recharge of ground water. | There is no feasibility of rain water harvesting potential at our site due to hilly region, as per CGWB.<br><br>**Annexure 5** – CGWA letter is attached for reference. |
| 8. | Green belt shall be developed in an area of 22.75 ha to mitigate the effects of fugitive emissions all around the plant. The development of green belt shall be as per the Central Pollution Control Boards guidelines. | Greenbelt has been developed in 82.28-hectare area around the plant. Which is around 62% of total area.<br><br>**Annexure 6** – Summary of Greenbelt is attached for your reference. |
| 9. | The project authorities shall comply with the recommendations made in the Disaster Management Plan. The Company shall install chlorine gas detectors to detect leakage of chlorine at liquid chlorine storage tanks, sodium hypo plant at vent pipe, HCl synthesis unit at vent pipe and electrolyzes area. The company should install on-line Hydrogen in Chlorine analyzer. | DMP has been prepared and has complied with its recommendation. Online Chlorine gas detectors (61 Nos) have been installed at different locations in Chlorine storage tanks, Sodium Hypo plant, HCl synthesis and Electrolyser area for monitoring of any residual chlorine leakage. Also, Online Hydrogen detectors (09 Nos) have been installed at different locations.<br><br>**Annexure 7** – List of all sensors installed in different location is attached for reference. |

U.K. Yadav

**General Conditions:**

| Sr. No. | Conditions | Compliance status |
|---|---|---|
| 1. | The project authorities must strictly adhere to the stipulations made by the Uttar Pradesh Pollution Control Board (UPPCB). | We follow the direction/guideline of UPPCB and consents are obtained. |
| 2. | No further expansion or modifications in the plant shall be carried out without prior approval of Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this ministry for clearance, a fresh reference shall be made to the Ministry to access the adequacy of conditions imposed and to add additional environmental protection measures required, if any. | No further expansion or modifications has been done. |
| 3. | The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and import of Hazardous Chemicals Rules, 1989 as amended in October 1994 and January 2000. Prior approvals from Chief Inspectorate of Factories, Chief of Controller Explosives, and Fire Safety Inspectorate etc. must be obtained. | We are complying with the MSIHC rules 1989 as amended in 1994 and 2000. We have preparedness for On Site and Off Site emergency plans and drills. |
| 4. | The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collection/treatment/storage / disposal of hazardous wastes. | Hazardous waste authorization has been obtained from UPPCB Lucknow for disposal and treatment of hazardous waste accordance with the Hazardous Wastes (Management and Handling) Rules, 2016.<br><br>**Annexure 9** – Hazardous waste authorization is attached for your reference. |
| 5. | The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under Environment (Protection) Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time) | Silencers provided to DG set vent and acoustic enclosures have been provided. The overall noise level and ambient noise levels during daytime and night time are within prescribed limits.<br>**Annexure 3** – Noise Monitoring Report for FY 2024-25 is attached for reference. |
| 6. | Occupational health surveillance program should be undertaken as regular exercise for all the employees, especially for those engaged in handling hazardous substances. The first aid facilities in the occupational health center shall be strengthened and the medical records of each employee should be maintained separately. | Annual health check-up of all employees are done. An 8-bedded OHC headed by a MBBS Doctor equipped with Ambulance are available. Records of medical examination maintained.<br>**Annexure 10** – Health examination record of all employee for FY 2024-25 is attached for reference. |

V.K. yadav

| Sr. No. | Conditions | Compliance status |
|---|---|---|
| 7. | The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA and Disaster Management Plan. The company also under takes social welfare/community development measures in the surrounding villages such as health care, education and drinking water supply facilities. | We comply with the safeguards recommended in EIA and DMP. Regular health camps, training workshops, RO drinking water, free school education etc. in villages situated around GIL are undertaken as part of our Rural development activities.<br>**Annexure 11** – Detail of expenditure made under community development as CSR scheme for FY 2024-25. |
| 8. | A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and monitoring functions. | We are having Structured Environment Management System in place and also we are having separate EMS Cell at unit level with full-fledged laboratory set up.<br>**Annexure 12** – Detail structure of Environmental Management Cell is attached for reference. |
| 9. | The project authorities will provide requisite funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment & Forests as well as State Government along with the implementation schedule for all the condition stipulated herein. The funds so provided shall not be diverted for any other purpose. | Complied.<br>We have spent Rs- 164,900,000.00 on different aspects of environmental pollution control in FY-2024-25. |
| 10. | The Ministry's Regional Office at Lucknow / UPPCB / CPCB will monitor the implementation of the project vis-à-vis environmental action plans. A six monthly compliance status report shall be submitted to monitoring agencies. | Six monthly reports are sent to authorities.<br>Refer - GIL/ENV/2024-25/76 dtd. 19 November 2024 Environment Clearance compliance for the period 1st April 2024 to 30th September 2024 submitted via E-mail & Parivesh Portal-2.O. |
| 11. | The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the UPPCB/Committee and may also be seen at Website of the Ministry at http://envfor.nic.in. This should be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office. | Advertised in two local newspapers i.e. Hindustan dated 22.10.05 & Dainik Jagaran dated 22.10.05.<br>Copy of the advertisement already sent to the regional office. |
| 12. | The Project Authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work, if any. | Data sheets sent to regional office. |

V.K. Yadav

**Annexure-2**

Environment Clearance Compliance of Project Code No. **IV/ENV/UP/IND-89/233/2007,** for Expansion of Membrane Cell Technology based Caustic Soda Plant from 255 TPD to 365 TPD vide Clearance Letter No. J-11011/284/2006 – IA II (I) dtd. 21.05.2007

Period of Compliance Report : **1st October 2024 to 31th March 2025**

**Specific Conditions:**

| Sr. No. | Conditions | Compliance Status |
|---|---|---|
| 1. | The gaseous emissions ($SO_2$, $NO_x$, $Cl_2$ & HCl) particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. | All the gases emission like $SO_2$, NOx, $Cl_2$ & HCl and PM from various process units of the plant are within the limits as prescribed by the Pollution Control Board. Latest months Stack monitoring report is attached, this monitoring done by 3rd Party.<br><br>Unit has also installed continuous online monitoring system for emissions testing of above parameters and real time data transfer on CPCB server on continuous basis.<br>**Annexure 1** –Stacks monitoring report done by 3rd party |
| 2. | Ambient air quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level concentration are anticipated in consultation with the SPCB and data submitted to the Ministry. | Ambient Air Monitoring at 04 locations within premises has been done by 3rd Party. CAAQMS is installed for on-line ambient air quality monitoring at Renukeshwar Temple. Report submitted Quarterly to ministry.<br>**Annexure 2** –Monthly Ambient Air Quality monitoring report done by 3rd party. |
| 3. | All the pipelines containing $Cl_2$ shall be connected to the Sodium Hypochlorite (Hypo) plant to control the $Cl_2$ emissions. Any $Cl_2$ escaping anywhere due to leakage, plant emergency shall be sucked into Hypo plant. High efficiency Karbate absorbers – coolers and scrubbers shall be installed for the absorption of HCl gas and scrubbing vent gases. The vent gases from chlorine absorber of sodium hydrochloride plant and HCl plant shall be controlled at source by effective absorption system so that $Cl_2$ concentration in the vent gases shall not exceed 5 ppm. The vent gases shall be discharged from the stacks of adequate height for effective dispersion. | All the $Cl_2$ pipelines are connected to the Sodium hypo-chlorite/Calcium Hypo Chlorite. High efficiency absorbers, coolers and scrubbers have been installed. The vent gases from the Sodium Hypo Chlorite and HCl plant is below the specified limits. The gases are being dispersed through the stacks having more than 30-meter height. We have also installed continuous online monitoring system for emissions and real time data transferred to CPCB server.<br>**Annexure 1** –Stacks monitoring report done by 3rd party |
| 4. | Lindane unit shall be provided with bag filters and efficient dust collectors. Scrubbers shall be provided to the $Al_2Cl_3$ unit to scrub un-reacted $Cl_2$ from reactors and $Al_2Cl_3$ vapor. | Lindane plant has been stopped permanently.<br><br>Scrubbers has been provided to the $AlCl_3$ unit to scrub un-reacted $Cl_2$ from reactors and $AlCl_3$ vapor. |

U. K. Yadav

| Sr. No. | Conditions | Compliance Status |
|---|---|---|
| 5. | Regular monitoring of fugitive emission in the work zone environment for all the relevant parameters including $Cl_2$, Hg, HCl and Benzene etc. using proper instruments shall be ensured and report submitted to the Ministry's Regional Office at Lucknow, CPCB and UPPCB. | Lindane, BHC and Mercury based processes have been stopped permanently.<br><br>Fugitive emission monitoring for relevant parameters (dust, Cl2, HCl) is done by 3rd party on quarterly basis.<br><br>**Annexure 2** –Fugitive emission monitoring report done by 3rd party. |
| 6. | Total water requirement from Rihand Reservoir shall not exceed 578* $m^3/d$ and as per the Agreement signed with UP Jal Vidyut Nigam Ltd. All the effluent shall be collected in one pit only and other pit shall be used for neutralization of the effluent in alternate cycles. Mercury bearing effluent shall be treated with Sodium sulphate to precipitate Mercury as Mercury sulphide. Treated supernatant (100%) shall be recycled back in the system. Settled sludge shall be disposed off in Hg bearing brine sludge disposal ground. Lindane plant effluent shall also be 100% recycled. The company shall make efforts to maximize the use of treated effluent for green belt development within the plant complex to minimize the discharge of treated effluent into Dongia Nallah. Further, efforts shall be made by maximizing optimal re-use and recycle of treated effluent in process and utilities to reduce the fresh water consumption. | The plant has water withdrawal from Rihand Reservoir is as per agreement with UP Jal Vidyut Nigam Ltd. |
| 7. | As mentioned in EIA/EMP report, no Mercury and/or Lindane bearing wastewater shall be discharged to Dongia Nallah/Rihand Reservoir. Regular monitoring of Dongia Nallah for all the relevant parameters shall be ensured. The treated effluent shall conform to the standards stipulated by the UPPCB for discharge in inland surface water. | We have totally stopped Lindane plant and mercury cell house.<br>Effluent treated through full fledge ETP along with RO, MEE and ATFD system.<br>Unit has already achieved and implemented Zero liquid discharge facility at site and real time data transferred on CPCB server on continuous basis through online Flow meter and PTZ camera installed at final discharge point. ***kindly refer Annexure 3*** |

V.K Yadav

| Sr. No. | Conditions | Compliance Status |
|---|---|---|
| 8. | The process sludge (non-hazardous) shall be stored at the project site or dumped as a landfill in nearby low-lying area. Hazardous brine sludge from the filter CETP shall be dumped in UPPCB approved hazardous waste storage area (TSDF) located in nearby valley. Solid waste from Lindane unit shall be used to manufacture Tri-Chloro Benzene. Fly ash generated from CPP (extracted from ESPs) shall be used for pozzolona Portland cement and brick manufacturing. Bottom ash shall be used for land filling. | All process sludge generated by different processes are being included in Hazardous waste authorization and disposed through authorized TSDF, as directed by UPPCB. ***Kindly refer Annexure 4***<br>GIL has totally stopped Lindane plant and mercury cell house.<br>Ash from CPP is being supplied to Cement plants and also used for making of bricks, blocks and road etc. Bottom ash is used for land filling. |
| 9. | Proper handling, management and disposal of Lindane and Mercury bearing sludge shall be ensured. | Related plants have been stopped permanently. |
| 10. | The company shall develop rainwater-harvesting structures to harvest the run-off water from the rooftop and by laying a separate storm water drainage system for recharge of ground water. | There is no feasibility of rain water harvesting potential at our site due to hilly region, as per CGWB.<br>**Annexure 5** – CGWA letter is attached for reference. |
| 11. | Greenbelt shall be developed in an area of 22.78 ha to mitigate the effects of fugitive emissions all around the plant. The development of green belt shall be as per the Central Pollution Control Board guidelines | Greenbelt has been developed in 82.28 ha area around the plant. This is around 62% of total area.<br>**Annexure 6** – Summary of Greenbelt is attached for your reference. |
| 12. | The project authorities shall comply with the recommendations made in the Disaster Management Plan. The Company shall install chlorine gas detectors to detect leakage of chlorine at liquid chlorine storage tanks, sodium hypo plant at vent pipe, HCl synthesis unit at vent pipe and electrolyzes area. The company should install on-line Hydrogen in Chlorine analyzer. | DMP has been prepared and has complied with its recommendation. Online Chlorine gas detectors (61 Nos) have been installed at different locations in Chlorine storage tanks, Sodium Hypo plant, HCl synthesis and Electrolyser area for monitoring of any residual chlorine leakage. Also, Online Hydrogen detectors (09 Nos) have been installed at different locations.<br>**Annexure 7** – List of all sensors installed in different location is attached for reference. |
| 13. | All the recommendations made in a Charter of Corporate Responsibility for Environmental Protection (CREP) shall be implemented in a time bound manner. | Implemented. |
| 14. | All the mercury cells of the existing Chlor Alkali (Mercury Cell) plant shall be phased out by 2012 and no further expansion will be granted. | Mercury cell permanently stopped in September 2011 well ahead of deadline 2012. |

U.K. Yadav

**General Conditions:**

<table>
<tr><th>Sr. No.</th><th>Conditions</th><th>Compliance Status</th></tr>
<tr><td>1.</td><td>The project authorities must strictly adhere to the stipulations made by the Uttar Pradesh Pollution Control Board (UPPCB).</td><td>We follow the direction/guidelines of UPPCB and consents are obtained. We are maintaining and complying the stipulated conditions and annual productions as per UPPCB Consents –
<table>
<tr><th>Sr. No.</th><th>Product</th><th>UOM</th><th>Production in Corresponding period- 1st April-2024 to 31th March 2025</th></tr>
<tr><td>1</td><td>Caustic Soda Lye</td><td>MT</td><td>1,29,000.00</td></tr>
<tr><td>2</td><td>Chlorine</td><td>MT</td><td>91,794.70</td></tr>
<tr><td>3</td><td>HCL Chemicals</td><td>MT</td><td>23,680.06</td></tr>
<tr><td>4</td><td>Stable Bleaching Powder</td><td>MT</td><td>39,936.00</td></tr>
<tr><td>5</td><td>Aluminium Chloride</td><td>MT</td><td>17,416.51</td></tr>
<tr><td>6</td><td>PAC 10% Basis</td><td>MT</td><td>49,710.66</td></tr>
<tr><td>7</td><td>Chlorinated paraffin</td><td>MT</td><td>19,487.87</td></tr>
<tr><td>8</td><td>Hydrogen Gas</td><td>Nm3</td><td>6,23,575.00</td></tr>
<tr><td>9</td><td>Sodium Hypo Chloride</td><td>MT</td><td>1,253.65</td></tr>
</table>
Annexure 8 – Copy of CTO is attached with for your reference</td></tr>
<tr><td>2.</td><td>No further expansion or modifications in the plant shall be carried out without prior approval of Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this ministry for clearance, a fresh reference shall be made to the Ministry to access the adequacy of conditions imposed and to add additional environmental protection measures required, if any.</td><td>No further expansion or modifications has been done.</td></tr>
<tr><td>3.</td><td>The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and import of Hazardous Chemicals Rules, 1989 as amended in October 1994 and January 2000. Prior approvals from Chief Inspectorate of Factories, Chief of Controller Explosives, Fire Safety Inspectorate etc. must be obtained.</td><td>We are complying with the MSIHC rules 1989 as amended in 1994 and 2000. We have preparedness for On Site and Off Site emergency plans and drills.</td></tr>
<tr><td>4.</td><td>The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collection/treatment/storage / disposal of hazardous wastes.</td><td>Hazardous waste authorization has been obtained from UPPCB Lucknow for disposal and treatment of hazardous waste.<br>Annexure 9 – Hazardous waste authorization is attached for your reference.</td></tr>
<tr><td>5.</td><td>The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under Environment (Protection) Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time)</td><td>Silencers to DG set vent and acoustic enclosures have been provided. The overall noise level and ambient noise levels during daytime and nighttime are within prescribed limits. kindly refer Annexure 3</td></tr>
</table>

VK Yadav

| Sr. No. | Conditions | Compliance Status |
|---|---|---|
| 6. | Occupational health surveillance program should be undertaken as regular exercise for all the employees, specially for those engaged in handling hazardous substances. The first aid facilities in the occupational health center shall be strengthened and the medical records of each employee should be maintained separately. | Annual health check-up of all employees are done. An 8-bedded OHC headed by a MBBS Doctor equipped with Ambulance are available. Records of medical examination maintained. **Annexure 10** – Health examination record of all employee for FY 2024-25 (Till April-24 to September-2024), is attached for reference. |
| 7. | The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA and Disaster Management Plan. The company also under takes social welfare/community development measures in the surrounding villages such as health care, education and drinking water supply facilities. | We comply with the safeguards recommended in EIA and DMP. Regular health camps, training workshops, cleaning of wells etc. in villages situated around GIL are undertaken as part of our Rural development activities. **Annexure 11** – Detail of expenditure made under community development as CSR scheme for FY 2024-25. |
| 8. | A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and monitoring functions. | We are having Structured Environment Management System in place and also we are having separate EMS Cell at unit level with full-fledged laboratory set up. **Annexure 12** – Detail structure of Environmental Management Cell is attached for reference. |
| 9. | Rs. 5.00 Crores and Rs. 0.50 Crores earmarked towards the capital cost and recurring cost/annum for environmental pollution control shall be judiciously used to implement the conditions stipulated by the Ministry of Environment & Forests as well as State Government. The funds so provided shall not be diverted for any other purpose. | Complied.<br><br>We have spent Rs- 164,900,000.00 on different aspects of environmental pollution control in FY-2024-25. |
| 10. | The implementation of the project vis-à-vis environmental action plans will be monitored by the Ministry's Regional Office at Lucknow / UPPCB / CPCB. A six monthly compliance status report shall be submitted to monitoring agencies. | Six monthly reports are sent to authorities.<br><br>Refer - GIL/ENV/2024-25/76 dtd. 19 November 2024<br>Environment Clearance compliance for the period 1st April 2024 to 30th September 2024 submitted via E-mail & Parivesh Portal-2.O. |
| 11. | The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the UPPCB/Committee and may also be seen at Website of the Ministry at http://envfor.nic.in. This should be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office. | Already advertised in two local newspapers i.e. Hindustan dtd. 27.05.07 & Dainik Jagaran dtd. 26.05.07.<br><br>Copy of the advertisement already sent to the regional office. |
| 12. | The Project Authorities shall inform the Regional Office as well as the ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work, if any. | Data sheets sent to regional office. |

V.K Yadav

**Annexure 1** –Stacks monitoring report done by 3rd party.
**Annexure 2** –Monthly Ambient Air Quality monitoring & Quarterly Fugitive report done by 3rd party.
**Annexure 3** – Monthly Effluent & Sewage water analysis report, and Monthly Noise Report, Done by Third Party.
**Annexure 4** – Form - 3 is attached for FY 2024-25.
**Annexure 5** – CGWA letter is attached for reference.
**Annexure 6** – Summary of Greenbelt is attached for your reference.
**Annexure 7** – List of all sensors installed in different location is attached for reference
**Annexure 8** – Copy of CTO is attached with for your reference
**Annexure 9** – Hazardous waste authorization is attached for your reference
**Annexure 10** – Health examination record of all employee for FY 2024-25.
**Annexure 11**– Detail of expenditure made under community development as CSR scheme for FY 2024-25.
**Annexure 12** – Detail structure of Environmental Management Cell is attached for reference.

V.P Yadav

ANNEXURE-1


# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Parwez Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/1008/2024 | | Date of Report: 04/05/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 26.04.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PSD Unit-I |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2 | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 26.0 |
| (b) | Stack gas temperature (°C) | 106.0 |
| (c) | Stack gas velocity (m/sec) | 12.47 |
| (d) | Flow rate (LPM) | 16 |
| (e) | Sampling time (minutes) | 56 |
| (f) | Volume of air sampled (liters) | 1064 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 214224 M |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-1): 1985 Reaffirmed: 2019 | 49.66 | 2.0 - 1000 | 100 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-2): 1985 Reaffirmed: 2019 | 237.15 | 4.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-7): 2005 Reaffirmed: 2022 | 128.65 | 2.0 - 1000 | 600 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/1:2015 | 11.2 | 0.1 - 20 | - |

PM Calculated at 12% $CO_2$

BDL= Below Detection Limit

..... End of Report .....

- ETRC declares that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The report issued only to the client(s).
- ETRC does not assume any liability for any claims or damages related to the quality of consumer products or the performance of the equipment connected to the circuits.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint regarding is entertained in one fortnight.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vibhuti Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTM@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No. : ETRC/EPA/11009/2024 | | Date of Report: 04/05/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. no. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 28.04.2024 |
| (b) | Stack material | RCC |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PGD unit-II |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 29.0 |
| (b) | Stack gas temperature (°C) | 105.0 |
| (c) | Stack gas velocity (m/sec) | 12.71 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 54 |
| (f) | Volume of air sampled (liters) | 1026 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 217763.17 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-1): 1985 Reaffirmed: 2019 | 43.69 | 2.0 - 1000 | 50 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS: 11255 (Part-2): 1985 Reaffirmed: 2019 | 253.28 | 1.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS: 11255 (Part-7): 2005 Reaffirmed: 2022 | 141.33 | 2.0 - 1000 | 300 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOPA/11 2015 | 11.4 | 0.1 - 20 | - |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- This result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analysed or the results should the parameters or the equipment contribute to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints regarding samples will not be entertained after 15 days.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : etrc1.lko@rediffmail.com, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA Act




## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/11010/2024 | | Date of Report: 04/05/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 28.04.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 81 m |
| (d) | Source to which stack attached | Steam Generation Boiler (CVPP) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 31.0 |
| (b) | Stack gas temperature (°C) | 152.0 |
| (c) | Stack gas velocity (m/sec) | 8.87 |
| (d) | Flow rate (LPM) | 26 |
| (e) | Sampling time (minutes) | 80 |
| (f) | Volume of air sampled (liters) | 1040 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 29128.18 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-1): 1985 Reaffirmed: 2019 | 42.18 | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-2): 1985 Reaffirmed: 2019 | 294.82 | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-7): 2005 Reaffirmed: 2022 | 139.50 | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29, 2017 | BDL | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11:2015 | 10.9 | 0.1 - 20 | - |

PM Calculated at 12% $CO_2$

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The report relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipments corresponding to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint regarding sample will be entertained only if received within 15 days from the date of issue of report.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Ashwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLKO@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (UKAS) ISO 17025:2005 NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PMOS/TEST REP/FT/43

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/1101 I/2024 | | Date of Report: 04/05/2024 |
| Name /Address/ Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 29.04.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (Thermax) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | STANDBY |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (LPM) | |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ($Nm^3/Hr$) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate matter | $mg/Nm^3$ | IS: 11255 (Part-1): 1985 Reaffirmed: 2019 | STANDBY | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS: 11255 (Part-2): 1985 Reaffirmed: 2019 | | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS 11255 (Part 7): 2005 Reaffirmed: 2022 | | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29: 2017 | | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP/01/2015 | | 0.1 - 20 | - |

PM Calculated at 12% $CO_2$

$SO_2$ = Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects the best attempt to generate accurate results on the sample(s) described in this report as stated.
- This report relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in this report, any performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint regarding report is possible in five days only.

Authorised Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorised Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.LKO@TATA.IN, Web.: www.etrcapl.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 17025:2017 NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/11012/2024 | | Date of Report: 04/06/2024 |
| Name /Address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 29.04.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 36 m |
| (d) | Source to which stack attached | D.G. Set 1875 KVA |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | HSD |
| (g) | Details of APCS installed | - |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 31.0 |
| (b) | Stack gas temperature (°C) | 154.0 |
| (c) | Stack gas velocity (m/sec) | 6.37 |
| (d) | Flow rate (LPM) | 25 |
| (e) | Sampling time (minutes) | 41 |
| (f) | Volume of air sampled (liters) | 1025 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 27974.61 |

### TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-1): 1985 Reaffirmed: 2019 | 45.17 | 2.0 - 1000 | 75 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-2): 1985 Reaffirmed: 2019 | 46.46 | 4.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-7): 2005 Reaffirmed: 2022 | 50.23 | 2.0 - 1000 | 710 |
| 4 | Carbon Monoxide | $mg/Nm^3$ | ETRC/LABSOP/A/13: 2015 | 105.0 | 1.145 - 5000 | 150 |
| 5 | Non-Methane Hydrocarbon (NMHC) | $mg/Nm^3$ | By G. C. | 12.5 | 0.1 - 200 | 100 |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in the report and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-In-charge

Authorized Signatory
(Ritu Garg)
ZM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vidhyak Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@YAHOO.CO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | | | |
|---|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/11013/2024 | | Date of Report: 04/05/2024 | | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | | |
| Monitored by | | ETRC, Lucknow | | |
| Sr. no. | GENERAL INFORMATION | DETAILS Membrane-I | DETAILS Membrane-II | DETAILS Membrane-III |
| 1.(a) | Date of monitoring | 30.04.2024 | 30.04.2024 | 30.04.2024 |
| (b) | Stack material | FRP | FRP | FRP |
| (c) | Height of stack from ground level | 30 m | 30 m | 30 m |
| (d) | Source to which stack attached | • Stack of HCl Furnace<br>• Hypo stack | • Stack of HCl Furnace | • Stack of HCl Furnace<br>• Hypo stack |
| (e) | No of Source attached with capacity | - | - | - |
| (f) | Type and quantity of fuel used | - | | |
| (g) | Details of APCS installed | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation |
| 2. | PARAMETERS | VALUES | VALUES | VALUES |
| (a) | Ambient temperature (°C) | 31.0 | 30.0 | 30.0 |
| (b) | Stack gas temperature (°C) | 30.0 | 31.0 | 32.0 |
| (c) | Stack gas velocity (m/sec.) | 1.58 | 1.55 | 1.54 |
| (d) | Flow rate (LPM) | 5.0 | 5.0 | 5.0 |
| (e) | Sampling time (minutes) | 60 | 60 | 60 |
| (f) | Volume of air sampled (liters) | 300 | 300 | 300 |
| (g) | Total gas quantity ($Nm^3$/Hr) | 285.302 | 72.572 | 287.705 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Results | | | Standard (as per CPCB) |
|---|---|---|---|---|---|---|---|
| | | | | Membrane-I | Membrane-II | Membrane-III | |
| 1 | Hydrochloric Acid (HCl) | $mg/Nm^3$ | USEPA Method 26, 2019 | 6.5 | 6.2 | 6.3 | 35 |
| 2 | Chlorine ($Cl_2$) | $mg/Nm^3$ | USEPA Method 26, 2019 | 0.58 | | 0.57 | 15 |

END OF REPORT. . .

- ETRC warrants that all analytical work is conducted reflectionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the validity of parameter employed in the results and/or the performance of the equipment consequently to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the Court of law and should not be used in any advertising media without our special permission in writing.
- Samples received in premises of our laboratory.

CHECKED

Authorized Signatory
(Bandana Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLKO@YAHOO.IN, Web.. www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (UKAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST REPORT/743

TC-5469

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/11225/2024 | | Date of Report: 04/06/2024 |
| Name /Address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 23.05.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | FGD unit-I |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 35.0 |
| (b) | Stack gas temperature (°C) | 102.0 |
| (c) | Stack gas velocity (m/sec) | 12.76 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 08 |
| (f) | Volume of air sampled (liters) | 1102 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 220375.16 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-1): 1985 Reaffirmed 2019 | 85.48 | 2.0 - 1000 | 100 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-2): 1985 Reaffirmed 2019 | 217.42 | 4.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-7): 2005 Reaffirmed 2022 | 116.10 | 2.0 - 1000 | 600 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29: 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11 2015 | 11.6 | 0.1 - 20 | |

PM Calculated at 12% $CO_2$

BDL= Below Detection Limit

...END OF REPORT...

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality or parameter analyzed or the results and/or the performance of the equipment consequential to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint, if any, is entertained in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2226/1, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC_LKO@YAHOO.CO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

TC-3469

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/11226/2024 | | Date of Report: 04/06/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. no. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 23.05.2024 |
| (b) | Stack material | RCC |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PSD Unit-II |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 36.0 |
| (b) | Stack gas temperature (°C) | 101.0 |
| (c) | Stack gas velocity (m/sec) | 12.64 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 56 |
| (f) | Volume of air sampled (liters) | 1045 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 217163.79 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-1): 1985 Reaffirmed: 2019 | 46.22 | 2.0 - 1000 | 50 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS 11255 (Part-2): 1985 Reaffirmed: 2019 | 257.17 | 1.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS 11255 (Part-7): 2005 Reaffirmed: 2022 | 122.26 | 2.0 - 1000 | 300 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29, 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11.2015 | 11.3 | 0.1 - 20 | |

End Of REPORT

- ETRC ensures that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that any data reported has been obtained to precise standards for the method. Measurement uncertainty is available on request.
- This result relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints, if any, should be made within one month.

Authorized Signatory
(Sandeep Kr. Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vaibhav Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC1mail@rediffmail.com, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REP/FT/43

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No : ETRC/EPA/11227/2024 | Date of Report: 04/06/2024 |
| Name, Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| 1.(a) | Date of monitoring | 24.05.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (CVPL) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bag filters |
| 2. | **PARAMETERS** | **VALUES** |
| (a) | Ambient temperature (°C) | 35.0 |
| (b) | Stack gas temperature (°C) | 148.0 |
| (c) | Stack gas velocity (m/sec) | 8.42 |
| (d) | Flow rate (CFM) | 26 |
| (e) | Sampling time (minutes) | 42 |
| (f) | Volume of air sampled (liters) | 1092.00 |
| (g) | Total gas quantity ($NM^3/Hr$) | 29126.18 |

## TEST RESULT

| Sr. no. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-1): 1985 Reaffirmed: 2019 | 41.99 | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS: 11255 (Part-2): 1985 Reaffirmed: 2019 | 276.34 | 4.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS: 11255 (Part-7): 2005 Reaffirmed: 2022 | 126.48 | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29 2017 | BDL | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11 2015 | 10.8 | 0.1 - 20 | - |

NI: Calculated at 12% $CO_2$
BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment pertaining to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete report is available in our laboratory.

Authorized Signatory
(Sarvesh Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vibhuti Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

email : ETRC.Lko@rediffmail.com, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (Cert.No) ISO 14001: 2015 & IMS, Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, govt. of India under EPA 1986




## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11228/2024 | Date of Report: 04/06/2024 |
| Name /Address/Type of industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. no. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| 1 (a) | Date of monitoring | 24.05.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 51 m |
| (d) | Source to which stack attached | Steam Generation Boiler (Thermax) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | STANDBY |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (LPM) | |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ($Nm^3/Hr$) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-1): 1985 Reaffirmed: 2019 | STANDBY | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS 11255 (Part-2): 1985 Reaffirmed: 2019 | | 1.0 - 2000 | |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS 11255 (Part-7): 2005 Reaffirmed: 2022 | | 2.0 - 1000 | |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29 2017 | | 0.02 - 5.0 | |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11 2015 | | 0.1 - 20 | |

PM Calculated at 12% $CO_2$

BDL = Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples, mentioned in the report as above.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints, if any, are available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLT@YAHOO.IN, Web. : www.etrcindia.com

ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/PM09/TEST REPORT/43

TC-5469

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/11229/2024 | | Date of Report: 04/06/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District Sonebhadra (U.P.) 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 24.05.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 36 m |
| (d) | Source to which stack attached | D.G. Set 1875 KVA |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | HSD |
| (g) | Details of APCS installed | - |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 38.0 |
| (b) | Stack gas temperature (°C) | 151.0 |
| (c) | Stack gas velocity (m/sec) | 8.77 |
| (d) | Flow rate (LPM) | 25 |
| (e) | Sampling time (minutes) | 40 |
| (f) | Volume of air sampled (liters) | 1000 |
| (g) | Total gas quantity ($Nm^3$/hr) | 29199.17 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-1): 1985 Reaffirmed 2019 | 46.38 | 20 - 1000 | 75 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-2): 1985 Reaffirmed 2019 | 52.46 | 10 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-7): 2006 Reaffirmed 2022 | 91.67 | 20 - 1000 | 710 |
| 4 | Carbon Monoxide | $mg/Nm^3$ | ETRC/LABSOP/IS: 2016 | 104.0 | 1.145 - 5000 | 150 |
| 5 | Non-Methane Hydrocarbon (NMHC) | $mg/Nm^3$ | By G. C | 11.9 | 0.1 - 200 | 100 |

.....END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with an applicable standard laboratory practice and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment used leading to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

CHECKED

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishnu Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.THE@YAHOO.IN, WEB : WWW.ETRC.IN

(ISO 9001:2015, ISO 45001:2018 (OHSC), ISO 14001:2015 MNRE Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

TC 54/P

| | | | | |
|---|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/1230/2024 | | Date of Report: 04/06/2024 | | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>Distrct: Sonebhadra (U.P.) - 231217 | | |
| Monitored by | | ETRC, Lucknow | | |
| Sr. No. | GENERAL INFORMATION | DETAILS Membrane-I | DETAILS Membrane-II | DETAILS Membrane-III |
| 1 (a) | Date of monitoring | 25.05.2024 | 25.05.2024 | 25.05.2024 |
| (b) | Stack material | FRP | FRP | FRP |
| (c) | Height of stack from ground level | 30 m | 30 m | 30 m |
| (d) | Source to which stack attached | • Stack of HCl Furnace<br>• Hypo stack | • Stack of HCl Furnace | • Stack of HCl Furnace<br>• Hypo stack |
| (e) | No of Source attached with capacity | - | | |
| (f) | Type and quantity of fuel used | - | | |
| (g) | Details of APCS installed | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation | • Tail gas tower with packing ring | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation |
| 2. | PARAMETERS | VALUES | VALUES | VALUES |
| (a) | Ambient temperature (°C) | 37.0 | 34.0 | 35.0 |
| (b) | Stack gas temperature (°C) | 36.0 | 35.0 | 36.0 |
| (c) | Stack gas velocity (m/sec) | 1.62 | .58 | .57 |
| (d) | Flow rate (LPM) | 5.0 | 5.0 | 5.0 |
| (e) | Sampling time (minutes) | 60 | 60 | 60 |
| (f) | Volume of air sampled (liters) | 300 | 300 | 300 |
| (g) | Total gas quantity ($Nm^3$/Hr) | 270.383 | 95.243 | 377.334 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Results | | | Standard (as per CPCB) |
|---|---|---|---|---|---|---|---|
| | | | | Membrane-I | Membrane-II | Membrane-III | |
| 1 | Hydrochloric Acid (HCl) | $mg/Nm^3$ | USEPA Method 26 - 2019 | 6.4 | 8.3 | 6.5 | 35 |
| 2 | Chlorine ($Cl_2$) | $mg/Nm^3$ | USEPA Method 26 - 2019 | 0.62 | | 0.58 | 15 |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample / members in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment contributing to the results.
- All Disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Rahmat Nagar, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REP/FT/43

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/11340/2024 | | Date of Report: 25/06/2024 |
|---|---|---|
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 13.06.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PSD Unit-I |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 36.0 |
| (b) | Stack gas temperature (°C) | 112.0 |
| (c) | Stack gas velocity (m/sec) | 12.67 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 56 |
| (f) | Volume of air sampled (liters) | 1064 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 212644.84 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 43.15 | 2.0 - 1000 | 100 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 206.66 | 1.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 121.50 | 2.0 - 1000 | 600 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29: 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/1.2015 | 11.3 | 0.1 - 20 | - |

PM Calculated at 12% $CO_2$
BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality or parameter analyzed in the results and/or the performance of any equipment established as the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete analysis is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTD@AOL.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/11341/2024 | | Date of Report: 25/06/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 13.06.2024 |
| (b) | Stack material | RCC |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PGD Unit-I |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and Quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | **PARAMETERS** | **VALUES** |
| (a) | Ambient temperature (°C) | 37.0 |
| (b) | Stack gas temperature (°C) | 106.0 |
| (c) | Stack gas velocity ( m/sec) | 12.86 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 57 |
| (f) | Volume of air sampled (liters) | 1083 |
| (g) | Total gas quantity ($Nm^3$/Hr) | 219072.53 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 42.18 | 2.0 - 1000 | 50 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS: 11255 (Part-02): 1985 Reaffirmed: 2019 | 218.26 | 1.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS: 11255 (Part-07): 2005 Reaffirmed: 2022 | 111.63 | 2.0 - 1000 | 300 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | Vol EPA Method -29 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A11:2015 | 11.5 | 0.1 - 20 | |

..... END OF REPORT .....

- ETRC warrants that all analysis work is conducted professionally in accordance with all applicable standard laboratory practices and that due care is taken in all attempt to generate accurate results for the samples, interpretations and report as above.
- The result valid only for the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete report is available in our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorised Signatory
(Ritu Sarg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No. : ETRC/EPA/11342/2024 | | Date of Report: 25/06/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored By | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 14.06.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (CVPL) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2 | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | STANDBY |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (LPM) | |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ($Nm^3/hr$) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/NM^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | STANDBY | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method-29 2017 | | 0.02 - 5.0 | |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11:2015 | | 0.1 - 20 | - |

..... END OF REPORT .....

- ETRC remains not responsible for analytical work if contracted professionally in accordance with all applicable national laboratory practices and that no data inputs out of our control is given to generate accurate results for the samples mentioned in this report as above.
- The report relates only to the testing issues.
- ETRC does not accept any liability for any claims or damages related to the quality of chemicals analyzed or the results under the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our specific permission in writing.
- Opinion regarding is available in our laboratory.

Authorized Signatory
(aanoop k. verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : U-251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@AIRCOLIN.NET.IN ; www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| **Test Report Ref No** : ETRC/EPA/11343/2024 | | **Date of Report**: 25/06/2024 |
| Name /Address/ Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 14.06.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (Thermax) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2 | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 35.0 |
| (b) | Stack gas temperature (°C) | 104.0 |
| (c) | Stack gas velocity (m/sec) | 7.76 |
| (d) | Flow rate (LPM) | 20.0 |
| (e) | Sampling time (minutes) | 61.0 |
| (f) | Volume of air sampled (liters) | 1066.0 |
| (g) | Total gas quantity ($Nm^3/hr$) | 29220.92 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 49.18 | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 102.82 | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2006 Reaffirmed: 2022 | 157.36 | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29: 2017 | BDL | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP/A/11:2015 | 10.8 | 0.1 - 20 | - |

PM Calculated at 12% $CO_2$

BDL= Below Detection Limit

..... End of Report .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempts to generate accurate results for the samples mentioned in the report as above.
- The report relates only to the object tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the reports and/or the performance of the equipment constituting as the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete record is available in our laboratory.

Authorized Signatory
(Sandeep K/ Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishnu Khand, Sunil Nagar, Jankipuram - 226 021 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA, 1986


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/11344/2024 | | Date of Report: 25/06/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 14.06.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 36 m |
| (d) | Source to which stack attached | D.G. Set 1875 KVA |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | HSD |
| (g) | Details of APCS installed | - |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 39.0 |
| (b) | Stack gas temperature (°C) | 155.0 |
| (c) | Stack gas velocity (m/sec) | 8.38 |
| (d) | Flow rate (LPM) | 26 |
| (e) | Sampling time (minutes) | 42 |
| (f) | Volume of air sampled (liters) | 1050 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 27792.88 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 45.24 | 2.0 - 1000 | 75 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS: 11255 (Part-02): 1985 Reaffirmed: 2019 | 52.46 | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS: 11255 (Part-07): 2005 Reaffirmed: 2022 | 93.88 | 2.0 - 1000 | 710 |
| 4 | Carbon Monoxide | $mg/Nm^3$ | ETRC/LABSOP/13: 2015 | 101.0 | 1.145 - 5000 | 150 |
| 5 | Non-Methane Hydrocarbon (NMHC) | $mg/Nm^3$ | By G. C. | 12.6 | 0.1 - 200 | 100 |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples tendered in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages suffered to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Gargi)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Yashwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.TH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001: 2018 (OHAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | | | |
|---|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/11345/2024 | | Date of Report: 25/06/2024 | | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | | |
| Monitored by | | ETRC, Lucknow | | |
| Sr. No | GENERAL INFORMATION | DETAILS Membrane-I | DETAILS Membrane-II | DETAILS Membrane-III |
| 1.(a) | Date of monitoring | 15.06.2024 | 15.06.2024 | 15.06.2024 |
| (b) | Stack material | FRP | FRP | FRP |
| (c) | Height of stack from ground level | 30 m | 30 m | 30 m |
| (d) | Source to which stack attached | • Stack of HCl Furnace<br>• Hypo stack | • Stack of HCl Furnace | • Stack of HCl Furnace<br>• Hypo stack |
| (e) | No of Source attached with capacity | - | - | - |
| (f) | Type and quantity of fuel used | - | - | - |
| (g) | Details of APCS installed | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation | • Tail gas tower with packing ring | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation |
| 2. | PARAMETERS | VALUES | VALUES | VALUES |
| (a) | Ambient temperature (°C) | 36.0 | 35.0 | 35.0 |
| (b) | Stack gas temperature (°C) | 37.0 | 36.0 | 37.0 |
| (c) | Stack gas velocity (m/sec) | 1.65 | 1.59 | 1.60 |
| (d) | Flow rate (CFM) | 5.0 | 5.0 | 5.0 |
| (e) | Sampling time (minutes) | 60 | 60 | 60 |
| (f) | Volume of air sampled (liters) | 300 | 300 | 300 |
| (g) | Total gas quantity ($Nm^3$/Hr) | 274.871 | 95.664 | 383.819 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Results | | | Standard (as per CPCB) |
|---|---|---|---|---|---|---|---|
| | | | | Membrane-I | Membrane-II | Membrane-III | |
| 1 | Hydrochloric Acid (HCl) | $mg/Nm^3$ | USEPA Method 26, 2019 | 6.1 | 6.5 | 3.2 | 35 |
| 2 | Chlorine ($Cl_2$) | $mg/Nm^3$ | USEPA Method 26, 2019 | 0.58 | | 0.64 | 15 |

.....END OF REPORT.....

- ETRC expresses that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results on the sample, mentioned in the report as above.
- This report cannot be used in the matter related.
- ETRC does not accept any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment/monitoring of the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-In-charge

CHECKED

Authorized Signatory
(Riku Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Ashiana Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : etrc.lko@rediffmail.com, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11515/2024 | Date of Report: 22/07/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| 1 (a) | Date of monitoring | 11.07.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PGR Unit-I |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 37.0 |
| (b) | Stack gas temperature (°C) | 110.0 |
| (c) | Stack gas velocity (m/sec) | 12.57 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 55 |
| (f) | Volume of air sampled (liters) | 1045 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 213110.13 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate matter | $mg/Nm^3$ | IS: 11255 (Part-01) : 1985 Reaffirmed: 2019 | 46.06 | 2.0 - 1000 | 100 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS 11255 (Part-02) : 1985 Reaffirmed: 2019 | 214.16 | 4.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS 11255 (Part-07) : 2005 Reaffirmed: 2022 | 137.71 | 2.0 - 1000 | 600 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29: 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11:2015 | 11.4 | 0.1 - 20 | |

Pdf Calculated at 12% $CO_2$

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC declares that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results on the sample mentioned in the report as above.
- This report relate only to the item tested.
- ETRC does not assume any liability for any claims or damages related to the quality of sample analyzed or the results and/or the performance of the equipment or relying on test results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without special permission in writing.
- Complaint regarding this report will not be entertained after 15 days.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
LIM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/264, Vishwas Khand, Gomti Nagar, Lucknow – 226 010 (U.P.)
Email : ETRCLUCKNOW@GMAIL.COM, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986.



# TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/11516/2024 | | Date of Report: 22/07/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 11.07.2024 |
| (b) | Stack material | RCC |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PSD Unit-II |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and Quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 36.0 |
| (b) | Stack gas temperature (°C) | 110.0 |
| (c) | Stack gas velocity (m/sec) | 12.73 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 56 |
| (f) | Volume of air sampled (liters) | 1083 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 215618.74 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 44.56 | 2.0 - 1000 | 50 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 229.83 | 4.0 - 2000 | 600 |
| 3 | Oxides of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS 11255 (Part-07): 2005 Reaffirmed: 2022 | 142.81 | 2.0 - 1000 | 300 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29: 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11:2015 | 11.3 | 0.1 - 20 | - |

- ETRC confirms that all analytical work is conducted professionally in accordance with all applicable standard operating practices and that the data reflects the work with no significant deviations made to the sample, method or investigation as stated.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law or shall not be used in any advertising media without our specific permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 3/291, Vishwas Khand, Gomti Nagar, Lucknow - 226010 (U.P.)

Email : ETRCLKO@AirSDC.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001: 2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/11517/2024 | | **Date of Report:** 22/07/2024 |
| **Name /Address/Type of Industry** | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| **Monitored by** | | ETRC, Lucknow |
| Sr. No. | **GENERAL INFORMATION** | **DETAILS** |
| 1.(a) | Date of monitoring | 12.07.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (CVPL) |
| (e) | No of Source attached with capacity | 01 no |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | **PARAMETERS** | **VALUES** |
| (a) | Ambient temperature (°C) | |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (CMH) | **STANDBY** |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ($nm^3$/hr) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | mg/$Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | STANDBY | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | mg/$Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | | 1.0 - 2000 | - |
| 3 | Oxides of Nitrogen ($NO_x$) | mg/$Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | mg/$Nm^3$ | US EPA Method - 29 2017 | | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP/01:2015 | | 0.1 - 20 | - |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects the best, within-the-scope, defensible results for the samples, maintained in the report as stated.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our specific permission in writing.
- Complaints, if any, should be addressed to us within 15 days.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
Dir

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/281, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web. : www.etrclko.com

(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11518/2024 | Date of Report: 22/07/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |
| Sr. No. GENERAL INFORMATION | DETAILS |
| 1.(a) Date of monitoring | 13.07.2024 |
| (b) Stack material | Mild Steel |
| (c) Height of stack from ground level | 61 m |
| (d) Source to which stack attached | Steam Generation Boiler (Thermax) |
| (e) No of Source attached with capacity | 01 No |
| (f) Type and quantity of fuel used | Coal |
| (g) Details of APCS installed | Bag Filters |
| 2. PARAMETERS | VALUES |
| (a) Ambient temperature (°C) | 36.0 |
| (b) Stack gas temperature (°C) | 108.0 |
| (c) Stack gas velocity (m/sec) | 7.57 |
| (d) Flow rate (l Pm) | 26.0 |
| (e) Sampling time (minutes) | 40.0 |
| (f) Volume of air sampled (liters) | 1066.0 |
| (g) Total gas quantity (nm³/Hr) | 28747.19 |

## TEST RESULT

| Sr. No. | Parameter | unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | mg/Nm³ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 43.19 | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | mg/Nm³ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 269.50 | 1.0 - 2000 | |
| 3 | Oxide of Nitrogen ($NO_x$) | mg/Nm³ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 168.17 | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | mg/Nm³ | US EPA Method -29, 2017 | BDL | 0.02 - 5.0 | |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP/A/1 2015 | 10.9 | 0.1 - 20 | - |

PM Calculated at 12% $CO_2$

BDL - Below Detection Limit

End Of REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to perform accurate analyses for the samples mentioned in the report as above.
- The report relate only to the items tested.
- ETRC does not assume any liability for any claims or damages arising out of the quality of performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is available in our laboratory.

Authorised Signatory
(Sanneep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
GM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/261, Indiara Khand, Sonal Nagar, Lucknow - 226 010 (U.P.)
Email : ETRC1@YAHOO.IN, Web. : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


# TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/11518/2024 | | Date of Report: 22/07/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 12.07.2024 |
| (b) | Stack material | MS Steel |
| (c) | Height of stack from ground level | 36 m |
| (d) | Source to which stack attached | D.G. Set 1875 KVA |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | HSD |
| (g) | Details of APCS installed | - |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 38.0 |
| (b) | Stack gas temperature (°C) | 152.0 |
| (c) | Stack gas velocity (m/sec) | 3.35 |
| (d) | Flow rate (LPM) | 25 |
| (e) | Sampling time (minutes) | 41 |
| (f) | Volume of air sampled (liters) | 1025 |
| (g) | Total gas quantity ($nm^3$/hr) | 27863.20 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 46.29 | 2.0 - 1000 | 75 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 58.12 | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS: 11255 (Part-07): 2005 Reaffirmed: 2022 | 63.23 | 2.0 - 1000 | 710 |
| 4 | Carbon Monoxide | $mg/Nm^3$ | ETRC/LABSOP/13: 2015 | 104.6 | 7.145 - 5000 | 150 |
| 5 | Non-Methane Hydrocarbon (NMHC) | $mg/Nm^3$ | By G. C. | 12.8 | 0.1 - 200 | 100 |

END OF REPORT

- ETRC remains that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as given.
- The result relate only to the sample given.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment purchasing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our specific permission in writing.
- Complaints, if any, should be addressed to our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.in, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11520/2024 | Date of Report: 22/07/2024 |
| Name /Address/Type of Industry | Sirsaen Industries Limited<br>Chemical Division<br>P. O. Rennukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS Membrane-I | DETAILS Membrane-II | DETAILS Membrane-III |
|---|---|---|---|---|
| 1.(a) | Date of monitoring | 13.07.2024 | 13.07.2024 | 13.07.2024 |
| (b) | Stack material | FRP | FRP | FRP |
| (c) | Height of stack from ground level | 30 m | 30 m | 30 m |
| (d) | Source to which stack attached | • Stack of HCl Furnace<br>• Hypo stack | • Stack of HCl Furnace | • Stack of HCl Furnace<br>• Hypo stack |
| (e) | No of Source attached with capacity | - | - | - |
| (f) | Type and quantity of fuel used | - | - | - |
| (g) | Details of APCS installed | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation | • Tail gas tower with packing ring | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation |
| 2. | PARAMETERS | VALUES | VALUES | VALUES |
| (a) | Ambient temperature (°C) | 34.0 | 34.0 | 34.0 |
| (b) | Stack gas temperature (°C) | 36.0 | 37.0 | 36.0 |
| (c) | Stack gas velocity (m/sec) | 1.65 | 1.63 | 1.64 |
| (d) | Flow rate (LPM) | 5.0 | 5.0 | 5.0 |
| (e) | Sampling time (minutes) | 60 | 60 | 60 |
| (f) | Volume of air sampled (liters) | 300 | 300 | 300 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 276.130 | 97.885 | 395.213 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Results | | | Standard (as per CPCB) |
|---|---|---|---|---|---|---|---|
| | | | | Membrane-I | Membrane-II | Membrane-III | |
| 1 | Hydrochloric Acid (HCl) | $mg/Nm^3$ | USEPA Method 26, 2019 | 6.4 | 5.2 | 5.4 | 35 |
| 2 | Chlorine ($Cl_2$) | $mg/Nm^3$ | USEPA Method 26, 2019 | 0.64 | | 0.59 | 5 |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment considering to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete report is available in our laboratory.

Authorized Signatory
(Sanjeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 3/261, Vishwas Khand, Gomti Nagar, Lucknow 226 010 (U.P.)

Email: ETRCLTH@YAHOO.IN, Web: www.etrclabs.com

ISO 9001:2015, ISO 14001 : 2015, OHSAS 18001 : 2007 & NABL Accredited Laboratory

An Approved Laboratory from Ministry of Environment, Forest and Climate Change, New Delhi


## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/11675/2024 | | Date of Report: 20/08/2024 |
| Name /Address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonabhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. no. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 07.08.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PGD Unit-I |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 32.0 |
| (b) | Stack gas temperature (°C) | 112.0 |
| (c) | Stack gas velocity (m/sec) | 12.60 |
| (d) | Flow rate (...PM) | 19 |
| (e) | Sampling time (minutes) | 54 |
| (f) | Volume of air sampled (liters) | 1028 |
| (g) | Total gas quantity ($Nm^3$/hr) | 211987.54 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | mg/$Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 44.07 | 2.0 - 1000 | 100 |
| 2 | Sulphur Dioxide ($SO_2$) | mg/$Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 205.33 | 4.0 - 2000 | N.A. |
| 3 | Oxide of Nitrogen ($NO_x$) | mg/$Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 146.41 | 2.0 - 1000 | 600 |
| 4 | Mercury (Hg) | mg/$Nm^3$ | US EPA Method -29: 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOPA/11:2015 | 11.2 | 0.1 - 20 | - |

PM Calculated at 12% $CO_2$

BDL = Below Detection Limit

.....END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results on the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not accept any liability for any claims or damages related to the quality of parameters analyzed in any sample and/or the performance of the equipment pertaining to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our specific permission in writing.
- Complete record is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2/251, Vishwas Khand, Gomti Nagar, Lucknow- 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web: www.etrcindia.com

ISO 9001:2015, ISO 14001 : 2015, OHSAS 18001 : 2007 & NABL Accredited Laboratory

An approved Laboratory from Ministry of Environment, Forest and Climate change, Govt. of India vide No. [illegible]


## TEST REPORT

### STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/11676/2024 | | Date of Report: 20/08/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 07.08.2024 |
| (b) | Stack material | RCC |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PSDU Unit-II |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 33.0 |
| (b) | Stack gas temperature (°C) | 108.0 |
| (c) | Stack gas velocity ( m/sec) | 12.89 |
| (d) | Flow rate (LPM) | 18 |
| (e) | Sampling time (minutes) | 05 |
| ( ) | Volume of air sampled (liters) | 1085 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 219034.14 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 43.26 | 2.0 - 1000 | 50 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 213.81 | 1.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS 11255 (Part-07): 2005 Reaffirmed: 2022 | 135.18 | 2.0 - 1000 | 300 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11:2015 | 11.4 | 0.1 - 20 | - |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to provide accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages relative to the quality of parameter analyzed or the results arising from the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint regarding analysis in our laboratory

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QMR

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory: 2281, Vishwas Khand, Gomti Nagar, Lucknow- 226 010 (U.P.)

Email : etrc@yahoo.in, Web: www.etrcindia.com

ISO 9001:2015, ISO 14001 : 2015, OHSAS 18001 : 2007 & NABL Accredited Laboratory

An Approved Laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/F753

TC-5469

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/11677/2024 | | Date of Report: 20/08/2024 |
|---|---|---|
| Name /Address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 03.08.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (CVPL) |
| (e) | No of Source attached with capacity | 01 Nos |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 34.0 |
| (b) | Stack gas temperature (°C) | 152.0 |
| (c) | Stack gas velocity (m/sec) | 8.24 |
| (d) | Flow rate (LPM) | 25 |
| (e) | Sampling time (minutes) | 41 |
| (f) | Volume of air sampled (liters) | 1025.0 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 27585.16 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reammed: 2019 | 42.90 | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 243.44 | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 147.15 | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29: 2017 | BDL | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11:2015 | 10.9 | 0.1 - 20 | |

PM Calculated at 12% $CO_2$

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results on the sample, mentioned in the report as above
- This result relate only to the item tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter employed in the results and/or the performance of the equipment contributing to the results
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing
- Complain register is available in our laboratory

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Riku Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/281, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.CO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India, New Delhi


## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/11678/2024 | **Date of Report:** 20/08/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonbhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| 1.(a) | Date of monitoring | 08.08.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 91 m |
| (d) | Source to which stack attached | Steam Generation Boiler ( Thermax) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | **PARAMETERS** | **VALUES** |
| (a) | Ambient temperature (°C) | STANDBY |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (LPM) | |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ($Nm^3/Hr$) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | STANDBY | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS: 11255 (Part-02): 1985 Reaffirmed: 2019 | | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS: 11255 (Part-07): 2005 Reaffirmed: 2022 | | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29: 2017 | | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOPA/11:2015 | | 0.1 - 20 | |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the laboratory uses its best attempts to generate accurate results for the sample, as mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality or parameter analyzed or the results and/or the performance of the equipment concerning to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our specific permission in writing.
- Complaint, if any, is entertained in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
IM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@YAHOO.in, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change Government of India vide [illegible]


ETRC/EPA/TEST REPORT/RT/1679

FC-5687

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/1679/2024 | | Date of Report: 20/08/2024 |
|---|---|---|
| Name /Address/ Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 08.08.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 35 m |
| (d) | Source to which stack attached | D.G. Set 1875 KVA |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | HSD |
| (g) | Details of APCS installed | - |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 35.0 |
| (b) | Stack gas temperature (°C) | 155.0 |
| (c) | Stack gas velocity (m/sec) | 8.30 |
| (d) | Flow rate (LPM) | 25 |
| (e) | Sampling time (minutes) | 42 |
| (f) | Volume of air sampled (liters) | 1050 |
| (g) | Total gas quantity ($Nm^3$/Hr) | 27867.40 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range or Testing Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | mg/$Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 48.86 | 2.0 - 1000 | 75 |
| 2 | Sulphur Dioxide ($SO_2$) | mg/$Nm^3$ | IS 11255 (Part-02): 1985 Reaffirmed: 2019 | 46.70 | 1.0 - 2000 | - |
| 3 | Oxides of Nitrogen ($NO_x$) | mg/$Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 71.65 | 2.0 - 1000 | 710 |
| 4 | Carbon Monoxide | mg/$Nm^3$ | ETRC/LABSOPA/13: 2015 | 101.0 | 1.145 - 5000 | 150 |
| 5 | Non-Methane Hydrocarbon (NMHC) | mg/$Nm^3$ | By G. C. | 13.2 | 0.1 - 200 | 100 |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that in no case reflects our best attempt to generate acceptable results for the samples, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter are used in the results under the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and not to be used as evidence in the court of law and should not be used in any advertising media without our written permission in writing.
- Complain register is available in our laboratory.

Sandeep Kr Verma

Authorised Signatory
(Sandeep Kr Verma)
Lab-incharge

Ritu Garg

Authorised Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : D/291, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLUCKNOW@GMAIL.COM, Web.: www.etrclko.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

ETRC/PM09/TEST REPORT/01

TC-6819


## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11680/2024 | Date of Report: 20/08/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS Membrane-I | DETAILS Membrane-II | DETAILS Membrane-III |
|---|---|---|---|---|
| 1.(a) | Date of monitoring | 09.08.2024 | 09.08.2024 | 09.08.2024 |
| (b) | Stack material | FRP | FRP | FRP |
| (c) | Height of stack from ground level | 30 m | 30 m | 30 m |
| (d) | Source to which stack attached | • Stack of HCl Furnace<br>• Hypo stack | • Stack of HCl Furnace | • Stack of HCl Furnace<br>• Hypo stack |
| (e) | No of Source attached with capacity | - | - | - |
| (f) | Type and quantity of fuel used | - | - | - |
| (g) | Details of APCS installed | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation | • Tail gas tower with packing ring | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation |
| 2. | PARAMETERS | VALUES | VALUES | VALUES |
| (a) | Ambient temperature (°C) | 30.0 | 32.0 | 32.0 |
| (b) | Stack gas temperature (°C) | 32.0 | 33.0 | 33.0 |
| (c) | Stack gas velocity (m/sec) | 1.67 | 1.64 | 1.65 |
| (d) | Flow rate (LPM) | 6.0 | 5.0 | 5.0 |
| (e) | Sampling time (minutes) | 60 | 60 | 60 |
| (f) | Volume of air sampled (liters) | 300 | 300 | 300 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 283.902 | 100.041 | 403.922 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Results | | | Standard (as per CPCB) |
|---|---|---|---|---|---|---|---|
| | | | | Membrane-I | Membrane-II | Membrane-III | |
| 1 | Hydrochloric Acid (HCl) | $mg/Nm^3$ | USEPA Method 26, 2019 | 6.1 | 8.4 | 8.2 | 35 |
| 2 | Chlorine ($Cl_2$) | $mg/Nm^3$ | USEPA Method 26, 2019 | 0.51 | | 0.55 | 6 |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The report relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment concerning to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(RKu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/281, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@AHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/11631/2024 | | Date of Report: 16/09/2024 |
|---|---|---|
| Name /Address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 05.09.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PGO Unit-I |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 29.0 |
| (b) | Stack gas temperature (°C) | 108.0 |
| (c) | Stack gas velocity (m/sec) | 12.68 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 60 |
| (f) | Volume of air sampled (liters) | 1045 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 216136.98 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 42.59 | 2.0 - 1000 | 100 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS 11255 (Part-02): 1985 Reaffirmed: 2019 | 197.45 | 1.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS.11255 (Part-07): 2005 Reaffirmed: 2022 | 186.26 | 2.0 - 1000 | 600 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11:2015 | 11.2 | 0.1 - 20 | |

PM Calculated at 12% $CO_2$

BDL= Below Detection Limit

End Of Report...

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment conforming to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without the specific permission in writing.
- Complaint, if any, should be brought to our notice within 7 days.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Yashwant Khand, Sonai Nagar, Lucknow - 226 012 (U.P.)

Email : ETRCLUCKNOW@RediffMail.com, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001: 2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT

### STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/11832/2024 | | **Date of Report:** 16/09/2024 |
| **Name /Address/Type of Industry** | | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |
| **Monitored by** | | **ETRC, Lucknow** |
| **Sr. No.** | **GENERAL INFORMATION** | **DETAILS** |
| 1 (a) | Date of monitoring | 05.09.2024 |
| (b) | Stack material | RCC |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PGD unit-II |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | **PARAMETERS** | **VALUES** |
| (a) | Ambient temperature (°C) | 30.0 |
| (b) | Stack gas temperature (°C) | 110.0 |
| (c) | Stack gas velocity (m/sec) | 12.80 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 54 |
| (f) | Volume of air sampled (liters) | 1026 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 218009.85 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 45.99 | 2.0 - 1000 | 50 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 203.71 | 4.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 186.44 | 2.0 - 1000 | 300 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/ABSOPA/11:2015 | 11.4 | 0.1 - 20 | - |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysis in the results and/or the performance of the equipment not relating to this report.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertisement media without our special permission in writing.
- Complain regarding sample will not be entertained after 15 days.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/2a1, Ishwari Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/1183/2024 | | Date of Report: 16/09/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 06.09.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack (from ground level | 51 m |
| (d) | Source to which stack attached | Steam Generation Boiler (CVPL) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 31.0 |
| (b) | Stack gas temperature (°C) | 109.0 |
| (c) | Stack gas velocity (m/sec) | 3.12 |
| (d) | Flow rate (LPM) | 27 |
| (e) | Sampling time (minutes) | 40 |
| (f) | Volume of air sampled (liters) | 1080.0 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 30223.43 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS 11255 (Part-01): 1985 Reaffirmed: 2019 | 44.59 | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 213.89 | 1.0 - 2000 | - |
| 3 | Oxides of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 196.81 | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29 2017 | BDL | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/1:2015 | 10.3 | 0.1 - 20 | - |

PM Uncorrected at 12% $CO_2$

BDL= Below Detection Limit

..... END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects the best attempt to provide accurate results for the sample. Interpretation in the report as above
- This report relates only to the items tested
- ETRC does not assume any liability for any claims or damages related to the quality of unidentified analytes in the results and/or the performance of the equipment complying to the results.
- All disputes subject to Lucknow jurisdiction
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing
- Complaint against is entertained up to 15 days only.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Sarai)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/281, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/1834/2024 | Date of Report: 16/09/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| 1.(a) | Date of monitoring | 06.09.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler ( Thermax) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | STANDBY |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (LPM) | |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ( $m^3$/Hr) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | STANDBY | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | | 2.0 - 1000 | |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29: 2017 | | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11: 2015 | | 0.1 - 20 | - |

END OF REPORT

- ETRC warrants that all analysis work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results on the samples submitted in the report as above.
- The report relates only to the items tested.
- ETRC does not accept any liability or damages related to the quality of parameter analysed in the results only the performance of the equipment concerning to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain regarding is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 4/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@YAHOO.IN, Web: www.etrcindia.com

(ISO 9001:2015, ISO 45001: 2018 (OHSAS) ISO 14001: 2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986




## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/1835/2024 | | **Date of Report:** 18/09/2024 |
| **Name /Address/Type of Industry** | | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |
| **Monitored by** | | **ETRC, Lucknow** |
| Sr. No. | **GENERAL INFORMATION** | **DETAILS** |
| 1.(a) | Date of monitoring | 07.09.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 36 m |
| (d) | Source to which stack attached | D.G. Set 1875 KVA |
| (e) | No of Source attached with capacity | 01 No. |
| (f) | Type and quantity of fuel used | HSD |
| (g) | Details of APCS installed | - |
| 2. | **PARAMETERS** | **VALUES** |
| (a) | Ambient temperature (°C) | 30.0 |
| (b) | Stack gas temperature (°C) | 152.0 |
| (c) | Stack gas velocity (m/sec.) | 8.57 |
| (d) | Flow rate (LPM) | 28 |
| (e) | Sampling time (minutes) | 41 |
| (f) | Volume of air sampled (liters) | 1066 |
| (g) | Total gas quantity ($Nm^3/hr$) | 28853.72 |

### TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | **46.95** | 2.0 - 1000 | 75 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11256 (Part-02): 1985 Reaffirmed: 2019 | **52.24** | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11256 (Part-07): 2005 Reaffirmed: 2022 | **72.87** | 2.0 - 1000 | 710 |
| 4 | Carbon Monoxide | $mg/Nm^3$ | ETRC/LABSOP/13: 2015 | **104.0** | 1.145 - 9000 | 150 |
| 5 | Non-Methane Hydrocarbon (NMHC) | $mg/Nm^3$ | By G. C. | **12.9** | 0.1 - 200 | 100 |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 72/51, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | | | |
|---|---|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/11836/2024 | | **Date of Report:** 16/09/2024 | | |
| **Name /Address/Type of Industry** | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonabhadra (U.P.) - 231217 | | |
| **Monitored by** | | ETRC, Lucknow | | |
| Sr. no. | GENERAL INFORMATION | DETAILS<br>Membrane-I | DETAILS<br>Membrane-II | DETAILS<br>Membrane-III |
| 1.(a) | Date of monitoring | 07.09.2024 | 07.09.2024 | 07.09.2024 |
| (b) | Stack material | FRP | FRP | FRP |
| (c) | Height of stack from ground level | 30 m | 30 m | 30 m |
| (d) | Source to which stack attached | • Stack of HCl Furnace<br>• Hypo stack | • Stack of HCl Furnace | • Stack of HCl Furnace<br>• Hypo stack |
| (e) | No of Source attached with capacity | - | - | - |
| (f) | Type and quantity of fuel used | - | - | - |
| (g) | Details of APCS installed | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation | • Tail gas tower with packing ring | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation |
| 2. | PARAMETERS | VALUES | VALUES | VALUES |
| (a) | Ambient temperature (°C) | 28.0 | 29.0 | 29.0 |
| (b) | Stack gas temperature (°C) | 31.0 | 31.0 | 30.0 |
| (c) | Stack gas velocity (m/sec) | 1.72 | 1.68 | 1.69 |
| (d) | Flow rate (LPM) | 5.0 | 5.0 | 5.0 |
| (e) | Sampling time (minutes) | 60 | 60 | 60 |
| (f) | Volume of air sampled (liters) | 300 | 300 | 300 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 295.391 | 103.699 | 417.268 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Results | | | Standard (as per CPCB) |
|---|---|---|---|---|---|---|---|
| | | | | Membrane-I | Membrane-II | Membrane-III | |
| 1 | Hydrochloric Acid (HCl) | $mg/Nm^3$ | USEPA Method 26, 2019 | 6.2 | 6.3 | 6.0 | 35 |
| 2 | Chlorine ($Cl_2$) | $mg/Nm^3$ | USEPA Method 26, 2019 | 0.54 | | 0.58 | 15 |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/351, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


TC-6469

ETRC/PM09/TEST-REP/FT/43

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/12205/2024 | | Date of Report: 02/11/2024 |
|---|---|---|
| Name /Address/Type of Industry | | Gram Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 23.10.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 75 M |
| (d) | Source to which stack attached | PGD unit-I |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 28.0 |
| (b) | Stack gas temperature (°C) | 109.0 |
| (c) | Stack gas velocity (m/sec) | 12.63 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 58 |
| (f) | Volume of air sampled (liters) | 1026 |
| (g) | Total gas quantity ($Nm^3$/Hr) | 212904.33 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 64.16 | 2.0 - 1000 | 100 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS 11255 (Part-02): 1985 Reaffirmed: 2019 | 194.32 | 1.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS.11255 (Part-07): 2005 Reaffirmed: 2022 | 116.88 | 2.0 - 1000 | 600 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29, 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOPA/11:2015 | 11.4 | 0.1 - 20 | - |

PM Calculated at 12% $CO_2$

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analysis work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results about the performance of the equipment corresponding to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used to any advertising media without our special permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sanjeev Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLKO@YAHOO.IN, Web.: www.etrcindia.com

ISO 9001:2015, ISO 45001: 2018 (OHSAS) ISO 14001: 2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of environment, Forest and Climate change, Govt. of India under EPA 1986 TC-5409


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/12206/2024 | | Date of Report: 02/11/2024 |
| Name /Address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 23.10.2024 |
| (b) | Stack material | RCC |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PG&P Unit-II |
| (e) | No of Source attached with capacity | 01 No. |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 29.0 |
| (b) | Stack gas temperature (°C) | 112.0 |
| (c) | Stack gas velocity (m/sec) | 12.76 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 06 |
| (f) | Volume of air sampled (liters) | 1064 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 213630.76 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate matter | mg/Nm | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 43.26 | 2.0 - 1000 | 50 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS: 11255 (Part-02): 1985 Reaffirmed: 2019 | 301.14 | 10 - 2000 | 600 |
| 3 | Oxides of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS: 11255 (Part-07): 2005 Reaffirmed: 2020 | 121.08 | 2.0 - 1000 | 300 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11:2015 | 11.2 | 0.1 - 20 | |

All Concerned at 12% $CO_2$

BDL= Below Detection Limit

..... END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data is the best attempt to generate accurate results for the samples mentioned in the report above.
- This result relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or any results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
CM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow- 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001: 2015A NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, GoI & of India under EPA 1986

TC-3465


ETRC/PM09/TEST-REPORT/43

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/12207/2024 | | Date of Report: 02/11/2024 |
| Name /Address/Type of industry | | Seksaria Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 24.10.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (CVPL) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | STANDBY |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (LPM) | |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ($Nm^3/Hr$) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | STANDBY | 2.0 - 1000 | ≤50 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | | 1.0 - 2000 | |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS: 11255 (Part 07): 2005 Reaffirmed: 2022 | | 2.0 - 1000 | |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29 2017 | | 0.02 - 5.0 | |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOPA/11.2015 | | 0.1 - 20 | |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in the results and/or the performance of the equipment consulting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete register is available in our laboratory.

Authorized Signatory
(Sanjeev Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 42/81, Yashwant Khand, Gomti Nagar, Lucknow- 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrclab.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/12208/2024 | | Date of Report: 02/11/2024 |
|---|---|---|
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 24.10.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (Thermax) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bag Filters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 36.0 |
| (b) | Stack gas temperature (°C) | 108.0 |
| (c) | Stack gas velocity (m/sec) | 7.68 |
| (d) | Flow rate (Lpm) | 20.0 |
| (e) | Sampling time (minutes) | 40.0 |
| (f) | Volume of air sampled (liters) | 1068.0 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 26671.68 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | mg/$Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 48.67 | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | mg/$Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 258.29 | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | mg/$Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 170.06 | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | mg/$Nm^3$ | US EPA Method -29 2017 | BDL | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOPA/11 2015 | 10.8 | 0.1 - 20 | - |

PM Calculated at 12% $CO_2$

BDL= Below Detection Limit

.....END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results on the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the reports, which the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our prior permission in writing.
- Complaint regarding report should be made within 7 days.

Authorised Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorised Signatory
(Ritu Garg)
CM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Yamuna Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@AHOO.IN, Web.: www.etrcindia.com

ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FTH3

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/12209/2024 | | Date of Report: 02/11/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 24.10.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 36 m |
| (d) | Source to which stack attached | D G, Set 1875 KVA |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | HSD |
| (g) | Details of APCS installed | - |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 31.0 |
| (b) | Stack gas temperature (°C) | 149.0 |
| (c) | Stack gas velocity (m/sec.) | 8.54 |
| (d) | Flow rate (LPM) | 26 |
| (e) | Sampling time (minutes) | 40 |
| (f) | Volume of air sampled (liters) | 1040 |
| (g) | Total gas quantity ($nm^3$/Hr) | 28716.89 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 64.58 | 2.0 - 1000 | 75 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 46.17 | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 70.84 | 2.0 - 1000 | 710 |
| 4 | Carbon Monoxide | $mg/Nm^3$ | ETRC/LABSOP/13: 2015 | 105.0 | 1.145 - 5000 | 150 |
| 5 | Non-Methane Hydrocarbon (NMHC) | $mg/Nm^3$ | By G. C. | 11.8 | 0.1 - 200 | 100 |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relates only to the items tested.
- ETRC shall not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow Jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint registered if available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
I.c-Incharge

Authorized Signatory
(Ritu Saini)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/281, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.Tech@rediffmail.com, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | | | |
|---|---|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/12210/2024 | | **Date of Report:** 02/11/2024 | | |
| Name /Address/ Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | | |
| Monitored by | | ETRC, Lucknow | | |
| Sr. No. | GENERAL INFORMATION | DETAILS Membrane-I | DETAILS Membrane-II | DETAILS Membrane-III |
| 1 (a) | Date of monitoring | 25.10.2024 | 25.10.2024 | 25.10.2024 |
| (b) | Stack material | FRP | FRP | FRP |
| (c) | Height of stack from ground level | 30 m | 30 m | 30 m |
| (d) | Source to which stack attached | • Stack of HCl Furnace<br>• Hypo stack | • Stack of HCl Furnace | • Stack of HCl Furnace<br>• Hypo stack |
| (e) | No of Source attached with capacity | - | - | - |
| (f) | Type and quantity of fuel used | - | - | - |
| (g) | Details of APCS installed | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation | • Tail gas tower with packing ring | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation |
| 2. | PARAMETERS | VALUES | VALUES | VALUES |
| (a) | Ambient temperature (°C) | 29.0 | 30.0 | 29.0 |
| (b) | Stack gas temperature (°C) | 30.0 | 32.0 | 31.0 |
| (c) | Stack gas velocity (m/sec) | 1.71 | 1.69 | 1.70 |
| (d) | Flow rate (LPM) | 5.0 | 5.0 | 5.0 |
| (e) | Sampling time (minutes) | 60 | 60 | 30 |
| (f) | Volume of air sampled (liters) | 300 | 300 | 300 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 294.757 | 104.177 | 420.565 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Results | | | Standard (as per CPCB) |
|---|---|---|---|---|---|---|---|
| | | | | Membrane-I | Membrane-II | Membrane-III | |
| 1 | Hydrochloric Acid (HCl) | $mg/Nm^3$ | USEPA Method 26, 2019 | 6.3 | 6.5 | 6.1 | 35 |
| 2 | Chlorine ($Cl_2$) | $mg/Nm^3$ | USEPA Method 26, 2019 | 0.59 | | 0.54 | 15 |

..... END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the reports and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register if received in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/264, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/12431/2024 | | Date of Report: 27/11/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonabhadra (U.P.) - 231217 |
| Monitored by | | ETRC, LUCKNOW |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 19.11.2024 |
| (b) | Stack material | MS Steel |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PGD Unit-I |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | SHUTDOWN |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (CFM) | |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ($Nm^3/Hr$) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | SHUTDOWN | 2.0 - 1000 | 100 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS 11255 (Part-02): 1985 Reaffirmed: 2019 | | 1.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS 11255 (Part-07): 2005 Reaffirmed: 2022 | | 2.0 - 1000 | 600 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29: 2017 | | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOPA/11:2015 | | 0.1 - 20 | |

.....End of REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to penetrate accurately and to the sample. Conclusions is our report as opinion.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of personnel employed in the supply and/or the performance of the equipment controlling in the tender.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence to the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sarvesh K. Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
CEO

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2263, Ashraf Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@YAHOO.CO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

TC-5469

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/12432/2024 | | Date of Report: 27/11/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>Distance: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 19.11.2024 |
| (b) | Stack material | RCC |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PSD Unit-II |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 28.0 |
| (b) | Stack gas temperature (°C) | 108.0 |
| (c) | Stack gas velocity (m/sec) | 12.95 |
| (d) | Flow rate ( F/M) | Da |
| (e) | Sampling time (minutes) | 55 |
| (f) | Volume of air sampled (liters) | 1065 |
| (g) | Total gas quantity ($Nm^3$/Hr) | 220756.30 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 46.68 | 2.0 - 1000 | 50 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS 11255 (Part-02): 1985 Reaffirmed: 2019 | 202.65 | 1.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen (NO$_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 186.97 | 2.0 - 1000 | 300 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29: 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11:2015 | 11.5 | 0.1 - 20 | - |

All Calculated at 12% $CO_2$

BDL= Below Detection Limit

..... End of REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects the best attempt to generate accurate results for the sample, matrix and in the report as above.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of sample(s) analyzed or the results and/or the performance of the equipment corresponding to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as proof in the court of law and should not be used in any advertising media without our specific permission in writing.
- Complain replies in 15 days from the date of delivery.

Authorized Signatory
(Sandeep Kr Verma)
Lab Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Yashwa Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001: 2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

TC-5458

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/12433/2024 | **Date of Report:** 27/11/2024 |
| **Name /Address/Type of Industry** | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| **Monitored by** | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| 1.(a) | Date of monitoring | 20.11.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (CVPL) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2 | **PARAMETERS** | **VALUES** |
| (a) | Ambient temperature (°C) | STANDBY |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (LPM) | |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (Nm³) | |
| (g) | Total gas quantity (Nm³/Hr) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate matter | mg/Nm³ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | STANDBY | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | mg/Nm³ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | mg/Nm³ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | mg/Nm³ | US EPA Method 29: 2017 | | 0.02 - 5.0 | |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP/AI/1:2015 | | 0.1 - 20 | |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that we have taken our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the result, and/or the performance of the equipment connected to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints may be received in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 222/1, Railway Kharid, Jeona Nagar, Lucknow - 226 010 (U.P.)
Email : ETRC.LTH@YAHOO.IN, Web. : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

TC-5459

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| **Test Report Ref No.**: ETRC/EPA/12434/2024 | Date of Report: 27/11/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| 1.(a) | Date of monitoring | 20.11.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler ( Thermax) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 28.0 |
| (b) | Stack gas temperature (°C) | 116.0 |
| (c) | Stack gas velocity (m/sec) | 7.31 |
| (d) | Flow rate (LPM) | 25.0 |
| (e) | Sampling time (minutes) | 40.0 |
| (f) | Volume of air sampled (liters) | 1000.0 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 28347.89 |

## TEST RESULT

| Sr. No | Parameter | Unit | Protocol | Result | Range of testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 42.66 | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS 11255 (Part-02): 1985 Reaffirmed: 2019 | 229.22 | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen (NOx) | $mg/Nm^3$ | IS 11255 (Part-07): 2005 Reaffirmed: 2022 | 165.88 | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29 2017 | BDL | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP/AIR/1 2015 | 10.9 | 0.1 - 20 | - |

PM Concentration at 12% $CO_2$
BDL= Below Detection Limit

.....End of REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects the best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and the name or seal of ETRC is not to be used in any advertising media without the written permission of ETRC.
- Complete report is available in the laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab-In-Charge

Authorised Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC@YAHOO.IN, Web : www.etrc.co.in

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & MoEF Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43

TC-5469

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/12435/2024 | | Date of Report: 27.11.2024 |
| Name /Address/Type of Industry | | Brassen Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 20.11.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 36 m |
| (d) | Source to which stack attached | D.G. Set 1875 KVA |
| (e) | No of source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | HSD |
| (g) | Details of APCS installed | - |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 28.0 |
| (b) | Stack gas temperature (°C) | 148.0 |
| (c) | Stack gas velocity (m/sec) | 8.31 |
| (d) | Flow rate (LPM) | 25 |
| (e) | Sampling time (minutes) | 40 |
| (f) | Volume of air sampled (liters) | 1000 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 28173.25 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range or Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 45.87 | 2.0 - 1000 | 75 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS: 11255 (Part-02): 1985 Reaffirmed: 2019 | 34.35 | 4.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS: 11255 (Part-07): 2005 Reaffirmed: 2022 | 84.70 | 2.0 - 1000 | 710 |
| 4 | Carbon Monoxide | $mg/Nm^3$ | ETRC/LABSOP/A13: 2015 | 102.0 | 1.145 - 5000 | 150 |
| 5 | Non-Methane Hydrocarbon (NMHC) | $mg/Nm^3$ | By G. C. | 11.6 | 0.1 - 200 | 100 |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of information analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints received if any will be entertained in our laboratory.

Authorized Signatory
(Sandeep Kr. Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
CMI

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vidhyut Khand, Sainik Nagar, Lucknow - 226 010 (U.P.)

Email : etrc.lko@yahoo.in, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (UKAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/Plant/TEST REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

TC-5469

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/12436/2024 | **Date of Report:** 27/11/2024 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |
| **Monitored by** | **ETRC, Lucknow** |

| Sr. No. | GENERAL INFORMATION | DETAILS Membrane-I | DETAILS Membrane-II | DETAILS Membrane-III |
|---|---|---|---|---|
| I.(a) | Date of monitoring | 21.11.2024 | 21.11.2024 | 21.11.2024 |
| (b) | Stack material | FRP | FRP | FRP |
| (c) | Height of stack from ground level | 30 m | 30 m | 30 m |
| (d) | Source to which stack attached | • Stack of HCl Furnace<br>• Hypo stack | • Stack of HCl Furnace | • Stack of HCl Furnace<br>• Hypo stack |
| (e) | No of Source attached with capacity | - | - | - |
| (f) | Type and quantity of fuel used | - | - | - |
| (g) | Details of APCS installed | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation | • Tail gas tower with packing ring | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation |
| 2. | **PARAMETERS** | **VALUES** | **VALUES** | **VALUES** |
| (a) | Ambient temperature (°C) | 27.0 | 28.0 | 28.0 |
| (b) | Stack gas temperature (°C) | 31.0 | 29.0 | 30.0 |
| (c) | Stack gas velocity (m/sec) | 1.70 | 1.65 | 1.67 |
| (d) | Flow rate (LPM) | 5.0 | 5.0 | 5.0 |
| (e) | Sampling time (minutes) | 60 | 60 | 60 |
| (f) | Volume of air sampled (liters) | 300 | 300 | 300 |
| (g) | Total gas quantity (Nm³/Hr) | 291.503 | 102.529 | 413.718 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Results | | | Standard (as per CPCB) |
|---|---|---|---|---|---|---|---|
| | | | | Membrane-I | Membrane-II | Membrane-III | |
| 1 | Hydrochloric Acid (HCl) | mg/Nm³ | USEPA Method 26, 2019 | 6.2 | 6.4 | 6.0 | 35 |
| 2 | Chlorine ($Cl_2$) | mg/Nm³ | USEPA Method 26, 2019 | 0.61 | | 0.58 | 15 |

..... END OF REPORT .....

- ETRC remarks that all of analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to provide accurate results for the samples received in the report as above.
- This result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/281, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (UP)

Email : ETRCLTH@YAHOO.IN, Web: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PMO/TEST-REPORT/43

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/13025/2024 | | Date of Report: 28/12/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of Monitoring | 18.12.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PCU Unit-I |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | SHUTDOWN |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (LPM) | |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ($Nm^3/Hr$) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed 2019 | SHUTDOWN | 2.0 - 1000 | 100 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS: 11255 (Part-02): 1985 Reaffirmed 2019 | | 1.0 - 2000 | 600 |
| 3 | Oxides of Nitrogen (NOx) | $mg/Nm^3$ | IS: 11255 (Part-07): 2005 Reaffirmed 2022 | | 2.0 - 1000 | 600 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29 2017 | | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP/Air/1 2015 | | 0.1 - 20 | |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance. All all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC shall not assume any liability for any claims or damages related to the quality of parameter analysed in the results under the performance of the equipment conforming to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete report is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/761, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@GMAIL.In, Web.: www.etrcindia.com

ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45 [illegible]

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/13028/2024 | | Date of Report: 28/12/2024 |
|---|---|---|
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 18.12.2024 |
| (b) | Stack material | RCC |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PGD Unit-II |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 20.0 |
| (b) | Stack gas temperature (°C) | 104.0 |
| (c) | Stack gas velocity (m/sec) | 12.56 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 54 |
| (f) | Volume of air sampled (liters) | 1026 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 216416.66 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 42.56 | 2.0 - 1000 | 50 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS: 11256 (Part-02): 1985 Reaffirmed: 2019 | 195.38 | 1.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS: 11256 (Part-07): 2006 Reaffirmed: 2022 | 122.84 | 2.0 - 1000 | 300 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP-W/1.2015 | 11.4 | 0.1 - 20 | |

PM Calculated at 12% $CO_2$

BDL= Below Detection Limit

.....END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reported are drawn in general accurate reasonable representative of the samples, interpreted in the report as aware.
- This report relates only to the items tested.
- ETRC does not accept any liability for any claims or damages related to the quality of instrument provided or the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep K. Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
AM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC1TRIPATHI@GMAIL.COM, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/13027/2024 | | Date of Report: 26/12/2024 |
| Name Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, LUCKNOW |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 18.12.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (CFBC) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | STANDBY |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (LPM) | |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ($Nm^3/Hr$) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed 2019 | STANDBY | 2.0 - 000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS 11255 (Part-02): 1985 Reaffirmed 2019 | | 4.0 - 2000 | |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS 11255 (Part-07): 2005 Reaffirmed 2022 | | 2.0 - 1000 | |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29 2017 | | 0.02 - 5.0 | |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/AA1 2015 | | 0.1 - 20 | |

.....End of report.....

- ETRC warrant that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, measured in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment complying to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain regarding is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 3/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986 TC-6488


ETRC/PM09/TEST-REPT/743

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/13028/2024 | | Date of Report: 28/12/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 19.12.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler ( Thermax) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 21.0 |
| (b) | Stack gas temperature (°C) | 108.0 |
| (c) | Stack gas velocity (m/sec) | 7.48 |
| (d) | Flow rate (LPM) | 25.0 |
| (e) | Sampling time (minutes) | 42.0 |
| (f) | Volume of air sampled (liters) | 1050.0 |
| (g) | Total gas quantity ($Nm^3$/hr) | 28013.22 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 42.86 | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS: 11255 (Part-02): 1985 Reaffirmed: 2019 | 217.68 | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS 11255 (Part-07): 2005 Reaffirmed: 2022 | 159.04 | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29 2017 | BDL | 0.002 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/V1 2015 | 10.8 | 0.1 - 20 | - |

Rst Calculated at 12% $CO_2$
BDL= Below Detection Limit

.....END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt in generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed or the results and/or use performance of the equipment controlling to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/261, Ashiyan Khanda, Sushil Nagar, Lucknow - 226 020 (U.P.)
Email : ETRCLKO@YAHOO.CO.IN, Web. : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & MoEF Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986



# TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/13029/2024 | | Date of Report: 28/12/2024 |
| Name /Address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, LUCKNOW |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 19.12.2024 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 36 m |
| (d) | Source to which stack attached | D.G. Set 1875 KVA |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | HSD |
| (g) | Details of APCS installed | - |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 20.0 |
| (b) | Stack gas temperature (°C) | 150.0 |
| (c) | Stack gas velocity (m/sec) | 6.90 |
| (d) | Flow rate (LPM) | 20 |
| (e) | Sampling time (minutes) | 60 |
| (f) | Volume of air sampled (liters) | 1060 |
| (g) | Total gas quantity ($Nm^3/hr$) | 28636.73 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 43.71 | 2.0 - 1000 | 75 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 28.77 | 4.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 59.39 | 2.0 - 1000 | 710 |
| 4 | Carbon Monoxide | $mg/Nm^3$ | ETRC/LABSOP/A13: 2015 | 105.0 | 1.145 - 5000 | 150 |
| 5 | Non-Methane Hydrocarbon (NMHC) | $mg/Nm^3$ | By G. C | 11.2 | 0.1 - 200 | 100 |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the sample and/or the performance of the equipment pertaining to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our specific permission in writing.
- Complaints register if available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Aliganj Khurd, Ganit Nagar, Lucknow - 226 810 (U.P.)

Email : ETRCLTH@YAHOO.CO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from ministry of Environment, Forest and Climate change, GOVT. of India vide EPA (M)S TC-5003




## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | | | |
|---|---|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/13030/2024 | | **Date of Report:** 28/12/2024 | | |
| **Name /Address/Type of Industry** | | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** | | |
| Monitored by | | ETRC, Lucknow | | |
| Sr. No. | GENERAL INFORMATION | DETAILS Membrane-I | DETAILS Membrane-II | DETAILS Membrane-III |
| 1.(a) | Date of monitoring | 20.12.2024 | 20.12.2024 | 20.12.2024 |
| (b) | Stack material | FRP | FRP | FRP |
| (c) | Height of stack from ground level | 30 m | 30 m | 30 m |
| (d) | Source to which stack attached | • Stack of HCl Furnace<br>• Hypo stack | • Stack of HCl Furnace | • Stack of HCl Furnace<br>• Hypo stack |
| (e) | No of Source attached with capacity | - | - | |
| (f) | Type and quantity of fuel used | - | | |
| (g) | Details of APCS installed | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation | • Tail gas tower with packing ring | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation |
| 2. | PARAMETERS | VALUES | VALUES | VALUES |
| (a) | Ambient temperature (°C) | 20.0 | 19.0 | 21.0 |
| (b) | Stack gas temperature (°C) | 24.0 | 25.0 | 24.0 |
| (c) | Stack gas velocity (m/sec) | 1.68 | 1.70 | 1.68 |
| (d) | Flow rate (LPM) | 5.0 | 5.0 | 5.0 |
| (e) | Sampling time (minutes) | 60 | 60 | 60 |
| (f) | Volume of air sampled (Nm³) | 300 | 300 | 300 |
| (g) | Total gas quantity (Nm³/Hr) | 286.432 | 407.623 | 429.402 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Results | | | Standard (as per CPCB) |
|---|---|---|---|---|---|---|---|
| | | | | Membrane-I | Membrane-II | Membrane-III | |
| 1 | Hydrochloric Acid (HCl) | mg/Nm³ | USEPA Method 26 : 2019 | 6.5 | 6.2 | 6.3 | 35 |
| 2 | Chlorine ($Cl_2$) | mg/Nm³ | USEPA Method 26 : 2019 | 0.54 | | 0.57 | 15 |

END OF REPORT.

- ETRC warrants that all chemical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- This result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment complying to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our written permission in writing.
- Counter report should be done in our laboratory.

Authorized Signatory
(Sharad Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/261, Vibhuti Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLKO@YAHOO.IN, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA Act



# TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/13468/2025 | Date of Report: 04/02/2025 |
| Name /Address/Type of Industry | Gresim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| 1 (a) | Date of monitoring | 28.01.2025 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PCD Units |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 22.0 |
| (b) | Stack gas temperature (°C) | 112.0 |
| (c) | Stack gas velocity (m/sec) | 12.75 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 55 |
| (f) | Volume of air sampled (liters) | 1045 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 216163.06 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS 11255 (Part-01): 1985 Reaffirmed: 2019 | 45.17 | 2.0 - 1000 | 100 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS 11255 (Part-02): 1985 Reaffirmed: 2019 | 168.02 | 4.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS 11255 (Part-07): 2005 Reaffirmed: 2022 | 136.77 | 2.0 - 1000 | 600 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method - 29: 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon dioxide ($CO_2$) | % | ETRC/LAB/SOP/01:2015 | 11.6 | 0.1 - 20 | |

PM Calculated at 12% $CO_2$
BDL= Below Detection Limit

End Of Report

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or law-suits related to the quality of parameter analysed in the results and/or the performance of the equipment constituting to the results
- All disputes subject to Lucknow jurisdiction
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing
- Complain register is available in our laboratory

Authorized Signatory
(Sandeep Kr Verma)
Lab-In-Charge

Authorized Signatory
(Pintu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/F1748

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/13469/2025 | | Date of Report: 04/02/2025 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 28.01.2025 |
| (b) | Stack material | RCC |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PSD Unit-II |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 21.0 |
| (b) | Stack gas temperature (°C) | 107.0 |
| (c) | Stack gas velocity (m/sec.) | 12.48 |
| (d) | Flow rate (LPM) | 18 |
| (e) | Sampling time (minutes) | 60 |
| (f) | Volume of air sampled (liters) | 1064 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 214467.63 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | mg/Nm³ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 45.20 | 2.0 - 1000 | 50 |
| 2 | Sulphur Dioxide ($SO_2$) | mg/Nm³ | IS: 11255 (Part-02): 1985 Reaffirmed: 2019 | 185.38 | 1.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | mg/Nm³ | IS: 11255 (Part-07): 2005 Reaffirmed: 2022 | 113.65 | 2.0 - 1000 | 300 |
| 4 | Mercury (Hg) | mg/Nm³ | US EPA Method -29: 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP/A/11:2015 | 11.2 | 0.1 - 20 | - |

Pol Calculated at 18% $CO_2$

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to precisely accurately the samples mentioned in this report as above.
- The result relate only to the item received.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is available in our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab Incharge

Authorised Signatory
(Ritu Garg)
Lab

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/13470/2025 | | Date of Report: 04/02/2025 |
|---|---|---|
| Name, Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 29.01.2025 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (CVPL) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (..PM) | STANDBY |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ($Nm^3/Hr$) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | mg/$Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | STANDBY | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | mg/$Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | | 4.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | mg/$Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | mg/$Nm^3$ | US EPA Method -29: 2017 | | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP/01:2015 | | 0.1 - 20 | - |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the report and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow Jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint, if any, is available only in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accreditation Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM02/TEST-REP/FT/45

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/1347 I/2025 | | Date of Report: 04/02/2026 |
| Name /address/Type of industry | | Graam Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 29.01.2025 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler ( Isenmann) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 22.0 |
| (b) | Stack gas temperature (°C) | 106.0 |
| (c) | Stack gas velocity (m/sec) | 7.46 |
| (d) | Flow rate (LPM) | 45.0 |
| (e) | Sampling time (minutes) | 81.0 |
| (f) | Volume of air sampled (liters) | 1025.0 |
| (g) | Total gas quantity (Nm³/Hr) | 2631.74 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate matter | mg/Nm³ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 41.67 | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | mg/Nm³ | IS:11256 (Part-02): 1985 Reaffirmed: 2019 | 209.68 | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | mg/Nm³ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 191.98 | 2.0 - 1000 | |
| 4 | Mercury (Hg) | mg/Nm³ | US EPA Method-29 2017 | BDL | 0.02 - 5.0 | |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP/A/11.2015 | 10.9 | 0.1 - 30 | |

Fd Equivalent 12% $CO_2$

BDL= Below Detection Limit

End of Report

- ETRC reports that all analytical work is conducted scrupulously in accordance with all applicable standard laboratory practices and that the data reported are genuine and correct for the sample, mentioned in the report as above
- This report refers only to the item tested
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysis in the report and/or the performance of the equipment constituting to the results
- All disputes subject to Lucknow jurisdiction
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
Cell

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Nirmala Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

TC-5469


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/13472/2025 | | Date of Report: 04/02/2025 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. no. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 29.01.2025 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 36 m |
| (d) | Source to which stack attached | D.G. Set 1875 KVA |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | HSD |
| (g) | Details of APCS installed | - |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 21.0 |
| (b) | Stack gas temperature (°C) | 152.0 |
| (c) | Stack gas velocity (m/sec) | 8.78 |
| (d) | Flow rate (LPM) | 25 |
| (e) | Sampling time (minutes) | 480 |
| ( ) | Volume of air sampled (liters) | 12040 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 29715.08 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 46.68 | 2.0 - 1000 | 75 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 22.94 | 4.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 35.40 | 2.0 - 1000 | 710 |
| 4 | Carbon Monoxide | $mg/Nm^3$ | ETRC/LABSOP/03: 2015 | 103.0 | 1.145 - 5000 | 150 |
| 5 | Non-Methane Hydrocarbon (NMHC) | $mg/Nm^3$ | By G. C. | 11.4 | 0.1 - 200 | 100 |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment contributing to the results.
- All analyses subject to Lucknow Jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain regarding sample in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA, 1986




## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | | | |
|---|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/13473/2026 | | Date of Report: 04/02/2025 | | |
| Name /Address/Type of Industry | | Graeim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | | |
| Monitored by | | ETRC, Lucknow | | |
| Sr. No. | GENERAL INFORMATION | DETAILS Membrane-I | DETAILS Membrane-II | DETAILS Membrane-III |
| (a) | Date of monitoring | 30.01.2025 | 30.01.2025 | 30.01.2025 |
| (b) | Stack material | FRP | FRP | FRP |
| (c) | Height of stack from ground level | 30 m | 30 m | 30 m |
| (d) | Source to which stack attached | • Stack of HCl Furnace<br>• Hypo stack | • Stack of HCl Furnace | • Stack of HCl Furnace<br>• Hypo stack |
| (e) | No of Source attached with capacity | - | - | - |
| (f) | Type and quantity of fuel used | - | - | - |
| (g) | Details of APCS installed | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation | • Tail gas tower with packing ring | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation |
| 2. | PARAMETERS | VALUES | VALUES | VALUES |
| (a) | Ambient temperature (°C) | 19.0 | 20.0 | 19.0 |
| (b) | Stack gas temperature (°C) | 22.0 | 21.0 | 22.0 |
| (c) | Stack gas velocity (m/sec) | 1.69 | 1.69 | 1.68 |
| (d) | Flow rate (LPM) | 5.0 | 5.0 | 5.0 |
| (e) | Sampling time (minutes) | 60 | 60 | 60 |
| (f) | Volume of air sampled (liters) | 300 | 300 | 300 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 300.218 | 305.446 | 429.765 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Results | | | Standard (as per CPCB) |
|---|---|---|---|---|---|---|---|
| | | | | Membrane-I | Membrane-II | Membrane-III | |
| 1 | Hydrochloric Acid (HCl) | mg/Nm³ | USEPA Method 26, 2019 | 6.3 | 6.4 | 6.2 | 35 |
| 2 | Chlorine ($Cl_2$) | mg/Nm³ | USEPA Method 26, 2019 | 0.58 | | 0.56 | 15 |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample(s) mentioned in the report as received.
- The results relate only to the items tested.
- ETRC does not assume any liability for any losses or damages related to the quality of parameters analyzed in the results and/or the performance of the equipment consulting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete legible data available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Ashwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@REDIFFMAIL.COM, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, GOI, of MoEF vide Lttr.


ETRC/PM09/TEST-REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref no.: ETRC/EPA/13798/2025 | | Date of Report: 06/03/2025 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monnored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 28.02.2025 |
| (b) | Stack material | MS Steel |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PSD Unit-I |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 24.0 |
| (b) | Stack gas temperature (°C) | 119.0 |
| (c) | Stack gas velocity (m/sec) | 12.79 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 54 |
| (f) | Volume of air sampled (liters) | 1026 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 219113.97 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range or Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 63.18 | 2.0 - 1000 | 100 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 175.72 | 1.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS 11255 (Part-07): 2005 Reaffirmed: 2022 | 131.93 | 2.0 - 1000 | 600 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method - 29: 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11: 2015 | 11.8 | 0.1 - 20 | - |

PM Calculated at 12% $CO_2$

BDL= Below Detection Limit

End Of Report

- ETRC warrants that all chemical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment connected to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register available in our laboratory.

Authorized Signatory
(Sandeep R. Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/253, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : etrc@yahoo.in, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 certified) (ISO / IEC 17025 : NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate Change (GOVT. OF INDIA) vide letter No. [illegible]

# TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/13797/2025 | | **Date of Report:** 05/03/2025 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 28.02.2025 |
| (b) | Stack material | RCC |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PGD Unit-II |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | - |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (LPM) | SHUTDOWN |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ($Nm^3/hr$) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | SHUTDOWN | 2.0 - 1000 | 30 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | | 1.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | | 2.0 - 1000 | 300 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method - 29 2017 | | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11:2015 | | 0.1 - 20 | - |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and in this data reflects our best attempt to generate accurate results for the sample, considered in the report in all ways.
- The report relate only to the items tested.
- ETRC does not assume any liability for any claims or damages arising out of the quality / performance / analysis of the sample / the accompanying or use of the equipment connected to / relating to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRC1.lko@rediffmail.com, Web. : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (UKAS) ISO 14001:2015 NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India
CPCB Registered Vide No. EPE/443

# TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.. ETRC/EPA/13798/2025 | Date of Report: 05/03/2025 |
| Name /Address/Type of industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| 1.(a) | Date of monitoring | 28.02.2025 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (CVPL) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 25.0 |
| (b) | Stack gas temperature (°C) | 108.0 |
| (c) | Stack gas velocity (m/sec) | 7.80 |
| (d) | Flow rate (LPM) | 29.0 |
| (e) | Sampling time (minutes) | 40.0 |
| (f) | Volume of air sampled (liters) | 1040.0 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 29436.76 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per GPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 44.16 | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS 11255 (Part-02): 1985 Reaffirmed: 2019 | 195.36 | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS 11255 (Part-07): 2005 Reaffirmed: 2022 | 117.69 | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29: 2017 | BDL | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP/A/11:2015 | 10.8 | 0.1 - 20 | - |

PM Calculated at 12% $CO_2$
BDL= Below Detection Limit

..... END OF REPORT.....

- ETRC assures that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that they uses reasonable efforts to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment pertaining to the reports.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is available in the laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
Dir

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : etrc@etrcindia.in, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 MNRE, Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate Change, New Delhi

# TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/13799/2025 | | **Date of Report:** 05/03/2025 |
| **Name /Address/Type of Industry** | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| **Monitored by** | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1 (a) | Date of monitoring | 28.02.2025 |
| (b) | Stack material | MS Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (Thermax) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Baghfilter |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | STANDBY |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (LPM) | |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ($Nm^3$/hr) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | STANDBY | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS 11255 (Part-07): 2005 Reaffirmed: 2022 | | 2.0 - 1000 | |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29 2017 | | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/AIR/2015 | | 0.1 - 20 | |

PM Calculated at 12% $CO_2$
BDL= Below Detection Limit

.....END OF REPORT.....

- ETRC warrants that all analysis work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the samples, mentioned in the report at entire.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of unknown products or the results arising the performance of the equipment connected to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC27@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& MoEF Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change (GOI) vide ENVT/RO/ES/NABET/143 /2021(E)


## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.. ETRC/EPA/13800/2025 | | Date of Report: 05/03/2025 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemecal Division<br>P. O. Renukoot<br>District: Sonebhedra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 01.03.2025 |
| (b) | Stack material | MS Steel |
| (c) | Height of stack from ground level | 36 m |
| (d) | Source to which stack attached | D.G. Set 1875 KVA |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | HSD |
| (g) | Details of APCS installed | - |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 25.0 |
| (b) | Stack gas temperature (°C) | 154.0 |
| (c) | Stack gas velocity (m/sec) | 8.60 |
| (d) | Flow rate (LPM) | 25 |
| (e) | Sampling time (minutes) | 40 |
| (f) | Volume of air sampled (liters) | 1040 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 29723.83 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 44.28 | 2.0 - 1000 | 75 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 17.24 | 1.0 - 2000 | - |
| 3 | Oxides of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 49.10 | 2.0 - 1000 | 710 |
| 4 | Carbon Monoxide | $mg/Nm^3$ | ETRC/LABSOP/A13: 2015 | 104.0 | 1.145 - 5000 | 150 |
| 5 | Non-Methane Hydrocarbon (NMHC) | $mg/Nm^3$ | By G. C | 11.2 | 0.1 - 200 | 100 |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the samples mentioned in the report as shown.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Comments (opinions & suitable in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Nitu Garg)
Lab

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLUCKNOW@GMAIL.COM, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India vide File No. EPA-22/...
ETRC/PM09/TEST REPORT/FT 43

# TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | | | |
|---|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/13801/2025 | | Date of Report: 06/03/2025 | | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | | |
| Monitored by | | ETRC, Lucknow | | |
| Sr. No | GENERAL INFORMATION | DETAILS Membrane-I | DETAILS Membrane-II | DETAILS Membrane-III |
| 1 (a) | Date of monitoring | 01.03.2025 | 01.03.2025 | 01.03.2025 |
| (b) | Stack material | FRP | FRP | FRP |
| (c) | Height of stack from ground level | 30 m | 30 m | 30 m |
| (d) | Source to which stack attached | • Stack of HCl Furnace<br>• type stack | • Stack of HCl Furnace | • Stack of HCl Furnace<br>• type stack |
| (e) | No of Source attached with capacity | - | - | - |
| (f) | Type and quantity of fuel used | - | - | - |
| (g) | Details of APCS installed | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation | • Tail gas tower with packing ring | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation |
| 2. | PARAMETERS | VALUES | VALUES | VALUES |
| (a) | Ambient temperature (°C) | 24.0 | 25.0 | 24.0 |
| (b) | Stack gas temperature (°C) | 23.0 | 24.0 | 23.0 |
| (c) | Stack gas velocity (m/sec) | 1.70 | 1.68 | 1.71 |
| (d) | Flow rate (LPM) | 5.0 | 5.0 | 5.0 |
| (e) | Sampling time (minutes) | 60 | 60 | 60 |
| (f) | Volume of air sampled (liters) | 300 | 300 | 300 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 301.770 | 106.996 | 437.105 |

## TEST RESULT

| Sr. No | Parameter | Unit | Protocol | Results | | | Standard (as per CPCB) |
|---|---|---|---|---|---|---|---|
| | | | | Membrane-I | Membrane-II | Membrane-III | |
| 1 | Hydrochloric Acid (HCl) | $mg/Nm^3$ | USEPA Method 26, 2019 | 6.1 | 6.2 | 6.3 | 35 |
| 2 | Chlorine ($Cl_2$) | $mg/Nm^3$ | USEPA Method 26, 2019 | 0.56 | | 0.52 | 15 |

END OF REPORT

- ETRC ensures that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relies only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of sample(s) analyzed or the results and/or the performance of the equipment or labelling of the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint, if any, can be made in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986



## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/14045/2025 | | **Date of Report:** 29/03/2025 |
| **Name /Address/Type of Industry** | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| **Monitored by** | | ETRC, Lucknow |
| Sr. No. | **GENERAL INFORMATION** | **DETAILS** |
| 1 (a) | Date of monitoring | 19.03.2025 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PGD Unit-I |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2. | **PARAMETERS** | **VALUES** |
| (a) | Ambient temperature (°C) | 29.0 |
| (b) | Stack gas temperature (°C) | 108.0 |
| (c) | Stack gas velocity (m/sec) | 12.82 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 55 |
| (f) | Volume of air sampled (liters) | 1045 |
| (g) | Total gas quantity ($nm^3/hr$) | 221503.51 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing (Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 43.16 | 2.0 - 1000 | 100 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 194.35 | 4.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 152.32 | 2.0 - 1000 | 600 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29: 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP/A/11:2015 | 11.6 | 0.1 - 20 | - |

PM Calculated at 12% $CO_2$
BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results on the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment corresponding to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our specific permission in writing.
- Complaint regarding report within seven days.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Ashwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/43 C-0469

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/14046/2026 | **Date of Report:** 29/03/2025 |
| **Name /Address/Type of Industry** | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| **Monitored by** | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| 1.(a) | Date of monitoring | 19.03.2025 |
| (b) | Stack material | RCC |
| (c) | Height of stack from ground level | 75 m |
| (d) | Source to which stack attached | PGD Unit-II |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | ESP |
| 2 | **PARAMETERS** | **VALUES** |
| (a) | Ambient temperature (°C) | 26.0 |
| (b) | Stack gas temperature (°C) | 107.0 |
| (c) | Stack gas velocity (m/sec) | 12.06 |
| (d) | Flow rate (LPM) | 19 |
| (e) | Sampling time (minutes) | 715 |
| (f) | Volume of air sampled (liters) | 1045 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 2195885.85 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01) : 1985 Reaffirmed 2019 | 44.09 | 2.0 - 1000 | 50 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS: 11255 (Part-02) : 1985 Reaffirmed 2019 | 173.88 | 4.0 - 2000 | 600 |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS: 11255 (Part-07) : 2005 Reaffirmed: 2022 | 141.86 | 2.0 - 1000 | 300 |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method -29 2017 | BDL | 0.02 - 5.0 | 0.03 |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LAB/SOP/01.2016 | 11.8 | 0.1 - 50 | |

**END OF REPORT**

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that no data values has been altered to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without prior special permission in writing.
- Complaint if any will be entertained within 30 days.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Ramnas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@YAHOO.CO.IN, Web.: www.etrclabs.com

(ISO 9001:2015, SO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/14047/2025 | | **Date of Report:** 29/03/2025 |
| **Name /Address/Type of Industry** | | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |
| **Monitored by** | | **ETRC, Lucknow** |
| **Sr. No.** | **GENERAL INFORMATION** | **DETAILS** |
| 1 (a) | Date of monitoring | 20.03.2025 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (CVPL) |
| (e) | No of Source attached with capacity | 01 No. |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | **PARAMETERS** | **VALUES** |
| (a) | Ambient temperature (°C) | 35.0 |
| (b) | Stack gas temperature (°C) | 110.0 |
| (c) | Stack gas velocity (m/sec) | 7.82 |
| (d) | Flow rate (LPM) | 26.0 |
| (e) | Sampling time (minutes) | 40.0 |
| (f) | Volume of air sampled (liters) | 1040.0 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 29379.75 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing (Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 43.15 | 2.0 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | 491.22 | 4.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | 196.25 | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29: 2017 | BDL | 0.02 - 5.0 | - |
| 5 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/A/11.2015 | 10.9 | 0.1 - 20 | - |

PM Calculated at 12% $CO_2$

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC certifies that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results on the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without prior written permission of ETRC.
- Complaint, if any, should be made within 7 days.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRC.Lko@rediffmail.com Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986

ETRC/PWW/TEST-REP/FT/43

# TEST REPORT
## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/140448/2025 | **Date of Report:** 29/03/2025 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>P. O. Renukoot<br>**District: Sonebhadra (U.P.) - 231217** |
| **Monitored by** | **ETRC, Lucknow** |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| 1.(a) | Date of monitoring | 20.03.2025 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 61 m |
| (d) | Source to which stack attached | Steam Generation Boiler (Thermax) |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | Coal |
| (g) | Details of APCS installed | Bagfilters |
| 2. | **PARAMETERS** | **VALUES** |
| (a) | Ambient temperature (°C) | STANDBY |
| (b) | Stack gas temperature (°C) | |
| (c) | Stack gas velocity (m/sec) | |
| (d) | Flow rate (LPM) | |
| (e) | Sampling time (minutes) | |
| (f) | Volume of air sampled (liters) | |
| (g) | Total gas quantity ($Nm^3$/Hr) | |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | STANDBY | 20 - 1000 | 150 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS:11255 (Part-02): 1985 Reaffirmed: 2019 | | 4.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS:11255 (Part-07): 2005 Reaffirmed: 2022 | | 2.0 - 1000 | - |
| 4 | Mercury (Hg) | $mg/Nm^3$ | US EPA Method 29: 2017 | | 0.02 - 5.0 | - |
| 6 | Carbon Dioxide ($CO_2$) | % | ETRC/LABSOP/11 2015 | | 0.1 - 20 | - |

..... END OF REPORT.....

- Field sampling may be assigned work is completed professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results on the sample, measured in the report as above.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment connected to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and its use is to be in accordance with the Code of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorised Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 272a1, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/14049/2025 | | Date of Report: 29/03/2025 |
|---|---|---|
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U. P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| 1.(a) | Date of monitoring | 20.03.2025 |
| (b) | Stack material | Mild Steel |
| (c) | Height of stack from ground level | 36 m |
| (d) | Source to which stack attached | D.G. Set 1875 KVA |
| (e) | No of Source attached with capacity | 01 No |
| (f) | Type and quantity of fuel used | HSD |
| (g) | Details of APCS installed | - |
| 2. | PARAMETERS | VALUES |
| (a) | Ambient temperature (°C) | 29.0 |
| (b) | Stack gas temperature (°C) | 152.0 |
| (c) | Stack gas velocity (m/sec.) | 8.78 |
| (d) | Flow rate (LPM) | 26 |
| (e) | Sampling time (Minutes) | 40 |
| (f) | Volume of air sampled (liters) | 1040 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 29715.09 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | Range of Testing / Limit of Detection | Standard (as per CPCB) |
|---|---|---|---|---|---|---|
| 1 | Particulate Matter | $mg/Nm^3$ | IS: 11255 (Part-01): 1985 Reaffirmed: 2019 | 48.11 | 2.0 - 1000 | 75 |
| 2 | Sulphur Dioxide ($SO_2$) | $mg/Nm^3$ | IS: 11255 (Part-02): 1985 Reaffirmed: 2019 | 22.94 | 1.0 - 2000 | - |
| 3 | Oxide of Nitrogen ($NO_x$) | $mg/Nm^3$ | IS: 11255 (Part-07): 2005 Reaffirmed: 2022 | 55.20 | 2.0 - 1000 | 710 |
| 4 | Carbon Monoxide | $mg/Nm^3$ | ETRC/LABSOP/01: 2015 | 106.0 | 145 - 5000 | 150 |
| 5 | Non-Methane Hydrocarbon (NMHC) | $mg/Nm^3$ | By G. C. | 11.0 | 0.1 - 200 | 100 |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects due diligence to generate accurate results for the sample / manufactured as the report is given.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment connected to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without written permission in writing.
- Complete results is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Riju Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Ashwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.IN@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986

TC-5469


ETRC/PM08/TEST-REP/FT/43

## TEST REPORT

## STACK EMISSION MONITORING AND ANALYSIS REPORT

| | | | | |
|---|---|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/14050/2025 | | **Date of Report:** 29/03/2025 | | |
| **Name /Address/Type of Industry** | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | | |
| **Monitored by** | | ETRC, Lucknow | | |
| Sr. No. | **GENERAL INFORMATION** | DETAILS Membrane-I | DETAILS Membrane-II | DETAILS Membrane-III |
| 1.(a) | Date of monitoring | 21.03.2025 | 21.03.2025 | 21.03.2025 |
| (b) | Stack material | FRP | FRP | FRP |
| (c) | Height of stack from ground level | 30 m | 30 m | 30 m |
| (d) | Source to which stack attached | • Stack of HCl Furnace<br>• H2 po stack | • Stack of HCl Furnace | • Stack of HCl Furnace<br>• H2 po stack |
| (e) | No of Source attached with capacity | - | - | |
| (f) | Type and quantity of fuel used | - | - | |
| (g) | Details of APCS installed | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation | • Tail gas tower with packing ring | • Tail gas tower with packing ring<br>• Scrubber with Caustic circulation |
| 2. | **PARAMETERS** | **VALUES** | **VALUES** | **VALUES** |
| (a) | Ambient temperature (°C) | 29.0 | 28.0 | 27.0 |
| (b) | Stack gas temperature (°C) | 24.0 | 25.0 | 24.0 |
| (c) | Stack gas velocity (m/sec.) | 1.69 | 1.71 | 1.70 |
| (d) | Flow rate (LPM) | 5.0 | 5.0 | 5.0 |
| (e) | Sampling time (minutes) | 60 | 60 | 60 |
| (f) | Volume of air sampled (litres) | 300 | 300 | 300 |
| (g) | Total gas quantity ($Nm^3/Hr$) | 284.894 | 105.297 | 430.139 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Results | | | Standard (as per CPCB) |
|---|---|---|---|---|---|---|---|
| | | | | Membrane-I | Membrane-II | Membrane-III | |
| 1 | Hydrochloric acid (HCl) | $mg/Nm^3$ | USEPA Method 26, 2019 | 5.4 | 6.1 | 6.3 | 35 |
| 2 | Chlorine ($Cl_2$) | $mg/Nm^3$ | USEPA Method 26, 2019 | 0.57 | | 0.58 | 15 |

..... END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and can also make out best opinion to generate accurate results for the sample, mentioned in the report of above.
- This result relate only to the same sample.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed or the results given in the report or the consequences of the judgments contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

ANNEXURE-2


# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/201, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.in, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/1004/2024 | | Date of Report: 04/05/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Main Gate | |
| Sr. No. | GENERAL OBSERVATIONS | DET ALS-$PM_{10}$ | DET ALS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind Direction | West to East | West to East |
| (c) | Average Humidity (%) | 34 | 34 |
| (d) | Average ambient temperature (°C) | 29 | 29 |
| (e) | Time of Sampling Started (Hours) | 10:42 am (28/04/2024) | 10:42 am (28/04/2024) |
| (f) | Time of Sampling completed (Hours) | 10:23 am (29/04/2024) | 10:23 am (29/04/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1418 minutes) | 24 hour (1417 minutes) |
| 2 | Average sampling rate for PM (in litre/minute) | 1.185 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1680.093<br>• 708.9 | • 23.559 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS, dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 80.2 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 49.66 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2) 2001, RA: 2022 | µg/$m^3$ | 13.89 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6) 2006, RA: 2022 | µg/$m^3$ | 21.36 | For 24 hour = 80 |
| 5 | Carbon monoxide (CO) | IS: 5182 (Part-10) 1999, RA: 2019 | mg/$m^3$ | 3.53 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9) 1974, RA: 2019 | µg/$m^3$ | 15.8 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25) 2018 | µg/$m^3$ | 21.56 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22) 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1) 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26) 2018 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a;<br>US EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- This result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of particular analytes in the results shall the performance of the equipment, scheduling or downtime.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : U/261, Indiwas Kunj, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web.. www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/11005/2024 | | Date of Report: 04/05/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonabhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Plant Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| i(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 52 | 52 |
| (d) | Average ambient temperature (°C) | 28 | 28 |
| (e) | Time of Sampling Started (Hours) | 10:40 am (29/04/2024) | 10:40 am (29/04/2024) |
| (f) | Time of Sampling completed (Hours) | 10:19 am (30/04/2024) | 10:19 am (30/04/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1385 minutes) | 24 hour (1385 minutes) |
| h | Average sampling rate for PM (m³/minute) | 1.155 | NA |
| i | Average sampling rate for gas (LPM) | 0.5 | NA |
| j | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 599.444<br>• 692.4 | • 23.054 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 16/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 81.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 59.32 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 14.22 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 20.55 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.51 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 16.4 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 20.75 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | CPA/0.25/IS 9004/Dec. /As EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC declares that all analytical work is conducted professionally in accordance with all applicable standard necessary practices and that we take utmost attempts to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analysed in any sample which are not stated in the report or the information furnished by the client.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 7/291, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REP/FT/42

## TEST REPORT
### AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/11006/2024 | | **Date of Report:** 04/05/2024 | |
| Name /address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | ETP Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 54 | 54 |
| (d) | Average ambient temperature (°C) | 29 | 29 |
| (e) | Time of Sampling Started (Hours) | 10:60 am (28/04/2024) | 10:50 am (28/04/2024) |
| (f) | Time of Sampling completed (Hours) | 10:29 am (29/04/2024) | 10:29 am (29/04/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1394 minutes) | 24 hour (1394 minutes) |
| 2 | Average sampling rate for PM (m³/minute) | 1.170 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM (m³)<br>• GAS (liter) | • 1631.448<br>• 697.2 | • 23.198 |

### TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 75.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 29.69 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 13.10 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 19.86 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 1.54 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 15.6 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 20.66 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a, US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

.....END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or any portion there of the equipment, construction to the results.
- All disputes subject to Lucknow Jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints/appeal (if any) should be addressed to us in writing within 30 days after the issue of report.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
Ritu Garg
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 226, Vaishali Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.- www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REPORT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/1007/2024 | | **Date of Report:** 04/05/2024 | |
| Name /address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Project Office | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 52 | 52 |
| (d) | Average ambient temperature (°C) | 28 | 28 |
| (e) | Time of Sampling Started (Hours) | 10:51 am (29/04/2024) | 10:51 am (29/04/2024) |
| (f) | Time of Sampling completed (Hours) | 10:26 am (30/04/2024) | 10:26 am (30/04/2024) |
| (g) | Total time of Sampling (minutes) | 24 hour (1387 minutes) | 24 hour (1387 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.165 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1616.068<br>• 693.5 | • 23.103 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 71.9 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | S: 5182 (Part-24): 2019 | µg/$m^3$ | 45.45 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 12.69 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 17.84 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 1.69 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 15.2 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | S: 5182 (Part-25): 2018 | µg/$m^3$ | 21.65 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | S: 5182 (Part-26): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010b, US EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detectable Limit

..... END OF REPORT .....

- ETRC ensures that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the report and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
CEO

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@YAHOO.IN, Web : www.etrclko.com

(ISO 9001:2015, ISO 45001:2018 (Online) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


## TEST REPORT

## WORKZONE AIR QUALITY MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/0805/12428/2024 | Date of Report: 08/05/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS ($Cl_2$ Filling) | DETAILS (CHP Area) | DETAILS (Coal Yard) | DETAILS (Chemical Boiler) |
|---|---|---|---|---|---|
| 1 (a) | Date of monitoring | 28.04.2024 | 28.04.2024 | 28.04.2024 | 29.04.2024 |
| (b) | Average ambient temperature (°C) | 28 | 30 | 28 | 30 |
| (c) | Average humidity (%) | 52 | 55 | 54 | 53 |
| (d) | Wind direction | West to East | West to East | West to East | West to East |
| 2. | PARAMETERS | VALUES | VALUES | VALUES | VALUES |
| (a) | Average sampling rate for PM (LPM) | 2.0 | 2.0 | 2.0 | 2.0 |
| (b) | Average sampling rate for VOCs (LPM) | 0.5 | 0.5 | 0.5 | 0.5 |
| (c) | Total time of sampling (Hours) | 8.0 | 8.0 | 8.0 | 8.0 |
| (d) | Sampled Air Volume for PM (liter) | 952 | 958 | 960 | 956 |
| (e) | Sampled Air Volume for VOCs (liter) | 238.0 | 239.5 | 240.0 | 239.0 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | | | | Detection Limit |
|---|---|---|---|---|---|---|---|---|
| | | | | $Cl_2$ Filling | CHP Area | Coal Yard | Chemical Boiler | |
| 1 | Particulate Matter | $mg/m^3$ | IS: 5182 | 1.20 | 1.48 | 1.72 | 1.79 | 0.05 - 10 |
| 2 | Hydrochloric Acid | $mg/m^3$ | S. 5182 | 3.2 | <1.0 | <1.0 | 1.01 | 1.0 - 50 |
| 3 | Chlorine | $mg/m^3$ | S: 5182 | 2.1 | <0.1 | <0.1 | 1.9 | 0.1 - 35 |
| 4 | Benzene | $mg/m^3$ | S: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.1 |
| 5 | Xylene | $mg/m^3$ | S: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 6 | Toluene | $mg/m^3$ | S: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 7 | Chlorinated VOCs | $mg/m^3$ | IS: 5182 | <0.003 | <0.003 | <0.003 | <0.003 | 0.003 - 0.1 |

..... END OF REPORT .....

- ETRC sampling may be employed work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples considered in this report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part or to quote be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Author zed Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Mahavir Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLKO@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001: 2018 (UKAS) ISO 14001: 2015) MoEF, Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


## TEST REPORT

## WORKZONE AIR QUALITY MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/0805/12429/2024 | Date of Report: 08/05/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS (AICP) | DETAILS (SBP Filling area) | DETAILS (SBP Lime Charging area) | DETAILS (Mem I & II (Hypo) |
|---|---|---|---|---|---|
| 1.(a) | Date of monitoring | 25.04.2024 | 25.04.2024 | 25.04.2024 | 25.04.2024 |
| (b) | Average ambient temperature ( C) | 30 | 28 | 28 | 29 |
| (c) | Average humidity (%) | 58 | 52 | 55 | 54 |
| (d) | Wind direction | West to East | West to East | West to East | West to East |
| 2 | PARAMETERS | VALUES | VALUES | VALUES | VALUES |
| (a) | Average sampling rate for PM (LPM) | 2.0 | 2.0 | 2.0 | 2.0 |
| (b) | Average sampling rate for VOCs (LPM) | 0.5 | 0.5 | 0.5 | 0.5 |
| (c) | Total time of sampling (Hours) | 8.0 | 8.0 | 8.0 | 8.0 |
| (d) | Sampled Air volume for PM (liter) | 958 | 958 | 958 | 962 |
| (e) | Sampled Air volume for VOCs (liter) | 241.0 | 239.6 | 239.0 | 240.5 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | | | | Detection Limit |
|---|---|---|---|---|---|---|---|---|
| | | | | AICP | SBP Filling Area | SBP Lime Charging Area | Mem I & II (Hypo) | |
| 1 | Particulate Matter | $mg/m^3$ | IS: 5182 | 1.39 | 1.08 | 1.21 | 0.95 | 0.05 - 10 |
| 2 | Hydrochloric Acid | $mg/m^3$ | IS: 5182 | 2.6 | 3.4 | 4.0 | 3.9 | 1.0 - 50 |
| 3 | Chlorine | $mg/m^3$ | IS: 5182 | 1.45 | 1.25 | 1.31 | 1.75 | 0.1 - 35 |
| 4 | Benzene | $mg/m^3$ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.1 |
| 5 | xylene | $mg/m^3$ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 6 | Toluene | $mg/m^3$ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 7 | Chlorinated VOCs | $mg/m^3$ | IS: 5182 | <0.003 | <0.003 | <0.003 | <0.003 | 0.003 - 0.1 |

..... End of report .....

- ETRC hereby that the analysis work is conducted professionally in accordance with all applicable standard laboratory practices and that the data offered in this report is genuine and within the limits of the sample measurement uncertainty unless otherwise noted.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed or the results arise due deficiencies of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any publishing media without our special permission in writing.
- Complete registry is available in our laboratory.

Authorized Signatory
(Sanjeev Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/11221/2024 | | Date of Report: 04/06/2024 | |
| Name /Address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonabhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling point | | Main Gate | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 51 | 51 |
| (d) | Average ambient temperature (°C) | 33 | 33 |
| (e) | Time of Sampling Started (Hours) | 10:23 am (23/05/2024) | 10:23 am (23/05/2024) |
| (f) | Time of Sampling completed (Hours) | 10:10 am (24/05/2024) | 10:10 am (24/05/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1380 minutes) | 24 hour (1387 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.180 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 638.312<br>• 684.2 | • 23.115 |

TC-5469

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 81.2 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 51.05 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 14.19 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 22.04 | For 24 hour = 80 |
| 5 | Carbon monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.61 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 76.2 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 22.16 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a, US EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable customer specifications and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analysed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is available at our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTr@Vsnl.Net, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/AMB/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/1222/2024 | | Date of Report: 04/06/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | PSD Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1 (a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 51 | 51 |
| (d) | Average ambient temperature (°C) | 33 | 33 |
| (e) | Time of Sampling Started (Hours) | 10:45 am (23/05/2024) | 10:45 am (23/05/2024) |
| (f) | Time of sampling completed (hours) | 10.28 am (24/05/2024) | 10:28 am (24/05/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1379 minutes) | 24 hour (1379 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.165 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 606.302<br>• 689.4 | • 22.986 |

## TEST RESULT

| Sr. No | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 78.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 48.60 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 13.99 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 29.83 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.52 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 116.0 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 20.63 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | CPA/625/R 9001/04, US EPA IO-3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

END OF REPORT.

- It is to certify that all analytical work is carried out appropriately in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes are open to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint regarding report will be entertained only within 15 days.

Authorized Signatory
(Sandeep Kr Verma)
Lab-in-charge

Authorized Signatory
(Rita Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/20J, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/11223/2024 | | Date of Report: 04/06/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonabhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | ETP Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 50 | 50 |
| (d) | Average ambient temperature (°C) | 34 | 34 |
| (e) | Time of Sampling Started (Hours) | 10:46 am (24/05/2024) | 10:46 am (24/05/2024) |
| (f) | Time of Sampling completed (Hours) | 10:24 am (25/05/2024) | 10:24 am (25/05/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1440 minutes) | 24 hour (1440 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.130 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1690.260<br>• 703.5 | • 23.402 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 76.4 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 48.29 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 13.42 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 19.84 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.53 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 19.9 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 20.14 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010, US EPA IO-3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL-Below Detection Limit

END OF REPORT

- ETRC, working under all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and with the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment corresponding to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register should be addressed to our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-In-charge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/2bs, Vishnu Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.TM@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001: 2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/11224/2024 | | Date of Report: 04/06/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Project Office | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 60 | 60 |
| (d) | Average ambient temperature (°C) | 34 | 34 |
| (e) | Time of Sampling Started (Hours) | 10:52 am (24/05/2024) | 10:52 am (24/05/2024) |
| (f) | Time of Sampling completed (Hours) | 10:48 am (25/05/2024) | 10:48 am (25/05/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1388 minutes) | 24 hour (1386 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.150 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (Nil) | <br>• 685.970<br>• 693.9 | <br>• 23.005 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 73.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 46.51 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 13.95 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 18.23 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.48 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 15.4 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 22.36 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a, IS:EPA 10.3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detection Limit

END OF REPORT

- ETRC, declares that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples, mentioned in the report as above
- The result relate only to the tested content.
- ETRC does not assume any liability for any claim or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment corresponding to the results
- All disputes subject to Lucknow jurisdiction
- This report is not to be reproduced wholly or in part and cannot be used as evidence in a court of law and should not be used in any advertising media without our special permission in writing.
- Complaints regarding our services in our laboratory

Authorized Signatory
(Sandeep Kr Verma)
Lab-In-charge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 222/1, Nishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC17@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST.REPORT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/1336/2024 | | **Date of Report:** 25/06/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| **Monitored by** | | ETRC, Lucknow | |
| Location of sampling points | | Main Gate | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 49 | 49 |
| (d) | Average ambient temperature (°C) | 35 | 35 |
| (e) | Time of Sampling Started (Hours) | 09:50 am (13/06/2024) | 09:50 am (13/06/2024) |
| (f) | Time of Sampling completed (Hours) | 09:36 am (14/06/2024) | 09:36 am (14/06/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1354 minutes) | 24 hour (1352 minutes) |
| h | Average sampling rate for PM ($m^3$/minute) | 1.175 | NA |
| i | Average sampling rate for gas (LPM) | 0.5 | NA |
| j | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1590.480<br>• 676.8 | • 22.538 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 19/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 80.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 50.14 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 14.83 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 21.33 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.22 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 17.9 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 23.28 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-28): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a, USEPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with the applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the report which are parameters of the equipment controlled by the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete register is available in our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorised Signatory
(Ritu Garg)
CMI

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/251, Vishwas Khand, Gomti Nagar, LUCKNOW - 226 010 (U.P.)

Email : ETRCLtd@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001: 2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/1337/2024 | | Date of Report: 25/06/2024 | |
| Name / address / type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Plant Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 49 | 49 |
| (d) | Average ambient temperature (°C) | 35 | 35 |
| (e) | Time of Sampling Started (Hours) | 10:02 am (13/06/2024) | 10:02 am (13/06/2024) |
| (f) | Time of Sampling completed (Hours) | 09:50 am (14/06/2024) | 09:50 am (14/06/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1386 minutes) | 24 hour (1367 minutes) |
| 2 | Average sampling rate for PM (in l/minute) | 1.105 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1531.530<br>• 693.0 | • 23.009 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 19/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 77.8 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 49.11 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 14.02 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 28.45 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.54 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 16.3 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 21.10 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA 6020 B (Rev. 02): US EPA IO-3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

END OF REPORT

- ETRC expressly that the analytical work is completed professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the same tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysis in the results and the performance of the equipment maintenance of the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be copied in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/201, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLW@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PMAM/TEST-REPRT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/11336/2024 | | **Date of Report:** 25/06/2024 | |
| Name /Address/ Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| **Monitored by** | | ETRC, Lucknow | |
| Location of sampling points | | ETP Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 48 | 48 |
| (d) | Average ambient temperature (°C) | 34 | 34 |
| (e) | Time of Sampling Started (Hours) | 09:49 am (14/06/2024) | 09:49 am (14/06/2024) |
| (f) | Time of Sampling completed (Hours) | 09:30 am (15/06/2024) | 09:30 am (15/06/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1380 minutes) | 24 hour (1380 minutes) |
| 2 | Average sampling rate for PM (m³/minute) | 1.170 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1590.732<br>• 679.8 | • 22.645 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 19/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 76.9 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 38.13 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 13.69 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 19.55 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.52 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 16.6 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 22.96 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a, US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL = Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is completed professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in the report, under the performance of the equipment beyond/up to the limits.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/63, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.in, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REPORT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| Test Report Ref No.: ETRC/EPA/11339/2024 | | Date of Report: 25/06/2024 | |
|---|---|---|---|
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | Project Office | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 48 | 48 |
| (d) | Average ambient temperature (°C) | 34 | 34 |
| (e) | Time of Sampling Started (Hours) | 09.58 am (14/06/2024) | 09.58 am (14/06/2024) |
| (f) | Time of Sampling completed (Hours) | 09.43 am (15/06/2024) | 09.43 am (15/06/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1372 minutes) | 24 hour (1370 minutes) |
| 2 | Average sampling rate for PM ($m^3$ minute) | 1.170 | NA |
| 3 | Average sampling rate for Gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1604.772<br>• 585.8 | • 22.832 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µgm$^3$ | 74.2 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m$^3$ | 45.55 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m$^3$ | 12.53 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_2$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m$^3$ | 17.23 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m$^3$ | 0.49 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m$^3$ | 15.4 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m$^3$ | 21.36 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m$^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m$^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m$^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a, US EPA IO 3.2 | ng/m$^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m$^3$ | BDL | Annual = 01 |

BDL=Below Deception Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standards laboratory practices and that the data reflects our best attempt to generate accurate results for the samples monitored in the report as above
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment pertaining to the results
- All disputes subject to Lucknow jurisdiction
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law etc. Should not be used in any advertising media without our special permission in writing
- Complaint regarding sample in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.The@gmail.in, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHAS) ISO 14001:2015A (NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/42

## TEST REPORT
### AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/1151/2024 | | Date of Report: 22/07/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Main Gate | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 50 | 50 |
| (d) | Average ambient temperature (°C) | 31 | 31 |
| (e) | Time of Sampling Started (Hours) | 10:45 am (11/07/2024) | 0:45 am (11/07/2024) |
| (f) | Time of Sampling completed (Hours) | 10:24 am (12/07/2024) | 0:24 am (12/07/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1368 minutes) | 24 hour (1387 minutes) |
| 2 | Average sampling rate for PM (in l/minute) | 1.200 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1690.080<br>• 684.2 | • 33.009 |

## TEST RESULT

| Sr. no. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 74.9 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 48.24 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 13.52 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_2$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 20.14 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.53 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 17.0 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 24.16 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010 Dec US-EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrine - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants only its analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reported are true, accurate to generally accepted limits for the samples, measurements in this report as above.
- The report relates only to the items tested.
- ETRC does not assume any liability for any claims or damages relating to the quality of parameters analysed in the values and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete reports should be taken in our knowledge.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Niraj Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : Q-261, Indira Nagar, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.THD@rediffmail.com, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/11512/2024 | | Date of Report: 22/07/2024 | |
| Name /Address/Type of Industry | | Graesim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | R&D Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 60 | 60 |
| (d) | Average ambient temperature (°C) | 31 | 31 |
| (e) | Time of Sampling Started (Hours) | 10:52 am (11/07/2024) | 10:52 am (11/07/2024) |
| (f) | Time of Sampling completed (Hours) | 10:36 am (12/07/2024) | 10:36 am (12/07/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1420 minutes) | 24 hour (1420 minutes) |
| 2 | Average sampling rate for PM (m³/minute) | 1.170 | Nm |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM (m³)<br>• GAS (liter) | • 1662.336<br>• 710.4 | • 23.625 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 79.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 49.10 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 13.42 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 19.36 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | (LOD) | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 19.6 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 22.33 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2019 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/CAM-300/TO6, US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

.....END OF REPORT.....

- ETRC interprets the all analytical work is conducted professionally in accordance with all applicable standard methodology/practices and utmost efforts to generate accurate results for the samples mentioned in the report as above
- The result relate only to the items tested
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in the results under the performance of the equipment constituting to the results
- All disputes subject to Lucknow jurisdiction
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without the written permission in writing
- Corrosion report is available in our laboratory

Authorized Signatory
(Sandeep Kr Verma)
Lab-In-Charge

Authorized Signatory
(Rikki Garg)
CEO


Mobile : +91 9077674127, 9936069576 | PAN No.: AHWPG5397M | GSTIN No.: 09AHWPG5397M1ZU

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLKO@AHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/11513/2024 | | Date of Report: 22/07/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | ETP Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| (a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 50 | 50 |
| (d) | Average ambient temperature (°C) | 30 | 30 |
| (e) | Time of Sampling Started (Hours) | 10:39 am (12/07/2024) | 10:39 am (12/07/2024) |
| (f) | Time of Sampling completed (Hours) | 10:22 am (13/07/2024) | 10:22 am (13/07/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1386 minutes) | 24 hour (1386 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.180 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>- PM ($m^3$)<br>- GAS (liter) | • 1635.480<br>• 693.0 | • 23.10M |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS; dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 75.3 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 47.18 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 12.33 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 18.12 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.61 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 45.6 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 21.20 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene (C$_6$H$_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010b; US EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best scientific generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages relates to the quality of parameter analyzed in the report and/or the performance of the equipment pertaining to the tests.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/361, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLUCKNOW@HOTMAIL.COM, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPAR/1514/2024 | | Date of Report: 22/07/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>Distrikt: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Project Office | |
| Sr. no. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 50 | 50 |
| (d) | Average ambient temperature (°C) | 30 | 30 |
| (e) | Time of Sampling Started (Hours) | 10:51 am (12/07/2024) | 10:51 am (12/07/2024) |
| (f) | Time of Sampling completed (Hours) | 10:43 am (13/07/2024) | 10:43 am (13/07/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1396 minutes) | 24 hour (1396 minutes) |
| 2 | Average sampling rate for PM (m³/minute) | 1.180 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM (m³)<br>• GAS (liter) | • 1646.808<br>• 710.4 | • 23.186 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 72.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 46.58 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 12.08 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 18.33 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.48 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 15.4 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 22.36 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene (C6H6) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-36): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a, US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The report relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of consumables and used in the results and/or the performance of the equipment used during survey/ sample.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our written permission in writing.
- Customer complaint is entertained in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Laboratory Head

CHECKED

Authorized Signatory
(Ravi Garg)
CMD

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/201, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


## TEST REPORT

## WORKZONE AIR QUALITY MONITORING AND ANALYSIS REPORT

| | | | | | |
|---|---|---|---|---|---|
| Test Report Ref No.: ETRC/2207/12941/2024 | | Date of Report: 22/07/2024 | | | |
| Name /Address/Type of Industry | | Gradeon Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | | | |
| Monitored by | | ETRC, Lucknow | | | |
| Sr. No. | GENERAL INFORMATION | DETAILS ($Cl_2$ Filling) | DETAILS (CHP Area) | DETAILS (Coal Yard) | DETAILS (Chemical Boiler) |
| 1.(a) | Date of monitoring | 11.07.2024 | 11.07.2024 | 11.07.2024 | 12.07.2024 |
| (b) | Average ambient temperature (°C) | 31 | 33 | 30 | 30 |
| (c) | Average humidity (%) | 52 | 55 | 54 | 53 |
| (d) | Wind direction | West to East | West to East | West to East | West to East |
| 2. | PARAMETERS | VALUES | VALUES | VALUES | VALUES |
| (a) | Average sampling rate for PM (LPM) | 2.0 | 2.0 | 2.0 | 2.0 |
| (b) | Average sampling rate for VOCs (LPM) | 0.5 | 0.5 | 0.5 | 0.5 |
| (c) | Total time of sampling (hours) | 8.0 | 8.0 | 8.0 | 8.0 |
| (d) | Sampled Air Volume for PM (liter) | 962 | 954 | 958 | 954 |
| (e) | Sampled Air Volume for VOCs (liter) | 240.5 | 238.5 | 239.5 | 238.5 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | | | | Detection Limit |
|---|---|---|---|---|---|---|---|---|
| | | | | $Cl_2$ Filling | CHP Area | Coal Yard | Chemical Boiler | |
| 1 | Particulate Matter | $mg/m^3$ | IS: 5182 | 1.29 | 1.41 | 1.68 | 1.75 | 0.05 - 10 |
| 2 | Hydrochloric Acid | $mg/m^3$ | IS: 5182 | 3.0 | <1.0 | <1.0 | 0.98 | 1.0 - 50 |
| 3 | Chlorine | $mg/m^3$ | IS: 5182 | 2.0 | <0.1 | <0.1 | 1.8 | 0.1 - 35 |
| 4 | Benzene | $mg/m^3$ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.1 |
| 5 | Xylene | $mg/m^3$ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 6 | Toluene | $mg/m^3$ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 7 | Chlorinated VOCs | $mg/m^3$ | IS: 5182 | <0.003 | <0.003 | <0.003 | <0.003 | 0.003 - 0.1 |

End of Report

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in this report as above.
- The result is/are only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality parameters analysed in the results and/or the performance of the equipment corresponding to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.CO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


## TEST REPORT
## WORKZONE AIR QUALITY MONITORING AND ANALYSIS REPORT

| | | | | | |
|---|---|---|---|---|---|
| Test Report Ref No.: ETRC/2207/12842/2024 | | Date of Report: 22/07/2024 | | | |
| Name /Address/Type of Industry | | Srasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | | | |
| Monitored by | | ETRC Lucknow | | | |
| Sr. No. | GENERAL INFORMATION | DETAILS (AICP) | DETAILS (SBP Filling Area) | DETAILS (SBP Lime Charging Area) | DETAILS (Mem I & II (Hypo) |
| 1 (a) | Date of monitoring | 12.07.2024 | 12.07.2024 | 13.07.2024 | 13.07.2024 |
| (b) | Average ambient temperature (°C) | 31 | 33 | 29 | 28 |
| (c) | Average humidity (%) | 54 | 53 | 52 | 54 |
| (d) | Wind direction | West to East | West to East | West to East | West to East |
| 2. | PARAMETERS | VALUES | VALUES | VALUES | VALUES |
| (a) | Average sampling rate for PM (LPM) | 2.0 | 2.0 | 2.0 | 2.0 |
| (b) | Average sampling rate for VOCs (LPM) | 0.5 | 0.5 | 0.5 | 0.5 |
| (c) | Total time of sampling (Hours) | 8.0 | 8.0 | 8.0 | 8.0 |
| (d) | Sampled Air Volume for PM (liter) | 958 | 960 | 954 | 960 |
| (e) | Sampled Air Volume for VOCs (liter) | 239.5 | 240.0 | 238.5 | 240.0 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | | | | Detection Limit |
|---|---|---|---|---|---|---|---|---|
| | | | | AICP | SBP Filling Area | SBP Lime Charging Area | Mem I & II (Hypo) | |
| 1 | Particulate Matter | $mg/m^3$ | IS: 5182 | 1.42 | 1.63 | 1.66 | 0.98 | 0.06 - 10 |
| 2 | Hydrochloric Acid | $mg/m^3$ | IS: 5182 | 2.8 | 3.7 | 4.1 | 3.6 | 1.0 - 50 |
| 3 | Chlorine | $mg/m^3$ | IS: 5182 | 1.40 | 1.28 | 1.30 | 1.72 | 0.1 - 35 |
| 4 | Benzene | $mg/m^3$ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.1 |
| 5 | Xylene | $mg/m^3$ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 6 | Toluene | $mg/m^3$ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 7 | Chlorinated VOCs | $mg/m^3$ | IS: 5182 | <0.004 | <0.003 | <0.003 | <0.003 | 0.003 - 0.1 |

..... END OF REPORT .....

- ETRC certifies that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflected on this report is genuine accurate results for the samples received in the report as above.
- The result relate only to analysis sample.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results which the appropriateness of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and various used for analysis in the court of law and should not be used for any advertising issues without our special permission in writing.
- Complain appeal, if liable in 30 laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 9/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986




## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/11671/2024 | | **Date of Report:** 20/08/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | Main Gate | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather condition | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 58 | 58 |
| (d) | Average ambient temperature (°C) | 28 | 28 |
| (e) | Time of Sampling Started (Hours) | 09:26 am (07/08/2024) | 09:26 am (07/08/2024) |
| (f) | Time of Sampling completed (Hours) | 09:16 am (08/08/2024) | 09:16 am (08/08/2024) |
| (g) | Total time of sampling (Minutes) | 24 hour (1402 minutes) | 24 hour (1406 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.190 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1668.818<br>• 701.1 | • 23.325 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 71.2 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 47.58 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 13.24 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 19.25 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.54 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 18.0 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 23.42 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/620/R-96/010a, US EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrine - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detection Limit

.....END OF REPORT.....

- ETRC assures that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment contributing to the report.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without the prior permission in writing.
- Common reagents are available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/201, Nirman Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLUCKNOW@YAHOO.CO.IN Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REPORT/462

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

TC-5469

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/1167/2024 | | Date of Report: 20/08/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Ramakool<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | PSD Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 58 | 58 |
| (d) | Average ambient temperature (°C) | 28 | 28 |
| (e) | Time of Sampling Started (Hours) | 09:45 am (07/08/2024) | 09:45 am (07/08/2024) |
| (f) | Time of Sampling completed (Hours) | 08:26 am (08/08/2024) | 09:26 am (08/08/2024) |
| (g) | Total time of Sampling (minutes) | 24 hour (1404 minutes) | 24 hour (1402 minutes) |
| 2 | Average sampling rate for PM (in m³/minute) | 1.180 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1656.720<br>• 702.0 | • 23.351 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS, dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 76.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 46.25 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2) 2001, RA: 2022 | µg/m³ | 12.36 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6) 2006, RA: 2022 | µg/m³ | 18.52 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10) 1999, RA: 2019 | mg/m³ | 1.52 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9) 1974, RA: 2019 | µg/m³ | 19.2 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25) 2018 | µg/m³ | 22.86 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22) 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11) 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26) 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a, US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

END OF REPORT.

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The report relate only to the items tested.
- ETRC does not undertake any liability for any claims or damages raised in the quality of parameter analysis in the report & also the performance of the equipment consumed in the above.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishnu Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCETH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA, 1986


ETRC/PM09/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/11673/2024 | | Date of Report: 20/08/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | ETP area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS $PM_{10}$ | DETAILS $PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 56 | 56 |
| (d) | Average ambient temperature (°C) | 29 | 29 |
| (e) | Time of Sampling Started (Hours) | 09:36 am (08/08/2024) | 09:36 am (08/08/2024) |
| (f) | Time of Sampling completed (Hours) | 09:22 am (09/08/2024) | 09:22 am (09/08/2024) |
| (g) | Total time of Sampling (minutes) | 24 hour (1402 minutes) | 24 hour (1401 minutes) |
| 2 | Average sampling rate for PM (m³/minute) | 1.180 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM (m³)<br>• GAS (liter) | • 1653.880<br>• 700.6 | • 23.342 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS, dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 70.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 46.70 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 12.25 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg m³ | 15.35 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.53 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 15.6 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 21.02 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010b;<br>US EPA IO-3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrine - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

.....END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the interpretation of the report with respect to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register shall be taken in our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab In-charge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHAS) ISO 14001:2015& MoEF Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PMnn/TEST REPORT

TC-5489

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPAr1674/2024 | | Date of Report: 20/08/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Project Office | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 56 | 56 |
| (d) | Average ambient temperature (°C) | 29 | 29 |
| (e) | Time of Sampling Started (Hours) | 09:45 am (08/08/2024) | 09:45 am (08/08/2024) |
| (f) | Time of Sampling completed (Hours) | 09:30 am (09/08/2024) | 09:30 am (09/08/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1441 minutes) | 24 hour (1408 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.150 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1622.880<br>• 705.6 | • 23.472 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 69.8 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 43.03 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 11.86 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 17.65 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.48 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 15.0 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 23.36 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-25): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010B; US EPA IO-3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed if the results affect the performance of the equipment considering to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as guidance in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Laboratory Incharge

Authorized Signatory
(Ritu Garg)
Lab

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTN@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015A NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REPORT/42

## TEST REPORT
### AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref no.: ETRC/EPA/1827/2024 | | Date of Report: 06/09/2024 | |
| Name /Address/type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Main Gate | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 56 | 56 |
| (d) | Average ambient temperature (°C) | 27 | 27 |
| (e) | Time of Sampling Started (Hours) | 10:35 am (05/09/2024) | 10:35 am (05/09/2024) |
| (f) | Time of Sampling completed (Hours) | 10:12 am (06/09/2024) | 10:12 am (06/09/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1405 minutes) | 24 hour (1406 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.130 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | <br>• 1587.876<br>• 702.5 | <br>• 23.418 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m$^3$ | 70.2 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m$^3$ | 45.89 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m$^3$ | 12.34 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m$^3$ | 18.46 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m$^3$ | 0.50 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m$^3$ | 16.2 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m$^3$ | 24.58 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m$^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/m$^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part 26): 2020 | ng/m$^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | CPA/b20/K-66/U10a;<br>US EPA IO 3.2 | ng/m$^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m$^3$ | BDL | Annual = 01 |

Min = Minimum Detectable Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of the sample analyzed or the results shown, the plant failure or the equipment breakdown in the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our specific permission in writing.
- Complete register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Raju Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Indira Nagar, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| Test Report Ref No.: ETRC/EPA/1828/2024 | | Date of Report: 16/09/2024 | |
|---|---|---|---|
| Name /address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonabhadra (U.P) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | PSU Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 56 | 56 |
| (d) | Average ambient temperature (°C) | 27 | 27 |
| (e) | Time of Sampling Started (Hours) | 10:50 am (05/09/2024) | 10:50 am (05/09/2024) |
| (f) | Time of Sampling completed (Hours) | 10:36 am (06/09/2024) | 10:36 am (06/09/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1414 minutes) | 24 hour (1412 minutes) |
| 2 | Average sampling rate for PM (LPM/minute) | 1.170 | NA |
| 3 | Average sampling rate for gas (LPM) | 3.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | <br>• 1653.912<br>• 705.5 | <br>• 23.526 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 75.4 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 44.83 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 11.25 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 17.52 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.63 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 16.6 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 21.33 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | CPA/820/R 900/08, US EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene – particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL = Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analyses work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of materials analyzed or the results and/or the performance of the equipment tested relating to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints regarding results in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-in-charge

Authorised Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/281, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLT@YAHOO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/1829/2024 | | Date of Report: 18/09/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | ETP Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 54 | 54 |
| (d) | Average ambient temperature (°C) | 28 | 28 |
| (e) | Time of Sampling Started (Hours) | 10.43 am (06/09/2024) | 10:43 am (06/09/2024) |
| (f) | Time of Sampling completed (Hours) | 10.20 am (07/09/2024) | 10:20 am (07/09/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1385 minutes) | 24 hour (1385 minutes) |
| 2 | Average sampling rate for PM (in l/minute) | 1.185 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.6 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1962.723<br>• 895.7 | • 23.204 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µgm$^3$ | 69.9 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µgm$^3$ | 47.41 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µgm$^3$ | 11.63 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µgm$^3$ | 18.65 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mgm$^3$ | 56.00 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µgm$^3$ | 15.5 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µgm$^3$ | 24.66 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µgm$^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µgm$^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ngm$^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a; US EPA IO-3.2 | ngm$^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ngm$^3$ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality or parameter analysis or the results unless the participation of the competent consultancy in the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001: 2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10TEST-REP/FT/42

## TEST REPORT
### AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/1830/2024 | | Date of Report: 16/09/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Project Office | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 54 | 54 |
| (d) | Average ambient temperature (°C) | 28 | 28 |
| (e) | Time of Sampling Started (Hours) | 10:56 am (06/09/2024) | 10:56 am (06/09/2024) |
| (f) | Time of Sampling completed (Hours) | 10:34 am (07/09/2024) | 10:34 am (07/09/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1440 minutes) | 24 hour (1442 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.170 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | <br>• 837.766<br>• 699.9 | <br>• 23.254 |

## TEST RESULT

| Sr. No | Particulars | Protocol | Unit | Result | Standard as per NAAQS; dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 67.2 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 42.14 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 10.89 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 17.89 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.49 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 16.4 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | S: 5182 (Part-25) 2018 | µg/m³ | 20.13 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | S: 5182 (Part-26) 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | CPA/ZSK 900/108; US EPA IO-3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and methods using skilled personnel to generate accurate results for the samples, mentioned in the report as above.
- The result is/are only for the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr. Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Indiranagar Extension, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.The@rediffmail.com, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, GOI & of India under EPA 1986

TC-5469


ETRC/PM10/TEST-REP/FT/42

## TEST REPORT

### AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/12201/2024 | | Date of Report: 02/11/2024 | |
| Name /address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | main gate | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| (a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 58 | 58 |
| (d) | Average ambient temperature (°C) | 28 | 28 |
| (e) | Time of Sampling Started (Hours) | 10:23 am (23/10/2024) | 10:23 am (23/10/2024) |
| (f) | Time of Sampling completed (Hours) | 10:16 am (24/10/2024) | 10:16 am (24/10/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1379 minutes) | 24 hour (1377 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.145 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 578.726<br>• 689.4 | • 22.945 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 75.8 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 48.38 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 12.59 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 19.23 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.52 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 13.6 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 23.92 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010b;<br>US EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL-Below Detection Limit

----- END OF REPORT -----

- ETRC declares that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that any deviations from these methods did not affect the ability to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analysed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sandeep Kr. Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/201, Vaibhav Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@AHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/12202/2024 | | Date of Report: 02/11/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | PGD Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| (a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 58 | 58 |
| (d) | Average ambient temperature (°C) | 28 | 28 |
| (e) | Time of Samping Started (Hours) | 10:38 am (23/10/2024) | 10:38 am (23/10/2024) |
| (f) | Time of sampling completed (Hours) | 10:22 am (24/10/2024) | 10:22 am (24/10/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1381 minutes) | 24 hour (1383 minutes) |
| 2 | Average sampling rate for PM (m³/minute) | 1.155 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>○ PM ($m^3$)<br>○ GAS (liter) | ● 1595.286<br>● 690.5 | ● 23.042 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 76.9 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 49.04 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 12.06 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 18.84 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.55 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 18.4 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 29.58 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-29): 2023 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/600/R-96/060 10A; US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL-Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The report relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment consulting in the report.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints register is available in our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab-in-charge

Authorised Signatory
(Ritu Garg)
CM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/481, Vaniksa Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

TC-5488


ETRC/PM09/TEST-REP/FT/42

## TEST REPORT
### AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/12203/2024 | | **Date of Report:** 02/11/2024 | |
| **Name /Address/Type of Industry** | | Grasim Industries Limited<br>Chemical Division<br>P. O. Kanukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| **Monitored by** | | ETRC, Lucknow | |
| **Location of Sampling points** | | ETP Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-PM10 | DETAILS-PM2.5 |
| (a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 56 | 56 |
| (d) | Average ambient temperature (°C) | 29 | 29 |
| (e) | Time of Sampling Started (Hours) | 10:42 am (24/10/2024) | 10:42 am (24/10/2024) |
| (f) | Time of Sampling Completed (Hours) | 10:33 am (25/10/2024) | 10:33 am (25/10/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1407 minutes) | 24 hour (1408 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.190 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1674.330<br>• 703.5 | • 28.459 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 68.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 46.69 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 11.86 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_2$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 17.56 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.49 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 18.6 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 23.56 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-xx): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA-6200/R-ebo/1.0a; US EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detection Limit

.....END OF REPORT.....

- ETRC remarks that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that due diligence and best attempt to guarantee accurate results for the sample, mentioned in the report as above.
- The result relate only to the listed sample.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment conducting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without any special permission in writing.
- Complaint register is available in our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab-In-charge

Authorised Signatory
(Ritu Garg)
CM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vaniwala Khera, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

TC-3469


ETRC/PM09/TEST-REP/FT/d2

## TEST REPORT
### AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/12204/2024 | | **Date of Report:** 02/11/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Project Office | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 56 | 56 |
| (d) | Average ambient temperature (°C) | 29 | 29 |
| (e) | Time of Sampling Started (Hours) | 10:53 am (24/10/2024) | 10:53 am (24/10/2024) |
| (f) | Time of Sampling completed (Hours) | 10:42 am (25/10/2024) | 10:42 am (25/10/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1372 minutes) | 24 hour (1373 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.190 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1691.056<br>• 685.8 | • 22.882 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS; dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 67.4 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 43.74 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 11.10 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 16.58 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.52 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 13.6 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 20.45 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a; US EPA IO-3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC operates this all analyses work is conducted procedurally in accordance with all applicable standard laboratory practices and the test data reflects our best attempt to produce accurate results for the item as per the scope of the report as above.
- The result relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment corresponding to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without any special permission of ETRC.
- Complain register is available in our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorised Signatory
(Ritu Garg)
CM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomo Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTHP/AHOO.IN, Web.. www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

TC-5469


## TEST REPORT
## WORKZONE AIR QUALITY MONITORING AND ANALYSIS REPORT

| Test Report Ref No.. ETRC/0211/13642/2024 | | Date of Report: 02/11/2024 | | | |
|---|---|---|---|---|---|
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) 231217 | | | |
| Monitored by | | ETRC, Lucknow | | | |
| Sr. No. | GENERAL INFORMATION | DETAILS ($Cl_2$ Filling) | DETAILS (CHP Area) | DETAILS (Coal Yard) | DETAILS (Chemical Boiler) |
| 1.(a) | Date of monitoring | 23.10.2024 | 23.10.2024 | 23.10.2024 | 24.10.2024 |
| (b) | Average ambient temperature (°C) | 30 | 31 | 29 | 30 |
| (c) | Average humidity (%) | 54 | 56 | 56 | 55 |
| (d) | Wind direction | West to East | West to East | West to East | West to East |
| 2. | PARAMETERS | VALUES | VALUES | VALUES | VALUES |
| (a) | Average sampling rate for PM (LPM) | 2.0 | 2.0 | 2.0 | 2.0 |
| (b) | Average sampling rate for VOCs (LPM) | 0.5 | 0.5 | 0.5 | 0.5 |
| (c) | Total time of sampling (Hours) | 8.0 | 8.0 | 8.0 | 8.0 |
| (d) | Sampled Air Volume for PM (Nm³) | 956 | 954 | 960 | 956 |
| (e) | Sampled Air Volume for VOCs (Nm³) | 239.5 | 238.5 | 240.0 | 239.5 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | | | | Detection Limit |
|---|---|---|---|---|---|---|---|---|
| | | | | $Cl_2$ Filling | CHP Area | Coal Yard | Chemical Boiler | |
| 1 | Particulate Matter | $mg/m^3$ | IS: 5182 | 1.82 | 1.60 | 1.64 | 1.70 | 0.05 - 10 |
| 2 | Hydrochloric Acid | $mg/m^3$ | IS: 5182 | 3.2 | <1.0 | <1.0 | 0.83 | 1.0 - 50 |
| 3 | Chlorine | $mg/m^3$ | IS: 5182 | 2.1 | <0.1 | <0.1 | 1.7 | 0.1 - 35 |
| 4 | Benzene | $mg/m^3$ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 3.1 |
| 5 | Xylene | $mg/m^3$ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 6 | Toluene | $mg/m^3$ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 7 | Chlorinated VOCs | $mg/m^3$ | IS: 5182 | <0.003 | <0.003 | <0.003 | <0.003 | 0.003 - 0.1 |

End Of Report

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as received.
- The result relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters reported in the results which are performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain regarding sample not entertainable in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web. : www.etrcindia.com
(ISO 9001:2015, ISO 45001: 2018 (OH&S) ISO 14001: 2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

TC-5469


## TEST REPORT
## WORKZONE AIR QUALITY MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/021 1/13543/2024 | Date of Report: 02/11/2024 |
| Name /Address/Type of Industry | Graam Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS (AICP) | DETAILS (SBP Filling Area) | DETAILS (SBP Lime Charging Area) | DETAILS (Mem I & II (Hypo) |
|---|---|---|---|---|---|
| 1.(a) | Date of monitoring | 24.10.2024 | 24.10.2024 | 25.10.2024 | 25.10.2024 |
| (b) | Average ambient temperature (°C) | 30 | 29 | 28 | 29 |
| (c) | Average humidity (%) | 58 | 52 | 50 | 54 |
| (d) | Wind direction | West to East | West to East | West to East | West to East |
| 2. | PARAMETERS | VALUES | VALUES | VALUES | VALUES |
| (a) | Average sampling rate for PM (LPM) | 2.0 | 2.0 | 2.0 | 2.0 |
| (b) | Average sampling rate for VOCs (LPM) | 0.5 | 0.5 | 0.5 | 0.5 |
| (c) | Total time of sampling (Hours) | 8.0 | 8.0 | 8.0 | 8.0 |
| (d) | Sampled Air Volume for PM (liter) | 962 | 954 | 958 | 958 |
| (e) | Sampled Air Volume for VOCs (liter) | 240.5 | 238.5 | 239.5 | 239.5 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | | | | Detection Limit |
|---|---|---|---|---|---|---|---|---|
| | | | | AICP | SBP Filling Area | SBP Lime Charging Area | Mem I & II (Hypo) | |
| 1 | Particulate Matter | mg/m³ | IS: 5182 | 1.52 | 1.55 | 1.58 | 0.85 | 0.05 - 10 |
| 2 | Hydrochloric Acid | mg/m³ | IS: 5182 | 2.5 | 3.9 | 4.3 | 3.2 | 1.0 - 50 |
| 3 | Chlorine | mg/m³ | IS: 5182 | 1.36 | 1.40 | 1.33 | 1.09 | 0.1 - 35 |
| 4 | Benzene | mg/m³ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.1 |
| 5 | Xylene | mg/m³ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 6 | Toluene | mg/m³ | IS: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 7 | Chlorinated VOCs | mg/m³ | IS: 5182 | <0.003 | <0.003 | <0.003 | <0.003 | 0.003 - 0.1 |

End of Report

- ETRC assures that it conducts work in compliance with all applicable standard laboratory practices and that the data reports do their utmost to generate accurate results of the sample. Interpretation of the report is yours.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed. The results and/or the performance of the equipment or relating to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without written permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@YAHOO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REPORT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

TC-6461

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/1242/2024 | Date of Report: 27/11/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |
| Location of Sampling points | Main Gate |

| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
|---|---|---|---|
| (a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 58 | 58 |
| (d) | Average ambient temperature (°C) | 26 | 26 |
| (e) | Time of Sampling Started (Hours) | 10:42 am (19/11/2024) | 10:42 am (19/11/2024) |
| (f) | Time of Sampling completed (Hours) | 10:24 am (20/11/2024) | 10:24 am (20/11/2024) |
| (g) | Total time of sampling (Minutes) | 24 hour (1383 minutes) | 24 hour (1365 minutes) |
| 2 | Average sampling rate for PM (m³/minute) | 1.170 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1618.110<br>• 691.5 | • 23.065 |

## TEST RESULT

| Sr. No. | Parameters | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 74.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 49.86 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 12.75 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 20.43 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.68 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 16.9 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 22.45 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a; US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL = Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC shall not assume any liability for any claims or damages related to the quality of parameter analyzed in the sample based on the performance of the equipment employed to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our written permission.
- Complaints regarding the report, if any, should be made within 7 days.

Authorised Signatory
(Sandeep Kr Verma)
Lab Incharge

Authorised Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC1.THEY@HOTMAIL.COM, Web.: WWW.ETRC.IN.COM

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REPORT/42

## TEST REPORT

### AMBIENT AIR QUALITY MONITORING REPORT

TC-5469

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/12428/2024 | | Date of Report: 27/11/2024 | |
| Name /Address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | PGW Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| (a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 56 | 56 |
| (d) | Average ambient temperature (°C) | 26 | 26 |
| (e) | Time of Sampling Started (Hours) | 10:48 am (19/11/2024) | 10:48 am (19/11/2024) |
| (f) | Time of Sampling completed (Hours) | 10:30 am (20/11/2024) | 10:30 am (20/11/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1440 minutes) | 24 hour (1367 minutes) |
| f | Average sampling rate for PM (m³/minute) | 1.155 | NA |
| r | Average sampling rate for gas (LPM) | 0.5 | NA |
| t | TOTAL VOLUME OF AIR SAMPLED<br>• PM (m³)<br>• GAS (liter) | • 1614.690<br>• 696.0 | • 23.112 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 16/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 75.2 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | S 5182 (Part-24): 2019 | µg/m³ | 51.08 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 12.20 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 19.82 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.52 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 15.8 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 19.82 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a; US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analysis work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempts to generate accurate results on the samples, parameters in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in the report and/or the determination of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC1THGMAIL.COM, WEB.: WWW.ETRCINDIA.COM

(ISO 9001: 2015, ISO 45001:2018 (UKAS) ISO 14001:2015 & QMS Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India vide EPA 1986


ETRC/PM10/TEST-REP/FT/42

## TEST REPORT
### AMBIENT AIR QUALITY MONITORING REPORT

TC-5469

| | | | |
|---|---|---|---|
| **Test Report Ref No.** ETRC/EPA/12429/2024 | | **Date of Report:** 27/11/2024 | |
| **Name /Address/Type of Industry** | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| **Monitored by** | | ETRC, Lucknow | |
| Location of Sampling points | | ETP Area | |
| **Sr. No.** | **GENERAL OBSERVATIONS** | **DETAILS-$PM_{10}$** | **DETAILS-$PM_{2.5}$** |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 56 | 56 |
| (d) | Average ambient temperature (°C) | 27 | 27 |
| (e) | Time of Sampling Started (Hours) | 10:32 am (26/11/2024) | 10:32 am (26/11/2024) |
| (f) | Time of Sampling completed (Hours) | 10:20 am (27/11/2024) | 10:20 am (27/11/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1379 minutes) | 24 hour (1377 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.170 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 5 | **TOTAL VOLUME OF AIR SAMPLED**<br>▪ PM ($m^3$)<br>▪ GAS (liter) | ▪ 1613.196<br>▪ 689.4 | ▪ 22.043 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 68.8 | For 24 hour = 100 |
| 2 | Particulate matters less size than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 49.27 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 11.96 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_2$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 18.44 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.48 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 15.2 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 22.36 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a US EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples received in the normal course.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the report and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015) (NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT

### AMBIENT AIR QUALITY MONITORING REPORT

TC-5469

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/12430/2024 | | Date of Report: 27/11/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | Project Office | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 58 | 58 |
| (d) | Average ambient temperature (°C) | 27 | 27 |
| (e) | Time of Sampling Started (Hours) | 10:49 am (20/11/2024) | 10:49 am (20/11/2024) |
| (f) | Time of Sampling Completed (Hours) | 10:26 am (21/11/2024) | 10:26 am (21/11/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1382 minutes) | 24 hour (1384 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.170 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1616.706<br>• 690.9 | • 23.043 |

## TEST RESULT

| Sr. No. | Parameters | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 66.4 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 45.13 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2) 2001, RA: 2022 | µg/$m^3$ | 11.45 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6) 2006, RA: 2022 | µg/$m^3$ | 17.53 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10) 1999, RA: 2019 | mg/$m^3$ | 0.60 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9) 1974, RA: 2019 | µg/$m^3$ | 16.0 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 21.47 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a, US EPA IO-3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as found.
- The result within only to the item tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed or the results and/or the performance of the equipment consulting or the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our written permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sandeep Kr. Verma)
Lab Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 72e1, Ratnakar Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web.: www.etrcltd.com
ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REPORT/02

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/13021/2024 | | Date of Report: 28/12/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Main Gate | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| (a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 62 | 62 |
| (d) | Average ambient temperature (°C) | 18 | 18 |
| (e) | Time of Sampling Started (Hours) | 10:10 am (18/12/2024) | 10:10 am (18/12/2024) |
| (f) | Time of Sampling completed (Hours) | 10:02 am (19/12/2024) | 10:02 am (19/12/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1370 minutes) | 24 hour (1378 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.145 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1578.726<br>• 559.4 | • 22.945 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µgrm$^3$ | 78.9 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m$^3$ | 48.81 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m$^3$ | 13.24 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m$^3$ | 19.84 | For 24 hour = 80 |
| 5 | Carbon monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m$^3$ | 1.52 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m$^3$ | 14.8 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m$^3$ | 21.48 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m$^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m$^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m$^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010b, US EPA IO 3.2 | ng/m$^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrine - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m$^3$ | BDL | Annual = 01 |

BDL = Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data related out best attempt to generate accurate results on the samples, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability to any claims or damages related to the quality of parameters analysed in the results and/or the performance of the equipment pertaining to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Ashiyana Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISC 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/13022/2024 | | **Date of Report:** 28/12/2024 | |
| **Name /Address/Type of Industry** | | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** | |
| **Monitored by** | | **ETRC, Lucknow** | |
| **Location of Sampling points** | | **PGD Area** | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 62 | 62 |
| (d) | Average ambient temperature (°C) | 18 | 18 |
| (e) | Time of Sampling Started (Hours) | 10:26 am (18/12/2024) | 10:26 am (18/12/2024) |
| (f) | Time of Sampling completed (Hours) | 10:10 am (19/12/2024) | 10:10 am (19/12/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1384 minutes) | 24 hour (1384 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.160 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | **TOTAL VOLUME OF AIR SAMPLED**<br>• PM ($m^3$)<br>• GAS (liter) | • 1603.584<br>• 591.2 | • 23.036 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 72.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 50.35 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 12.33 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 18.07 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.55 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 15.2 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 19.86 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | µg/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a; US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best opinion of the proper analytical results of the samples mentioned in the report as above.
- The results relate only to the items tested.
- ETRC does not accept any liability for any claims or damages relative to the quality of parameters analysed in the results and/or the performance of the equipment conforming to the results.
- All disputes subject to ...dation jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without special permission in writing.
- Complain register is available in the laboratory.

Authorised Signatory
(Sankalp Kr Verma)
Lab-Incharge

Authorised Signatory
Ritu Garg
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/251, Vibhuti Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTN@YAHOO.IN, Web. : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REPORT/02

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/13023/2024 | | Date of Report: 28/12/2024 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | ETP Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| (a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 80 | 80 |
| (d) | Average ambient temperature (°C) | 18 | 9 |
| (e) | Time of Sampling Started (Hours) | 10:26 am (19/12/2024) | 10:26 am (19/12/2024) |
| (f) | Time of Sampling completed (Hours) | 10:14 am (20/12/2024) | 10:14 am (20/12/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1372 minutes) | 24 hour (1379 minutes) |
| 2 | Average sampling rate for PM (in litre/min) | 1.150 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1577.340<br>• 685.8 | • 22.825 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | $\mu g/m^3$ | 70.2 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | $\mu g/m^3$ | 48.19 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | $\mu g/m^3$ | 12.02 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_X$) | IS: 5182 (Part-6): 2006, RA: 2022 | $\mu g/m^3$ | 18.45 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | $mg/m^3$ | 1.18 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | $\mu g/m^3$ | 10.9 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | $\mu g/m^3$ | 23.42 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | $\mu g/m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | $\mu g/m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | $ng/m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a; US EPA IO 3.2 | $ng/m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | $ng/m^3$ | BDL | Annual = 01 |

BDL-Below Detection Limit

..... END OF REPORT .....

- ETRC declares that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt at generating accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment conforming to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our written permission in this.
- Complain regarding sample in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Alawa Khera, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.lko@yahoo.in, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (Offices) ISO 14001:2015 &NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986

TC-5167


ETRC/PM10/TEST-REPRT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| Test Report Ref No.: ETRC/EPA/13024/2024 | | Date of Report: 28/12/2024 | |
|---|---|---|---|
| Name /address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Project Office | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 30 | 30 |
| (d) | Average ambient temperature (°C) | 19 | 19 |
| (e) | Time of Sampling Started (Hours) | 10:38 am (18/12/2024) | 10:38 am (19/12/2024) |
| (f) | Time of Sampling completed (Hours) | 10:16 am (20/12/2024) | 10:16 am (20/12/2024) |
| (g) | Total time of sampling (minutes) | 24 hour (1364 minutes) | 24 hour (1366 minutes) |
| 2 | Average sampling flow for PM ($m^3$/minute) | 1.140 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1554.732<br>• 681.9 | • 22.744 |

## TEST RESULT

| Sr No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 68.8 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 45.61 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 11.98 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 16.65 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.49 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 15.8 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 20.11 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010b; US EPA IO-3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrine - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC is only responsible for the analysis carried out in the laboratory in accordance with the applicable standard methods and the data furnished by the client to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in the report which are beyond the control of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law or any tribunal without prior written approval.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorised Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : D-261, Vaswas Vihar, Gomti nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REPORT/2

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/13464/2025 | | Date of Report: 04/02/2025 | |
| Name /Address/Type of Industry | | Srasaln Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | Main Gate | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| (a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 60 | 60 |
| (d) | Average ambient temperature (°C) | 17 | 17 |
| (e) | Time of Sampling Started (Hours) | 10:26 am (28/01/2025) | 10:26 am (28/01/2025) |
| (f) | Time of Sampling completed (Hours) | 10:10 am (29/01/2025) | 10:10 am (29/01/2025) |
| (g) | Total time of sampling (minutes) | 24 hour (1343 minutes) | 24 hour (1340 minutes) |
| 2 | Average sampling rate for PM (in m³/minute) | 1.160 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1658.344<br>• 671.7 | • 22.332 |

## TEST RESULT

| Sr. no. | Particulars | Protocol | Unit | Result | Standard as per NAAQS, dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 79.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 49.26 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 13.69 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 20.45 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.83 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 35.2 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 22.14 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/2007/Method 10B, US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint, if any, should be informed to us/laboratory.

Authorized Signatory
(Sangeeta Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLKO@YAHOO.IN, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986 TC-6109


ETRC/EPA/TEST-REPORT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/13465/2025 | | Date of Report: 04/02/2025 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | RGU area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 60 | 60 |
| (d) | Average ambient temperature (°C) | 17 | 17 |
| (e) | Time of Sampling Started (Hours) | 10:42 am (28/01/2025) | 10:42 am (28/01/2025) |
| (f) | Time of Sampling completed (Hours) | 10:16 am (29/01/2025) | 10:16 am (29/01/2025) |
| (g) | Total time of sampling (minutes) | 24 hour (1382 minutes) | 24 hour (1383 minutes) |
| 2 | Average sampling rate for PM (in liter/min) | 1.170 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM (m³)<br>• GAS (liter) | <br>• 1617.408<br>• 691.2 | <br>• 23.045 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 74.1 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | S: 5182 (Part-24): 2019 | µg/m³ | 51.20 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 14.22 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 19.30 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.55 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 34.8 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 20.34 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/825-R-96/010a, US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using the due regards for good internal to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of [illegible] in the results and/or the performance of the equipment contributing to the above.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lead Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Faizan Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986 TC-5468


ETRC/PM09/TEST-REP/FT/62

## TEST REPORT
### AMBIENT AIR QUALITY MONITORING REPORT

| Test Report Ref No.: ETRC/EPA/13466/2025 | | Date of Report: 04/02/2025 | |
|---|---|---|---|
| Name /Address/Type of industry | | Srasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | ETP Area | |
| S. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| (a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 60 | 60 |
| (d) | Average ambient temperature (°C) | 18 | 18 |
| (e) | Time of Sampling Started (Hours) | 10:32 am (29/01/2025) | 10:32 am (29/01/2025) |
| (f) | Time of Sampling completed (Hours) | 10.16 am (30/01/2025) | 10:16 am (30/01/2025) |
| (g) | Total time of sampling (minutes) | 24 hour (1375 minutes) | 24 hour (1376 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.160 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (litre) | • 1604.604<br>• 688.3 | • 22.913 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standards as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 68.9 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 49.32 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 12.36 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 13.45 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.48 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 35.6 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 24.12 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-36): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010b; US EPA IO-3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL-Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our official permission in writing.
- Complaints regarding sample in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/281, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC17@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

TC-5469


ETRC/PM/W/TEST-REP/FT/42

## TEST REPORT

### AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/13467/2026 | | Date of Report: 04/02/2025 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | Project Office | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS $PM_{10}$ | DETAILS $PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 60 | 60 |
| (d) | Average ambient temperature (°C) | 18 | 18 |
| (e) | Time of Sampling Started (Hours) | 10:35 am (28/01/2025) | 10:33 am (29/01/2025) |
| (f) | Time of Sampling completed (Hours) | 10.35 am (30/01/2025) | 10:35 am (30/01/2025) |
| (g) | Total time of sampling (minutes) | 24 hour (1370 minutes) | 24 hour (1371 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.156 | NA |
| 3 | Average sampling rate for gas (L/Min) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (Nm³) | • 1582.312<br>• 685.2 | • 22.845 |

## TEST RESULT

| Sr. No. | Parameters | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 88.5 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 47.71 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 12.03 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 17.34 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part 10): 1999, RA: 2019 | mg/m³ | 0.50 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 14.6 | For 1 hour = 180 |
| 7 | Ammonia (NH₃) | IS: 5182 (Part-25): 2018 | µg/m³ | 20.69 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a; US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

Sulphonic Emission Limit

..... END OF REPORT .....

- ETRC maintains due all employed work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to provide accurate results on the sample, item tested in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special prior approval in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
Chief

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLUK@YAHOO.IN, Web.: www.etrclko.com

(ISO 9001:2015, ISC 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


## TEST REPORT

## WORKZONE AIR QUALITY MONITORING AND ANALYSIS REPORT

| | | | | | |
|---|---|---|---|---|---|
| **Test Report Ref No.:** ETRC/0402/14124/2025 | | **Date of Report:** 04/02/2025 | | | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | | | |
| Monitored by | | ETRC, Lucknow | | | |
| Sr No. | GENERAL INFORMATION | DETAILS ($Cl_2$ Filling) | DETAILS (CHP Area) | DETAILS (Coal Yard) | DETAILS (Chemical Boiler) |
| 1.(a) | Date of monitoring | 28.01.2025 | 28.01.2025 | 28.01.2025 | 29.01.2025 |
| (b) | Average ambient temperature (°C) | 30 | 31 | 29 | 30 |
| (c) | Average humidity (%) | 54 | 55 | 56 | 55 |
| (d) | Wind direction | West to East | West to East | West to East | West to East |
| 2. | PARAMETERS | VALUES | VALUES | VALUES | VALUES |
| (a) | Average sampling rate for PM (LPM) | 2.0 | 2.0 | 2.0 | 2.0 |
| (b) | Average sampling rate for VOCs (LPM) | 0.5 | 0.5 | 0.5 | 0.5 |
| (c) | Total time of sampling (hours) | 8.0 | 8.0 | 8.0 | 8.0 |
| (d) | Sampled Air Volume for PM (liter) | 960 | 958 | 958 | 958 |
| (e) | Sampled Air Volume for VOCs (liter) | 240.0 | 239.0 | 239.5 | 239.0 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | | | | Detection Limit |
|---|---|---|---|---|---|---|---|---|
| | | | | $Cl_2$ Filling | CHP Area | Coal Yard | Chemical Boiler | |
| 1 | Particulate Matter | $mg/m^3$ | IS 5182 | 1.46 | 1.51 | 1.56 | 1.58 | 0.05 - 10 |
| 2 | Hydrochloric Acid | $mg/m^3$ | IS 5182 | 2.9 | <1.0 | <1.0 | 0.89 | 1.0 - 50 |
| 3 | Chlorine | $mg/m^3$ | IS 5182 | 1.8 | <0.1 | <0.1 | 1.6 | 0.1 - 50 |
| 4 | Benzene | $mg/m^3$ | IS 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.1 |
| 5 | Xylene | $mg/m^3$ | IS 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 6 | Toluene | $mg/m^3$ | IS 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 7 | Chlorinated VOCs | $mg/m^3$ | IS 5182 | <0.003 | <0.003 | <0.003 | <0.003 | 0.003 - 0.1 |

End of Report

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the samples submitted as the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any damage caused to the quality of parameter analyzed in the results and/or the performance of the equipment consequent to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
CEO

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLKO@AOL.in, Web.: www.etrcindia.com

ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


## TEST REPORT

## WORKZONE AIR QUALITY MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/0402/4125/2025 | Date of Report: 04/02/2025 |
| Name /Address/ Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS (AICP) | DETAILS (SBP Filling Area) | DETAILS (SBP Lime Charging Area) | DETAILS (Mem I & II (Hypo) |
|---|---|---|---|---|---|
| 1.(a) | Date of monitoring | 29.01.2025 | 29.01.2025 | 30.01.2025 | 30.01.2025 |
| (b) | Average ambient temperature (°C) | 30 | 29 | 28 | 29 |
| (c) | Average humidity (%) | 58 | 62 | 50 | 54 |
| (d) | Wind direction | West to East | West to East | West to East | West to East |
| 2. | PARAMETERS | VALUES | VALUES | VALUES | VALUES |
| (a) | Average sampling rate for PM (LPM) | 2.0 | 2.0 | 2.0 | 2.0 |
| (b) | Average sampling rate for VOCs (LPM) | 0.5 | 0.5 | 0.5 | 0.5 |
| (c) | Total time of sampling (Hours) | 8.0 | 8.0 | 8.0 | 8.0 |
| (d) | Sampled Air Volume for PM (liter) | 958 | 958 | 964 | 962 |
| (e) | Sampled Air Volume for VOCs (liter) | 239.0 | 239.5 | 235.5 | 240.6 |

## TEST RESULT

| Sr. No. | Parameter | Unit | Protocol | Result | | | | Detection Limit |
|---|---|---|---|---|---|---|---|---|
| | | | | AICP | SBP Filling Area | SBP Lime Charging Area | Mem I & II (Hypo) | |
| 1 | Particulate Matter | mg/m³ | S: 5182 | 1.35 | 1.45 | 1.69 | 0.98 | 0.05 - 10 |
| 2 | Hydrochloric Acid | mg/m³ | S: 5182 | 2.3 | 3.8 | 4.1 | 3.4 | 1.0 - 50 |
| 3 | Chlorine | mg/m³ | S: 5182 | 1.42 | 1.36 | 1.34 | 1.58 | 0.1 - 15 |
| 4 | Benzene | mg/m³ | S: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.1 |
| 5 | Xylene | mg/m³ | S: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 6 | Toluene | mg/m³ | S: 5182 | <0.002 | <0.002 | <0.002 | <0.002 | 0.002 - 0.02 |
| 7 | Chlorinated VOCs | mg/m³ | S: 5182 | <0.003 | <0.003 | <0.003 | <0.003 | 0.003 - 0.1 |

End of Report

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reported are based on actual analysis of genuine samples received in the laboratory as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment pertaining to the tests.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence. Any part of the test should not be used in any advertising media without our special permission in writing.
- Complete report is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
I/c-Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 1/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRC.LKO@INDIA.IN, Web.. www.etrcindia.com
ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 NABL Accredited Laboratory
An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India vide EPA 1986 G 3446

ETRC/PM09/TEST-REP/FT/42

# TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/13792/2025 | | Date of Report: 05/03/2025 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | Main Gate | |
| Sr. no. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to east | West to East |
| (c) | Average humidity (%) | 58 | 58 |
| (d) | Average ambient temperature (°C) | 20 | 20 |
| (e) | Time of Sampling Started (Hours) | 09.10 am (28/02/2025) | 09.10 am (28/02/2025) |
| (f) | Time of Sampling completed (Hours) | 09:05 am (01/03/2025) | 09.05 am (01/03/2025) |
| (g) | Total time of sampling (minutes) | 24 hour (1382 minutes) | 24 hour (1382 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.150 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 8 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1589.760<br>• 691.2 | • 23.016 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 82.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 50.60 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 13.79 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 19.43 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part 10): 1999, RA: 2019 | mg/$m^3$ | 0.62 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 15.6 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 21.46 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-25): 2020 | µg/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a, JS EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of customer analyzed or the results and/or the performance of the equipment pertaining to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
GM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 1/251, Ratnavas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRC1@rediffmail.com, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001: 2018 (OHSAS) ISO 14001: 2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986 TC-5469



# TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/13793/2025 | | Date of Report: 05/03/2025 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | PGD Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 58 | 58 |
| (d) | Average ambient temperature (°C) | 20 | 20 |
| (e) | Time of Sampling Started (Hours) | 09:29 am (28/02/2025) | 09:29 am (28/02/2025) |
| (f) | Time of Sampling completed (Hours) | 09:13 am (01/03/2025) | 09:13 am (01/03/2025) |
| (g) | Total time of sampling (minutes) | 24 hour (1379 minutes) | 24 hour (1379 minutes) |
| 2 | Average sampling rate for PM (m³/minute) | 1.165 | N/A |
| 3 | Average sampling rate for gas (LPM) | 0.5 | N/A |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | <br>• 1633.878<br>• 689.4 | <br>• 22.976 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS, dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 76.4 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | S: 5182 (Part-24): 2019 | µg/m³ | 52.86 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part 2): 2001, RA: 2022 | µg/m³ | 14.86 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_2$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 20.86 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.53 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part 9): 1974, RA: 2019 | µg/m³ | 14.9 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 19.56 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a; Us EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

END OF REPORT

- ETRC, warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of the sample analyzed or the results and/or the performance of the equipment supplied by the client.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sarvesh Kr Verma)
Lab Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/261, Ramada Khand, Jankipuram, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@GMAIL.COM, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA, 1986
EC-5487

ETRC/PM09/TEST-REP/FT/42

TEST REPORT

## AMBIENT AIR QUALITY MONITORING REPORT

| Test Report Ref No.: ETRC/EPA/13794/2025 | | Date of Report: 05/03/2025 | |
|---|---|---|---|
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | ETP Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 58 | 58 |
| (d) | Average ambient temperature (°C) | 20 | 20 |
| (e) | Time of Sampling Started (Hours) | 09:45 am (28/02/2025) | 09:45 am (28/02/2025) |
| (f) | Time of Sampling completed (Hours) | 09:23 am (01/03/2025) | 09:23 am (01/03/2025) |
| (g) | Total time of sampling (minutes) | 24 hour (1405 minutes) | 24 hour (1405 minutes) |
| 2 | Average sampling rate for PM (m³/minute) | 1.170 | N/A |
| 3 | Average sampling rate for gas (LPM) | 0.5 | N/A |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM (m³)<br>• GAS (liter) | <br>• 1643.382<br>• 702.3 | <br>• 23.364 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 71.9 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 48.79 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 12.38 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 18.43 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.49 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 15.2 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 22.34 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96-010a, US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

END OF REPORT

- ETRC agrees that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt in generating accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of data/results analyzed or the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001: 2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA notification


ETRC/PM09/TEST-REP/FT/42

TEST REPORT

## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report RM No.: ETRC/EPA/13795/2025 | | Date of Report: 05/03/2025 | |
| Name /Address/Type of Industry | | Gissam Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | Project Office | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 38 | 38 |
| (d) | Average ambient temperature (°C) | 20 | 20 |
| (e) | Time of Sampling Started (Hours) | 09:34 am (28/02/2025) | 09:34 am (28/02/2025) |
| (f) | Time of Sampling completed (Hours) | 09:40 am (01/03/2025) | 09:40 am (01/03/2025) |
| (g) | Total time of sampling (minutes) | 24 hour (1384 minutes) | 24 hour (1384 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.155 | NA |
| 3 | Average sampling rate for gas (L-Pm) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1598.058<br>• 691.8 | • 23.052 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | standard as per NAAQS dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 68.4 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 46.15 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 12.13 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 17.95 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.46 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 14.4 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 20.46 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a, US EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as received.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment pertaining to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without the written permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Satyadeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLT@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REPORT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| Test Report Ref No.: ETRC/EPA/14041/2025 | | Date of Report: 29/03/2025 | |
|---|---|---|---|
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | Main Gate | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 54 | 54 |
| (d) | Average ambient temperature (°C) | 25 | 25 |
| (e) | Time of Sampling Started (Hours) | 10:18 am (19/03/2025) | 10:18 am (19/03/2025) |
| (f) | Time of Sampling completed (Hours) | 10:06 am (20/03/2025) | 10:06 am (20/03/2025) |
| (g) | Total time of sampling (minutes) | 24 hour (1386 minutes) | 24 hour (1387 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.176 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1628.550<br>• 693 | • 23.186 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 83.6 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 39.03 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 13.58 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 20.16 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.83 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 15.4 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 20.13 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2019 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010a; US EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in the results, under the performance of the equipment complying to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register will be taken at our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-in-charge

CHECKED

Authorized Signatory
(Rita Singh)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 122/1, Vaibhav Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web. : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHAS) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REPORT/742

## TEST REPORT
### AMBIENT AIR QUALITY MONITORING REPORT

| Test Report Ref No.: ETRC/EPA/14042/2025 | | Date of Report: 29/03/2025 | |
|---|---|---|---|
| Name Address/ Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Plant Area | |
| Sr. No. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 54 | 54 |
| (d) | Average ambient temperature (°C) | 25 | 25 |
| (e) | Time of Sampling Started (Hours) | 10:32 am (19/03/2025) | 10:32 am (19/03/2025) |
| (f) | Time of Sampling completed (Hours) | 10:18 am (20/03/2025) | 10:18 am (20/03/2025) |
| (g) | Total time of sampling (minutes) | 24 hour (1378 minutes) | 24 hour (1378 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.150 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 586.810<br>• 689.7 | • 22.995 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 90.4 | For 24 hour = 100 |
| 2 | Particulate matter size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 51.40 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 14.12 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 21.33 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.51 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 14.8 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 18.44 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010s, US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL = Below Detection Limit

----- END OF REPORT -----

- ETRC warrants that all analysis work is conducted professionally in accordance with all applicable standard practices and that the data reported are believed to generate accurate results for the sample mentioned in the report as above.
- The result refers only to the items tested.
- ETRC shall not assume any liability for any claims or damages related to the quality of parameter analyzed in the report and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used for any advertising media without special permission in writing.
- Consent register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
Ritu Garg
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/401, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory under Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


TC-5469

ETRC/PM09/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/14043/2025 | | Date of Report: 29/03/2025 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of Sampling points | | ETP Area | |
| Sr. no. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| (a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 55 | 55 |
| (d) | Average ambient temperature (°C) | 26 | 26 |
| (e) | Time of sampling started (Hours) | 10:20 am (20/03/2025) | 10:20 am (20/03/2025) |
| (f) | Time of Sampling completed (Hours) | 10:12 am (21/03/2025) | 10:12 am (21/03/2025) |
| (g) | Total time of sampling (minutes) | 24 hour (1413 minutes) | 24 hour (1411 minutes) |
| 2 | Average sampling rate for PM ($m^3$/minute) | 1.180 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM ($m^3$)<br>• GAS (liter) | • 1667.340<br>• 706.5 | • 23.512 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS dated 18/11/2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/$m^3$ | 72.2 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/$m^3$ | 49.76 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/$m^3$ | 12.33 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_2$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/$m^3$ | 19.66 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/$m^3$ | 0.56 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/$m^3$ | 5.0 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/$m^3$ | 21.36 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/$m^3$ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-1): 2006, RA: 2022 | µg/$m^3$ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/$m^3$ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625/R-96/010b;<br>US EPA IO 3.2 | ng/$m^3$ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/$m^3$ | BDL | Annual = 01 |

BDL=Below Detectable Limit

----- END OF REPORT -----

- ETRC makes and all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any losses or damages related to the quality of parameter analysis or any results and/or the performance of the equipment connected to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorised Signatory
(Saraswati Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 3/261, Ashiyana Khanda, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@AIRDC.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/42

## TEST REPORT
## AMBIENT AIR QUALITY MONITORING REPORT

| | | | |
|---|---|---|---|
| Test Report Ref No.: ETRC/EPA/140a4/2025 | | Date of Report: 28/03/2025 | |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 | |
| Monitored by | | ETRC, Lucknow | |
| Location of sampling points | | Project Office | |
| Sr. no. | GENERAL OBSERVATIONS | DETAILS-$PM_{10}$ | DETAILS-$PM_{2.5}$ |
| 1(a) | Weather conditions | Clear | Clear |
| (b) | Wind direction | West to East | West to East |
| (c) | Average humidity (%) | 55 | 55 |
| (d) | Average ambient temperature (°C) | 26 | 26 |
| (e) | Time of sampling Started (Hours) | 10:30 am (20th March 2025) | 10:30 am (20/03/2025) |
| (f) | Time of Sampling completed (Hours) | 10:14 am (21/03/2025) | 10:14 am (21/03/2025) |
| (g) | Total time of Sampling (minutes) | 24 hour (1387 minutes) | 24 hour (1385 minutes) |
| 2 | Average sampling rate for PM (m³/minute) | 1.155 | NA |
| 3 | Average sampling rate for gas (LPM) | 0.5 | NA |
| 4 | TOTAL VOLUME OF AIR SAMPLED<br>• PM (m³)<br>• GAS (liter) | • 1601.523<br>• 693.5 | • 23.105 |

## TEST RESULT

| Sr. No. | Particulars | Protocol | Unit | Result | Standard as per NAAQS: dated 18/11/ 2009 |
|---|---|---|---|---|---|
| 1 | Particulate matters size less than 10 µm ($PM_{10}$) | IS: 5182 (Part-23): 2006, RA: 2022 | µg/m³ | 69.9 | For 24 hour = 100 |
| 2 | Particulate matters size less than 2.5 µm ($PM_{2.5}$) | IS: 5182 (Part-24): 2019 | µg/m³ | 38.47 | For 24 hour = 60 |
| 3 | Sulphur Dioxide ($SO_2$) | IS: 5182 (Part-2): 2001, RA: 2022 | µg/m³ | 12.08 | For 24 hour = 80 |
| 4 | Oxides of Nitrogen ($NO_x$) | IS: 5182 (Part-6): 2006, RA: 2022 | µg/m³ | 17.58 | For 24 hour = 80 |
| 5 | Carbon Monoxide (CO) | IS: 5182 (Part-10): 1999, RA: 2019 | mg/m³ | 0.48 | For 8 hour = 02 |
| 6 | Ozone ($O_3$) | IS: 5182 (Part-9): 1974, RA: 2019 | µg/m³ | 14.0 | For 1 hour = 180 |
| 7 | Ammonia ($NH_3$) | IS: 5182 (Part-25): 2018 | µg/m³ | 20.48 | For 24 hour = 400 |
| 8 | Lead (Pb) | IS: 5182 (Part-22): 2004, RA: 2019 | µg/m³ | BDL | For 24 hour = 01 |
| 9 | Benzene ($C_6H_6$) | IS: 5182 (Part-11): 2006, RA: 2022 | µg/m³ | BDL | Annual = 05 |
| 10 | Nickel (Ni) | IS: 5182 (Part-26): 2020 | ng/m³ | BDL | Annual = 20 |
| 11 | Arsenic (As) | EPA/625 R-96/010a<br>US EPA IO 3.2 | ng/m³ | BDL | Annual = 06 |
| 12 | Benzo (a) Pyrene - particulate phase only | IS: 5182 (Part-12): 2004, RA: 2019 | ng/m³ | BDL | Annual = 01 |

BDL=Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr. Verma)
Laboratory

Authorized Signatory
(Ritu Garg)
CM

ANNEXURE-3


# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Yerwada Khema, Gomti Nagar, Lucknow – 226 010 (U.P.)

Email : ETRCLTM@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& WASI Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/46

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/110164/2024 | Date of Report: 04/05/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonabhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 30.04.2024 | 7 | Analysis Start Date | 30.04.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 04.05.2024 |

### TEST RESULT

| Sr. No | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.1 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 1426.8 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 48.5 | 5.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 62.0 | 1.0 - 90000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 272.0 | 2.0 - 135000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023-4500 Cl B | 436.0 | 2.0 - 2000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023-4500 F C | 0.38 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023-4500 S2- F | 0.39 | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023-5520 A+D | 5.3 | 5 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 60 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.45 | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.71 | 0.06 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.06 | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023-3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.38 | 0.05 - 80 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, as received in the laboratory.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced entirely or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is not active in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : U/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHMS) ISO 14001:2015A NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REPORT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report test no.: ETRC/EPA/1017/2024 | Date of Report: 04/05/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 30.04.2024 | 7 | Analysis Start Date | 30.04.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 04.05.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing / limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 212.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 6.4 | 5.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 3.6 | 1.0 - 60000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 12.0 | 2.0 - 135000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023-4500 Cl B | 12.28 | 2.0 - 2000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023-4500 F- C | 0.65 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023-4500 S2- F | BDL | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023-5520 A+D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.30 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | mg/l | APHA 24th Ed. 2023-3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.08 | 0.05 - 80 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, determined in the report as above.
- The results relate only to the items tested.
- ETRC does not accept any liability for any claims or damages related to the quality or parameter analyzed in the results under the performance of the agreement, consulting work or report.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our written permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Indira Nagar, Sarai Sagar, Lucknow - 226 016 (U.P.)
Email : ETRCLTM@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PMCB/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/11016/2024 | **Date of Report:** 04/05/2024 |
| **Name /Address/Type of Industry** | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 30.04.2024 | 7 | Analysis Start Date | 30.04.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 04.05.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 8.9 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 958.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 41.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 28.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 132.0 | 2.0 - 600000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1965 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 5.9 | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 0.41 | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.29 | 0.05 - 20 |
| 10 | SAR | % | - | 3.2 | - |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is carried out professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample(s) mentioned in the report as above.
- This result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the report and/or the performance of the equipment compiling to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and must not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vaibhav Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.in, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/1101W2024 | Date of Report: 04/05/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAIL 3

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 30.04.2024 | 7 | Analysis Start Date | 30.04.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 04.05.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 390.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 6.9 | 5.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part 44): 1993 Reaffirmed: 2019 | 2.2 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 800000 |
| 6 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 N org B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 10 | SAR | % | - | 3.6 | - |
| 11 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 262.0 | 1.8 - 1600 |
| 12 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 430.0 | 1.8 - 1600 |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages relative to the quality of parameter analyzed in the results and/or the performance of the equipment conducting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 19001 2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REPORT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/1020/2024 | Date of Report: 04/05/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 30.04.2024 | 7 | Analysis Start Date | 30.04.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 04.05.2024 |

## TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | | APHA 24th Ed. 2023-4500H+ | 7.5 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 412.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 82.6 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 20.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 112.0 | 2.0 - 500000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 3.8 | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 0.53 | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.15 | 0.05 - 20 |
| 10 | SAR | % | - | 10.86 | |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with accepted standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of chemical analysed in the wells and/or the performance of the equipment connecting to the wells.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Laboratorian

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 226L, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REPORT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/11027/2024 | Date of Report: 04/05/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonabhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 30.04.2024 | 7 | Analysis Start Date | 30.04.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 04.05.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing/ limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.2 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 186.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 8.2 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part 44): 1993 Reaffirmed: 2019 | 2.4 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 600000 |
| 6 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 10 | Salt | % | - | 0.1 | - |
| 11 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 190.0 | 1.8 - 1600 |
| 12 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 340.0 | 1.8 - 1600 |

BDL= Below Detection Limit

End of Report

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- This report relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in the report and/or the performance of the equipment consulting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our specific permission in writing.
- Complete register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 272bi, Vishnoo Khanna, Sonia Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTN@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PMha/TEST-REP/FT/46

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

TC-3409

| Test Report Ref No.: ETRC/EPA/11243/2024 | Date of Report: 04/06/2024 |
|---|---|
| Name /Address/Type of Industry | Graeim Industries Limited<br>Chemical Division<br>P. O. Rernikoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 25.05.2024 | 7 | Analysis Start Date | 25.05.2024 |
| 4 | Sample Quantity | 2.0 Liters | 8 | Analysis End Date | 03.06.2024 |

### TEST RESULT

| Sr No | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing limit or detection |
|---|---|---|---|---|---|
| 1 | pH | | APHA 24th Ed. 2023-4500H+ | 7.8 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 1052.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 58.6 | 6.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 86.0 | 1.0 - 90000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 148.0 | 2.0 - 135000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023-4500 Cl- B | 181.3 | 2.0 - 2000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023-4500 F- C | 0.62 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023-4500 S2- F | 0.50 | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023-5520 A+D | BDL | 5 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.24 | 0.35 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023-3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.06 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.98 | 0.05 - 80 |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, measured in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without the written permission of ETRC.
- Complaints register in writing at our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.INDIA@OUTLOOK.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/112/44/2024 | Date of Report: 04/06/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 25.05.2024 | 7 | Analysis Start Date | 25.05.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 03.06.2024 |

### TEST RESULT

| Sr. No | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing/ limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.5 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 198.0 | 10 - 80000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 5.2 | 5.0 - 20000 |
| 4 | Biochemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 7.4 | 1.0 - 90000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 12.0 | 2.0 - 135000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023-4500 Cl B | 53.11 | 2.0 - 2000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023-4500 F C | 0.24 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023-4500 $S^{2-}$ F | BDL | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 5520 A&D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.10 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023-3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.50 | 0.05 - 80 |

BDL= Below Detection Limit

----- END OF REPORT -----

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to provide accurate results on the samples, parameters in the report as above.
- The results pertain only to the items tested.
- ETRC does not assume any liability for any claims or damages arised to the quality of parameter analyzed or the results and/or the performance of the equipment, consequently or otherwise.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints regarding sample to be made within seven days.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Riju Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11245/2024 | Date of Report: 04/06/2024 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 25.05.2024 | 7 | Analysis Start Date | 26.05.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 03.06.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H | 8.6 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 714.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 44.0 | 5.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 56.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 140.0 | 2.0 - 500000 |
| 6 | Ammoniacal Nitrogen | mg/l | IS: 3025 Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 3.36 | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 0.62 | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.14 | 0.05 - 20 |
| 10 | SAR | % | - | 5.4 | - |

BDL= Below Detection Limit

.....END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results on the sample, mentioned in the report as above.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Counter reports is available in our laboratory.

CHECKED

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 4/281, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/Plants/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11246/2024 | Date of Report: 04/06/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 25.05.2024 | 7 | Analysis Start Date | 25.05.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 03.06.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.1 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 286.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 6.4 | 6.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 1.4 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 600000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 N$_{org}$ B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (CP-OES) | BDL | 0.05 - 20 |
| 10 | SAR | % | - | 3.6 | - |
| 11 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 170.0 | 1.8 - 1800 |
| 12 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 280.0 | 1.8 - 1800 |

BDL= Below Detection Limit

END OF REPORT

- ETRC ensures that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample received in the report as above.
- The result is valid only for the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete records are available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/203, Ashiyana Khand, Gomti Nagar, Lucknow- 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrclabs.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA:1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11247/2024 | Date of Report: 04/06/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 25.05.2024 | 7 | Analysis Start Date | 25.05.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 03.06.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing/ limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 4500H+ | 8.9 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 358.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 66.4 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 21.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 104.0 | 2.0 - 600000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 2.86 | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 1.48 | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.42 | 0.05 - 20 |
| 10 | SAR | % | - | 3.2 | |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment pertaining to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint received will be taken in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.co.in, Web.. www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, GOVT. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/11248/2024 | **Date of Report:** 04/06/2024 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | **STP Outlet Colony** | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 25.05.2024 | 7 | Analysis Start Date | 25.05.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 03.06.2024 |

### TEST RESULT

| Sr No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 212.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 7.6 | 5.0 - 20000 |
| 4 | Biochemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.2 | 1.0 - 1500000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 3000000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1986 Reaffirmed: 2019 | BDL | 0.6 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1600 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 10 | SAR | % | - | 4.3 | |
| 11 | Facal Colliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 170.0 | 1.8 - 1600 |
| 12 | Total Colliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 350.0 | 1.8 - 1600 |

BDL= Below Detection Limit

*****End of report*****

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, equipment or the item as stated.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 92B1, Vijitkas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.TH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REPORT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/11358/2024 | Date of Report: 25/06/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 15.06.2024 | 7 | Analysis Start Date | 16.06.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 24.06.2024 |

### TEST RESULT

| Sr. No | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing limit or detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.2 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 1125.0 | 10 - 400000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 63.6 | 5.0 - 20000 |
| 4 | Biochemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 440 | 1.0 - 60000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 156.0 | 2.0 - 135000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023-4500 Cl- B | 176.2 | 2.0 - 2000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023-4500 F- C | 0.36 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023-4500 S2- F | 0.96 | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023-5520 A+B | BDL | 5 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.56 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023-3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 3.91 | 0.05 - 80 |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment corresponding to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 272e1, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/11:559/2024 | Date of Report: 25/06/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Rawalkoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 15.06.2024 | 7 | Analysis Start Date | 15.06.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 24.06.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing limit of detection |
|---|---|---|---|---|---|
| 1 | pH | | APHA 24th Ed. 2023-4500H+ | 7.5 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 1186.9 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 6.1 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.3 | 1.0 - 30000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 92.0 | 2.0 - 1350000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023-4500 Cl- B | 12.4 | 2.0 - 2000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023-4500 F- C | 0.21 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023-4500 S2- F | BDL | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023-5520 A+D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 80 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.09 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | ppm | APHA 24th Ed. 2023-3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.14 | 0.05 - 80 |

BDL= Below Detection Limit

..... END OF REPORT.....

- ETRC signifies that all analytical work is carried professionally in accordance with an applicable standard laboratory protocol and that the data reflects our best attempt to generate accurate results on the samples received in the report as above.
- This report is only for the same sample.
- ETRC does not assume any liability for any claims or damages related to the quality or parameter analyzed in the report, and/or the performance of the equipment connected to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used for any commercial purpose without our specific permission in writing.
- Complain regarding sample will be entertained within 7 days.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 72/21, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PMW/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/11360/2024 | **Date of Report:** 25/06/2024 |
| **Name /Address/Type of Industry** | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 15.06.2024 | 7 | Analysis Start Date | 15.06.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 24.06.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 4500-$H^+$ B | 8.7 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 728.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 42.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 42.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 136.0 | 2.0 - 60000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.6 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 3.10 | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023 4500 P-D | 0.08 | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.11 | 0.05 - 20 |
| 10 | SAR | % | - | 7.2 | - |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is completed properly in accordance with all applicable standard laboratory practices and that the data reflects the best attempt to generate accurate results for the sample, interpreted in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages caused to the quality of parameter analyzed in the results and/or the performance of the equipment constituting as the quality.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the Court of law and should not be used in any advertising media without our special permission in writing.
- Complete register is available in our laboratory.

Authorized Signatory
(Sandeep K. Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLKO@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PW0a/TEST-REP/FT/e5

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/11361/2024 | **Date of Report:** 25/06/2024 |
| **Name /Address/Type of Industry** | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 15.06.2024 | 7 | Analysis Start Date | 15.06.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 24.06.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 4500H+ | 7.6 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 252.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 6.6 | 5.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 1.8 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 300000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1963 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023 4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P-D | BDL | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 10 | SAR | % | - | 3.1 | - |
| 11 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 120.0 | 1.8 - 1600 |
| 12 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 350.0 | 1.8 - 1600 |

BDL= Below Detection Limit

----- END OF REPORT -----

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the item tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain regarding sample is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab Incharge

Authorized Signatory
(Ritu Garg)
DM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/201, Vaniyas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.Engg@AHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11902/2024 | Date of Report: 25/06/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 15.06.2024 | 7 | Analysis Start Date | 15.06.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 24.06.2024 |

### TEST RESULT

| Sr. no. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | | APHA 24th Ed. 2023-4500H+ | 8.8 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 289.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 66.4 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 25.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 96.0 | 2.0 - 600000 |
| 6 | Ammoniacal Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 2.80 | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 1.02 | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.68 | 0.05 - 20 |
| 10 | SAR | % | - | 3.1 | |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reported are best attempt to generate accurate results for the samples submitted to the report are stated.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain report is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
CM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web.: www.etrclabs.com
(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/11363/2024 | **Date of Report:** 25/06/2024 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample Received Date | 15.06.2024 | 7 | Analysis Start Date | 16.06.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 24.06.2024 |

### TEST RESULT

| Sr No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.3 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 220.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 7.2 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.3 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 12.0 | 2.0 - 600000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1986 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 10 | SAR | % | - | 4.0 | - |
| 11 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 124.3 | 1.8 - 1600 |
| 12 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 344.3 | 1.8 - 1600 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and during the test reports our best attempt to generate accurate results on the samples submitted to the laboratory.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register available in our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorised Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 272B, Indrapuri Khanq, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLUCKNOW@HOTMAIL.COM, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11533/2024 | Date of Report: 22/07/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 13.07.2024 | 7 | Analysis Start Date | 13.07.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 22.07.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.3 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 1086.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 58.6 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 48.0 | 1.0 - 80000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 172.0 | 2.0 - 135000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023-4500 Cl- B | 180.2 | 2.0 - 2000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023-4500 F- C | 0.69 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023-4500 S2- F | 0.68 | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023-5520 A+D | BDL | 5 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 1.29 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023-3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 1.33 | 0.05 - 80 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results unless the proper sampling of the equipment conducting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Sample will remain in the laboratory for 15 days only.

Authorized Signatory
(Sandeep Kr. Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 7/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.).
Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India vide: EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11534/2024 | Date of Report: 22/07/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 13.07.2024 | 7 | Analysis Start Date | 13.07.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 22.07.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 192.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 9.2 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.6 | 1.0 - 30000 |
| 6 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 16.0 | 2.0 - 135000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023-4500 Cl B | 14.0 | 2.0 - 2000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023-4500 F C | 0.20 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023-4500 S2 F | BDL | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023-5520 A+B | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.05 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023-3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.16 | 0.05 - 80 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed or the results where the performance of the equipment contributed to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint registers available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
CMI

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vibhuti Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (UKAS) ISO 14001:2015) & GMP Accredited Laboratory

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/115352/2024 | Date of Report: 22/07/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 13.07.2024 | 7 | Analysis Start Date | 13.07.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 22.07.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H | 6.8 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 620.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 54.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 52.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 144.0 | 2.0 - 300000 |
| 6 | Ammoniacal Nitrogen | mg/l | IS: 3026 (Part): 1986 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 2.89 | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 0.76 | 0.1 - 1560 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.42 | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2019 | 7.8 | |

BDL= Below Detectable Limit

End Of Report

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects the best effort to generate accurate results for the sample, methods and the report as given.
- The report relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analysed in the results and/or the performance of the equipment pertaining to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
I/c-in-charge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC1.1@RTAMail.in, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (UKAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM10/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/11536/2024 | **Date of Report:** 22/07/2024 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 13.07.2024 | 7 | Analysis Start Date | 13.07.2024 |
| 4 | Sample Quantity | 2.0 litters | 8 | Analysis End Date | 22.07.2024 |

## TEST RESULT

| Sr No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.3 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 320.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 6.6 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.2 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 12.0 | 2.0 - 600000 |
| 6 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (CP-OES) | BDL | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2019 | 2.8 | - |
| 11 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 84.0 | 1.8 - 1800 |
| 12 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 252.0 | 1.8 - 1800 |

BDL = Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted and reported in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples received as described above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of consumer analysed in the results under the performance of the equipment conforming to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain regarding sample only in our laboratory.

Authorized Signatory
(Sandeep Kr. Verma)
Lab-in-charge

CHECKED

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : Z/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLUCKNOW@GMAIL.COM, Web : WWW.ETRCINDIA.COM

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/11537/2024 | **Date of Report:** 22/07/2024 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | **STP Inlet Colony** | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 13.07.2024 | 7 | Analysis Start Date | 13.07.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 22.07.2024 |

## TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing/ limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 6.8 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 348.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 76.4 | 5.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 76.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 120.0 | 2.0 - 300000 |
| 6 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 2.38 | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 0.69 | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.65 | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2019 | 8.2 | - |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned on the report by client.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of chemicals analysed or the results and/or the performance of the equipment connecting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints register only within 15 days in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/203, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.CO.IN, Web. : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM08/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/11538/2024 | **Date of Report:** 22/07/2024 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 19.07.2024 | 7 | Analysis Start Date | 19.07.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 22.07.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16) 2023 | 272.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 6.8 | 6.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44) 1993 Reaffirmed: 2019 | 2.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58) 2006 Reaffirmed: 2022 | 12.0 | 2.0 - 900000 |
| 6 | Ammonical Nitrogen | mg/l | Is: 3025 (Part) 1986 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2019 | 3.8 | - |
| 11 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 96.0 | 1.8 - 1600 |
| 12 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 312.0 | 1.8 - 1600 |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample submitted to the reported above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorized Signatory
(Ritu Garg)
CEO

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REPORT/15
TC-5469

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11693/2024 | Date of Report: 20/08/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 09.08.2024 | 7 | Analysis Start Date | 09.08.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 20.08.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range or testing limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.2 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 883.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 61.2 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 Part-44): 1993 Reaffirmed: 2019 | 62.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 156.0 | 2.0 - 600000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023-4500 Cl- B | 162.9 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023-4500 F- C | 0.59 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023-4500 S2- F | BDL | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023-5520 A+D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 2.38 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | mg/l | APHA 24th Ed. 2023-3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 3.24 | 0.05 - 60 |

BDL= below detection limit.

END OF REPORT.

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempts to generate accurate results for the samples, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment corresponding to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : V/26L, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLUCKNOW@GMAIL.COM, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (UKAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/F145

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/T1694/2024 | Date of Report: 20/08/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 09.08.2024 | 7 | Analysis Start Date | 09.08.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 20.08.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing/ limit of detection |
|---|---|---|---|---|---|
| 1 | pH | | APHA 24th Ed. 2023-4500H+ | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 284.0 | 10 - 80000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 8.0 | 5.0 - 20000 |
| 4 | Biochemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part 44): 1993 Reaffirmed 2019 | 2.4 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part 58): 2006 Reaffirmed: 2022 | 12.0 | 2.0 - 600000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023-4500 Cl- B | 18.0 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023-4500 F- C | 0.23 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023-4500 S2- F | BDL | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023-5520 A+B | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.07 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | ug/l | APHA 24th Ed. 2023-3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.02 - 30 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.26 | 0.05 - 80 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vibhuti Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC1TH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/1169B/2024 | Date of Report: 20/08/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 09.08.2024 | 7 | Analysis Start Date | 09.08.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 20.08.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range or testing limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 8.9 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 398.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 58.6 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed 2019 | 46.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 162.0 | 2.0 - 500000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 2.14 | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 0.51 | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.32 | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2010 | 5.8 | |

BDL= Below Detection Limit

.....END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with its approved analytical laboratory practices and that this data reflects the best attempt to provide accurate results for the sample(s) received as the result is given.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in the results and/or the performance of the equipment pertaining to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (UKAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/11696/2024 | Date of Report: 20/08/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 09.08.2024 | 7 | Analysis Start Date | 09.08.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 20.08.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 475.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 6.8 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed 2019 | 2.3 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 600000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.06 - 20 |
| 10 | SAR | % | IS: 11624: 2019 | 2.6 | - |
| 11 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 46.0 | 1.8 - 1600 |
| 12 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 270.0 | 1.8 - 1600 |

BDL = Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the samples mentioned in the present report.
- The result relate only to the items tested.
- ETRC does not undertake any liability for any claims or damages related to the quality or parameter analyzed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Common regulars is available in our laboratory.

Authorised Signatory
(Sandeep K. Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/161, Vibhuti Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : [illegible] Web. : www.etrconline.com

(ISO 9001:2015, ISO 45001:2018 (Office) ISO 17025: NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/11897/2024 | Date of Report: 20/08/2024 |
|---|---|
| Name Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 09.08.2024 | 7 | Analysis Start Date | 09.08.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 20.08.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 6.8 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 386.4 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 2540 D | 72.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed 2019 | 52.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 172.0 | 2.0 - 500000 |
| 6 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 1986 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 2.89 | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500P D | 0.82 | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.41 | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2019 | 7.4 | |

BDL= Below Detection Limit

End of Report

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reported [illegible] or calculated in the report as stated.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the results of parameter analysis or the waste under the performance of the equipment connecting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete register is available in our laboratory

Verma

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@AirSDC.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/11698/2024 | Date of Report: 20/08/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 09.08.2024 | 7 | Analysis Start Date | 09.08.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 20.08.2024 |

### TEST RESULT

| Sr. no. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing/ limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 4500H+ | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 290.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | BDL | 5.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.2 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 12.0 | 2.0 - 600000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2019 | 2.8 | - |
| 11 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 56.0 | 1.8 - 1600 |
| 12 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 260.0 | 1.8 - 1600 |

BDL= Below Detection Limit

End of Report

- ETRC declares that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting in the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our specific permission in writing.
- Complain regular is not liable in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 22261, Ashwas Khand, Sonia Nagar, Lucknow - 226 010 (U. P.)
Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India Under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/1649/2024 | Date of Report: 16/09/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 07.09.2024 | 7 | Analysis Start Date | 07.09.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 16.09.2024 |

## TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 - 4500H+ | 8.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 1109.3 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | 80.4 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 60.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 106.0 | 2.0 - 300000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500-Cl B | 142.156 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4500 F- C | 0.53 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 S2- F | 0.80 | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.46 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023 - 3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.07 | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.07 | 0.05 - 80 |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the samples, represented in the report as above.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment concerning to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be copied as evidence in the court of law and should not be used in any advertising media without the written permission.
- Complaint register within 15 days from date of receipt.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/551, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web.. www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/1650/2024 | Date of Report: 16/09/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 07.09.2024 | 7 | Analysis Start Date | 07.09.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 16.09.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 - 4500H | 7.7 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 242.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | 9.2 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.6 | 1.0 - 160000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 16.0 | 2.0 - 500000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500 Cl B | 40.61 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4500 F- D | 0.26 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 S2- F | BDL | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.17 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023 - 3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
Ritu Garg
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/201, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India Under EPA 1986


ETRC/PM06/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/11851/2024 | Date of Report: 16/09/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 07.09.2024 | 7 | Analysis Start Date | 07.09.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 16.09.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 6.6 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 622.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 53.2 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 64.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 192.0 | 2.0 - 600000 |
| 6 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 3.92 | 2.9 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 0.86 | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.17 | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2019 | 7.14 | - |

BDL= Below Detection Limit

.....END OF REPORT.....

- ETRC maintains QA/QC of analytical work & operations in accordance with all applicable standard laboratory practices and that the data reflects our best estimate of parameters addressed for the samples. Remarks in the report as above.
- The report results only to the sample tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed or the results and the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/251, Vamika Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLKO@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/11852/2024 | **Date of Report:** 16/09/2024 |
| **Name /Address/Type of Industry** | Grasim Industries Limited<br>Chemical Division<br>P. O. Ranukoot<br>District: Sonebhadra (U.P.) - 231217 |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 07.09.2024 | 7 | Analysis Start Date | 07.09.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 16.09.2024 |

## TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.3 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 668.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 6.8 | 5.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 300000 |
| 6 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 988 Reaffirmed: 2019 | BDL | 0.6 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.06 - 20 |
| 10 | SAR | - | IS: 11624: 2019 | 3.5 | - |
| 11 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 70.0 | 1.8 - 1800 |
| 12 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 350.0 | 1.8 - 1600 |

BDL= Below Detection Limit

----- END OF REPORT -----

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the appropriateness of the assumptions considering to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorised Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Sainik Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.THEY@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA, 1986


ETRC/PM09/TEST-REPORT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11853/2024 | Date of Report: 16/09/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 07.09.2024 | 7 | Analysis Start Date | 07.09.2024 |
| 4 | Sample Quantity | 2.0 litre | 8 | Analysis End Date | 16.09.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /Limit of detection |
|---|---|---|---|---|---|
| 1 | pH | | APHA 24th Ed. 2023-4500H+ | 6.9 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 454.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 62.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 68.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 129.0 | 2.0 - 500000 |
| 6 | Ammoniacal Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | 0.50 | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 2.60 | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 0.79 | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.10 | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2019 | 0.02 | - |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample mentioned in the report above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of sample analyzed in the results and/or the performance of the equipment consistent to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr. Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 42B/1, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC1TM@YAHOO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/11864/2024 | Date of Report: 16/09/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | **STP Outlet Colony** | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 07.09.2024 | 7 | Analysis Start Date | 07.09.2024 |
| 4 | Sample Quantity | 2.0 liters | 8 | Analysis End Date | 16.09.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing/ limit of detection |
|---|---|---|---|---|---|
| 1 | pH | | APHA 24th Ed. 2023-4500H+ | 7.0 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 318.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 5.4 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.8 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 16.0 | 2.0 - 800000 |
| 6 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2019 | 1.79 | - |
| 11 | Fecal Coliform | MPN/ 100 ml | IS: 1622 : 1981 Reaffirmed: 2019 | 80.0 | 1.8 - 1600 |
| 12 | Total Coliform | MPN/ 100 ml | IS: 1622 : 1981 Reaffirmed: 2019 | 340.0 | 1.8 - 1600 |

BDL= Below Detection Limit

----- END OF REPORT -----

- ETRC warranty that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that any data reported are best attempt to generate accurate results on the sample, undertaken in any report by ETRC.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register if available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
CMI

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/281, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTD@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001: 2018 (OH&S) ISO 14001: 2015) NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

TC-5469


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/1222-3/2024 | Date of Report: 02/11/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 25.10.2024 | 7 | Analysis Start Date | 25.10.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 02.11.2024 |

### TEST RESULT

| Sr. No | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 - 4500H+ | 7.58 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 646.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | 75.0 | 5.0 - 20000 |
| 4 | Biochemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 45.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 162.24 | 2.0 - 600000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500 Cl B | 210.2 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4500 F C | 0.62 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 $S^{2-}$ F | 1.60 | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 B+D | 5.2 | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.32 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023 - 3120 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.05 | 0.05 - 80 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC maintains that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow Jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Yamuna Kiran, Sahara Nagar, Lucknow - 226 028 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, GoI, of India under EPA 1986

TC-4449


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/12224/2024 | **Date of Report:** 02/11/2024 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 25.10.2024 | 7 | Analysis Start Date | 25.10.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 02.11.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing/ limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 - 4500H+ | 7.44 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 386.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | 9.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.6 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 12.0 | 2.0 - 600000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500 Cl- B | 76.01 | 2.0 - 30000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4500 F- D | 0.38 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 S2- F | BDL | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.21 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023 - 3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 80 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above
- The result relate only to the items tested
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment pertaining to the results
- All disputes subject to Lucknow jurisdiction
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing
- Complete log data is available in our laboratory

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : A/201, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

TC-5469


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/12225/2024 | Date of Report: 02/11/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 25.10.2024 | 7 | Analysis Start Date | 25.10.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 02.11.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 4500H+ | 8.50 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 544.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 2540 D | 113.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 52.3 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 156.0 | 2.0 - 800000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 Norg B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.07 | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2019 | 1.738 | - |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that its data reflects the best attempt to generate accurate results on the samples received as given.
- This report relates only to the items tested.
- ETRC does not accept any liability or any claims or damages related to the quality of parameters analysed in the above sample the performance of the equipment conducting tests/results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QHS

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/201, Ashiana Khand, Sector Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@YAHOO.IN Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015& MABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


TC-5459

ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/1222B/2024 | Date of Report: 02/11/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 25.10.2024 | 7 | Analysis Start Date | 25.10.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 02.11.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Procedure/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 6.56 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 334.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 6.0 | 5.0 - 20000 |
| 4 | Bio Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.1 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 500000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2019 | 1.46 | |
| 11 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 64.0 | 1.8 - 1600 |
| 12 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 280.0 | 1.8 - 1600 |

BDL = Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and can not be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Calibration record is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/361, Vaibhav Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTD@AHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, GOVT. OF INDIA under EPA 1986

TC-5469


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/12227/2024 | Date of Report: 02/11/2024 |
| Name /Address/Type of Industry | Graoim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 25.10.2024 | 7 | Analysis Start Date | 25.10.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 02.11.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 6.91 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 310.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 23.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 15.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 120.64 | 2.0 - 900000 |
| 6 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 N org B+C | 2.24 | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 0.196 | 0.1 - 1500 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.07 | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2019 | 3.85 | |

BDL= Below Detection Limit

.....END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample(s) mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any Advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Viswas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.LKO@YAHOO.CO, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, GOVT. of India under EPA 1986

TC-5469


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/12228/2024 | **Date of Report:** 02/11/2024 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U. P.) - 231217** |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | **STP Outlet Colony** | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 25.10.2024 | 7 | Analysis Start Date | 25.10.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 02.11.2024 |

## TEST RESULT

| Sr. No | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | | APHA 24th Ed. 2023-4500H+ | 6.96 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 328.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 5.0 | 5.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.4 | 1.0 - 1500000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 12.0 | 2.0 - 500000 |
| 6 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 1986 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 7 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 Norg B+C | BDL | 2.0 - 1200 |
| 8 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1000 |
| 9 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 10 | SAR | % | IS: 11624: 2018 | 1.95 | |
| 11 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 70.0 | 1.8 - 1600 |
| 12 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 280.0 | 1.8 - 1600 |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted procedurally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the samples mentioned in this report as received.
- This result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analysed in the results and/or the performance of the equipment conducting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLUCKNOW@GMAIL.COM, Web : www.etrcindia.com

(ISO 9001: 2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PMS/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

TC-5489

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/12469/2024 | Date of Report: 27/11/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 21.11.2024 | 7 | Analysis Start Date | 21.11.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 26.11.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 - 4500H+ | 8.2 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 664.0 | 10 - 400000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | 30.2 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed 2019 | 66.0 | 1.0 - 150000 |
| 6 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed 2022 | 176.0 | 2.0 - 300000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500 Cl B | 171.06 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4500 F C | 0.21 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 S2- F | 1.80 | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 B&D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.45 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023 - 3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.09 | 0.05 - 80 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflect our best attempt to generate accurate results for the samples, as received at the region as above.
- The test relate only to the items tested.
- ETRC does not accept any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment owned by the client.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

CHECKED

Authorised Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vibhuti Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from ministry of Environment, Forest and climate change, Govt. of India under EPA 1986


ETRC/PN09/TEST-REPORT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

TC-3469

| Test Report Ref No.: ETRC/EPA/12450/2024 | Date of Report: 27/11/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 21.11.2024 | 7 | Analysis Start Date | 21.11.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 26.11.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 - 4500H+ | 7.7 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 480.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | BDL | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.2 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 500000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500 Cl- B | 21.23 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4500 F- C | 0.20 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 S2- F | BDL | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.11 | 0.06 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023 - 3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 80 |

BDL= Below Detection Limit

.....End Of REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results on the sample / conditions at the time of report issuance.
- This result shall only be the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment used/leading to the results.
- All disputes subject to Lucknow jurisdiction
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising matter without our special permission in writing
- Complaints register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2761, Vaishno Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 & MNRE Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PWR/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/12451/2024 | Date of Report: 27/11/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

TC-5469

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 21.11.2024 | 7 | Analysis Start Date | 21.11.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 26.11.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 6.8 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 734.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 117.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 44.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 148.0 | 2.0 - 500000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | 6.0 | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | IS: 3025 (Part-34): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 Norg B+C | 2.24 | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 0.150 | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.08 | 0.05 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 5.124 | |

BDL= Below Detectable Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard procedures and that the data reflects our best attempt to generate accurate results for the sample, parameters as described above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment connected to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Satdeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLUCKNOW@YAHOO.CO.IN, Web.. www.etrcindia.com

(ISO 9001:2015, ISO 45001: 2018 (OHSMS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST REPORT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/12452/2024 | Date of Report: 27/11/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

TC-5419

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Waren Waste Water | Waste Water | 6 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 21.11.2024 | 7 | Analysis Start Date | 21.11.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 26.11.2024 |

## TEST RESULT

| Sr. No. | Test Parameter | Unit | Procedure/Test Method | Result | Range of testing limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 4500H+ | 7.3 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 644.0 | 10 - 80000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 8.4 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.4 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 12.0 | 2.0 - 500000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 2.6 | - |
| 12 | Faecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 40.0 | 1.8 - 1600 |
| 13 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 220.0 | 1.8 - 1600 |

BDL = Below Detection Limit

End of Report

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages raised by the quality or parameter analyzed in the results and/or the performance of the equipment constituting to test reports.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-In-charge

Authorized Signatory
(Ravi Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vibhuti Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLKO@GMAIL.COM, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

TC-5469

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/12453/2024 | Date of Report: 27/11/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 21.11.2024 | 7 | Analysis Start Date | 21.11.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 26.11.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /Limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.2 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 362.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 30.5 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 22.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 104.0 | 2.0 - 500000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+B | 8.0 | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.6 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P B | 1.51 | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.08 | 0.05 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 3.17 | - |

BDL = Below Detection Limit

End of report

- ETRC Warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- This report relates only to the same tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysis or the results and/or the performance of the equipment, consumable or the reagents.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our specific permission in writing.
- Complaints register cases will be in our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vibhuti Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC1@YAHOO.IN, Web... www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PMU/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/12454/2024 | Date of Report: 27/11/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

TC-6469

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 21.11.2024 | 7 | Analysis Start Date | 21.11.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 26.11.2024 |

### TEST RESULT

| Sr No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023- 4500H+ | 7.1 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 298.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | BDL | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.2 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 500000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | Is. 3025 (Part): 1986 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 1.21 | - |
| 12 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 70.0 | 1.8 - 1600 |
| 13 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 350.0 | 1.8 - 1600 |

BDL= Below Detection Limit

End of report

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the item tested
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing
- Complete record is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
CEO

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLUCKNOW@RD.IN, Web. : www.etrcindia.com

(ISO 9001: 2015, ISO 45001:2018 (UKAS) ISO 14001:2015) NABL Accredited Laboratory

An approved laboratory from Ministry of Environment, Forest and Climate change, GOVT. OF INDIA under EPA 1986 TC-5409


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/13043/2024 | Date of Report: 28/12/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 20.12.2024 | 7 | Analysis Start Date | 20.12.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 27.12.2024 |

### TEST RESULT

| Sr No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing limit or detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 - 4500H+ | 7.9 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 680.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | 78.4 | 5.0 - 20000 |
| 4 | Biochemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 65.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 172.0 | 2.0 - 600000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500 Cl B | 164.0 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4500 F C | 0.23 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 $S^{2-}$ F | 1.76 | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 60 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.61 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023 - 3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.08 | 0.05 - 80 |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment considering to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Comments/opinions are above of our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : etrc1@rediffmail.in, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 Govt. Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/PH09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref no.: ETRC/EPA/13044/2024 | Date of Report: 28/12/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 20.12.2024 | 7 | Analysis Start Date | 20.12.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 27.12.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing/ limit of detection |
|---|---|---|---|---|---|
| 1 | pH | | APHA 24th Ed. 2023 - 4500H | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 488.3 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | BDL | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.3 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 500000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500 Cl B | 22.4 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4500 F C | 0.28 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 S2- F | BDL | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.10 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023 - 3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 60 |

BDL= Below Detection Limit

..... END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the reports and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sonneep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLUCKNOW@YAHOO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 Certified, ISO 14001:2015 NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, GOVT. of India under EPA 1986

IC-5449


ETRC/PM09/TEST-REP/FT/46

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/13045/2024 | Date of Report: 28/12/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 20.12.2024 | 7 | Analysis Start Date | 20.12.2024 |
| 4 | Sample Quantity | 1.0 Liters | 8 | Analysis End Date | 27.12.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 6.9 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16) 2023 | 716.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 120.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 48.0 | 1.0 - 100000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 136.0 | 2.0 - 600000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 5520 A+D | BDL | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 1986 reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 2.12 | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P-D | 0.18 | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.06 | 0.05 - 20 |
| 11 | Salt | % | IS: 11624: 2019 | 0.06 | - |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempts to generate accurate results for the sample, mentioning in the report above.
- The result relate only to the items tested
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Aliganj Khand, Sonali Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC1@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (Online) ISO 14001:2015 NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/13046/2024 | Date of Report: 28/12/2024 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 20.12.2024 | 7 | Analysis Start Date | 20.12.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 27.12.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 636.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 8.1 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.3 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 900000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | IS: 3025 (Part-34): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 2.6 | - |
| 12 | Faecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 36.0 | 1.8 - 1600 |
| 13 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 240.0 | 1.8 - 1600 |

BDL= Below Detection Limit

End of Report

- ETRC maintains Data as analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects the best efforts to generate accurate results for the samples mentioned in the report as above.
- This report relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register available in our laboratory.

Authorized Signatory
Sandeep Kr Verma
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 72/61, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.in, Web. : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986
TC-5463


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/13047/2024 | Date of Report: 28/12/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 20.12.2024 | 7 | Analysis Start Date | 20.12.2024 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 27.12.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.9 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 368.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 52.8 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 24.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 104.0 | 2.0 - 300000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | 6.2 | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | Is 3025 (Part) 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 1.45 | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.07 | 0.05 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 3.20 | - |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants only of analytical work is conducted professionally in accordance with applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples submitted. No other warranty is implied.
- The report relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment controlling to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced in part or part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Ashiyana Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.LKO@GMAIL.COM, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An Approved laboratory from Ministry of Environment, Forest and Climate change, GOVT. OF INDIA under EPA 1986 - TC-5469


ETRC/PM09/TEST-REPORT/65

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/13048/2024 | **Date of Report:** 28/12/2024 |
| **Name /Address/Type of Industry** | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 20.12.2024 | 7 | Analysis Start Date | 20.12.2024 |
| 4 | Sample Quantity | 1.0 litre | 8 | Analysis End Date | 27.12.2024 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H | 7.3 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 304.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | BDL | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.4 | 1.0 - 160000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 300000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 N$_3$ B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 11 | SAR | % | IS 11624: 2019 | 1.16 | |
| 12 | Fecal Coliform | MPN/ 100 ml | IS 1622 - 1981 Reaffirmed: 2019 | 32.0 | 1.8 - 1600 |
| 13 | Total Coliform | MPN/ 100 ml | IS 1622 - 1981 Reaffirmed: 2019 | 380.0 | 1.8 - 1600 |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment employed in the tests.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete report & Interpretation at our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-In-Charge

Authorized Signatory
(RNu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 226/1, Vishnupuri Chauraha, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015A (NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

TC-5469


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/13486/2025 | Date of Report: 04/02/2025 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 30.01.2025 | 7 | Analysis Start Date | 30.01.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 04.02.2025 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | | APHA 24th Ed. 2023 - 4500H | 7.6 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 714.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | 78.6 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed 2019 | 42.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed 2022 | 180.0 | 2.0 - 300000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500 Cl B | 168.4 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4500 F C | 0.28 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 S2- F | 1.60 | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A&D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.36 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023 - 3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.02 - 40 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.58 | 0.05 - 80 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC always that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results on the sample, described in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages arised out the quality of parameter analyzed in the report and/or the performance of the equipment conducting to the result.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register & samples in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

TC-5469


ETRC/PW09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/13487/2025 | Date of Report: 04/02/2025 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 6 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Outlet | 5 | Sample Collected By | ETRC |
| 3 | Sample received date | 30.01.2025 | 7 | Analysis Start Date | 30.01.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 04.02.2025 |

## TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 - 4500H+ | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 482.0 | 0 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | 5.2 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.4 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.2 | 2.0 - 500000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500 Cl- B | 20.0 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4500 F- C | 0.24 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 $S^{2-}$ F | BDL | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 ARD | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.10 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | mg/l | APHA 24th Ed. 2023 - 3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.23 | 0.05 - 80 |

BDL= Below Detectable Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable laboratory practices and that due care is taken to use best attempt to generate accurate results for the sample, mentioned in the report as above.
- This result relate only to the item tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the report and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints/queries if any, may be addressed in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 1/241, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web. : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986
TC-5469

ETRC/PM09/TEST-REP/FT/45

# TEST REPORT
## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/T3485/2025 | Date of Report: 04/02/2025 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 30.01.2025 | 7 | Analysis Start Date | 30.01.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 04.02.2025 |

## TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /Limit of detection |
|---|---|---|---|---|---|
| 1 | pH | | APHA 24th Ed. 2023-4500H+ | 8.9 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 724.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 128.0 | 5.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 62.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 168.0 | 2.0 - 600000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | 6.8 | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | IS: 3025 (Part-34): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 2.19 | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 1.26 | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.10 | 0.05 - 20 |
| 11 | B&R | % | IS: 11624: 2019 | 8.14 | - |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the above test report.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages arising out of the quality of parameters analyzed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint regarding analysis in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Indiwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTM@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved Laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/13489/2025 | **Date of Report.** 04/02/2025 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 30.01.2025 | 7 | Analysis Start Date | 30.01.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 04.02.2025 |

## TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.2 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS 3025 (Part-16): 2023 | 612.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 7.4 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.3 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 600000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1966 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 11 | SAR | - | IS: 11624: 2019 | 2.2 | - |
| 12 | Faecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 28.0 | 1.8 - 1600 |
| 13 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 260.0 | 1.8 - 1600 |

BDL= Below Detection Limit

---- Nothing Follows ----

- ETRC warrants that all analytical work is conducted professionally in accordance with acceptable standard laboratory practices and that the data utilized to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters described in the results and/or the performance of the equipment considering to the results.
- All disputes subject to Lucknow jurisdiction.
- The report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without the special permission in writing.
- Complaint register only if made in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
Dir

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Vipnaw Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web. : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015A NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

TC-5469


ETRC/Pmob/TEST-REP/FT/45

## TEST REPORT

### WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/10490/2025 | **Date of Report:** 04/02/2025 |
| **Name /Address/Type of Industry** | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 30.01.2025 | 7 | Analysis Start Date | 30.01.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 04.02.2025 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 4500H+ | 7.1 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 486.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 2540 D | 52.2 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed 2019 | 38.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 Part-58): 2006 Reaffirmed 2022 | 92.0 | 2.0 - 800000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | 5.0 | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed 2018 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 N org B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 1.08 | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.09 | 0.05 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 4.56 | - |

BDL= Below Detection Limit

End Of Report

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the results of parameters analyzed in the results under the performance of the equipment, consistency of the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain regarding sample in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-in-charge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishnu Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.CO.IN, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986

TC-5469


ETRC/PM10/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/13491/2025 | Date of Report: 04/02/2025 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra ( U.P ) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 30.01.2025 | 7 | Analysis Start Date | 30.01.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 04.02.2025 |

### TEST RESULT

| Sr No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing / limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.3 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 312.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | BDL | 5.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025(Part-44): 1993 Reaffirmed: 2019 | 2.1 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 600000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P B | BDL | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 1.8 | - |
| 12 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 32.0 | 1.8 - 1600 |
| 13 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 320.0 | 1.8 - 1600 |

BDL= Below Detection Limit

..... End Of Report .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reported are based on the sample to generate accurate results for the sample, maintained in the record as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment considering as the results.
- All disputes subject to Lucknow Jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/261, Ashiana Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : etrc1.lko@gmail.com, Web : www.etrconline.com
(ISO 9001:2015, ISO 50001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986
FC-0469

ETRC/PM09/TEST-REP/FT/45

# TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/13814/2025 | Date of Report: 05/03/2025 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 01.03.2025 | 7 | Analysis Start Date | 01.03.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 05.03.2025 |

## TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | | APHA 24th Ed. 4923 - 4500H+ | 7.3 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 710.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | 74.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 64.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 192.0 | 2.0 - 600000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500 Cl- B | 146.6 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4000 F- C | 0.33 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 S2- F | 1.72 | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 10 | Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.48 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023 - 3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.69 | 0.05 - 80 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results on the samples represented in the report as above.
- This report relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed or the results and/or the performance of the equipment consulting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete registers available in our laboratory.

Authorized Signatory
(Sanjeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 1/261, Ashiyana Road, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : etrc.lko@gmail.com, Web : www.etrcindia.com
ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

ETRC/PM09/TEST-REP/FT/45

# TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/13815/2025 | Date of Report: 05/03/2025 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 01.03.2025 | 7 | Analysis Start Date | 01.03.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 05.03.2025 |

## TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 - 4500H | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 516.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | 9.6 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 3.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 12.0 | 2.0 - 800000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500 Cl- B | 22.0 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4500 F- C | 0.29 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 S2- F | BDL | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 60 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.09 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023 - 3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.18 | 0.05 - 80 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- Test results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : etrc.lko@yahoo.in, Web. : www.etrclko.com
(ISO 9001:2015, ISO 45001:2018 (Omitt) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

ETRC/PM09/TEST-REP/FT/45

# TEST REPORT
## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/138159/2025 | Date of Report: 05/03/2025 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 01.03.2025 | 7 | Analysis Start Date | 01.03.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analyses End Date | 05.03.2025 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 6.9 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 730.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 114.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 64.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 176.0 | 2.0 - 600000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 7 | Ammoniacal Nitrogen | mg/l | Is: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 2.23 | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 1.41 | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.12 | 0.05 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 6.23 | |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment conducting to the results.
- All disputes subject to Lucknow Jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep K Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLUCKNOW@GMAIL.COM, Web. : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015A MoEF, Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986

ETRC/PM09/TEST-REP/FT/45

# TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/13817/2025 | **Date of Report:** 05/03/2025 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>P. O. Renukoot<br>**District: Sonabhadra (U.P.) - 231217** |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 01.03.2025 | 7 | Analysis Start Date | 01.03.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 05.03.2025 |

## TEST RESULT

| Sr No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.3 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 696.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 7.2 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.8 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 12.0 | 2.0 - 300000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.6 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $NO_3$ B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 2.62 | - |
| 12 | Faecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 240 | 1.8 - 1600 |
| 13 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 240.0 | 1.8 - 1600 |

BDL= Below Detection Limit

End of Report.

- ETRC warrants only that analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data collected are exempt to generate accurate results for the samples mentioned in the report as above.
- The report relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment considering to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our specific written approval in writing.
- Complaints regarding the sample in our laboratory

Authorized Signatory
(Sandeep K. Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/281, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : etrc.lko@gmail.com, etrc@... Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/1381/2025 | **Date of Report:** 05/03/2025 |
| **Name /Address/Type of Industry** | Starch Industries Limited<br>Chemical Division<br>P. O. Ranakot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 01.03.2025 | 7 | Analysis Start Date | 01.03.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 05.03.2025 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing/ limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.1 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 4240 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 50.8 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 42.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 112.0 | 2.0 - 500000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | 6.2 | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 1.0 | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.10 | 0.05 - 20 |
| 11 | SAR | % | IS: 11624 :2019 | 5.20 | |

BDL= Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that it is data reflects our best attempt to generate accurate results for the parameters mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not accept any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting of the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register if available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

ENVIRONMENTAL AND TECENICAL RESEARCH CENTRE
Office & Laboratory : 1/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web... www.etrclko.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015A, NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986
TC-5469

ETRC/PM09/TEST-REP/FT/45

# TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/13819/2025 | Date of Report: 05/03/2025 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 6 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet Colony | 6 | Sampler Collected By | ETRC |
| 3 | Sample received date | 01.03.2025 | 7 | Analysis Start Date | 01.03.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 05.03.2025 |

### TEST RESULT

| Sr No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.2 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 326.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 5.6 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.2 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 600000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 5520 A+D | BDL | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 800 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.9 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 1.96 | - |
| 12 | Fecal Coliform | MPN/ 100 ml | IS: 1622 : 1981 Reaffirmed: 2019 | 28.0 | 1.8 - 1600 |
| 13 | Total Coliform | MPN/ 100 ml | IS: 1622 : 1981 Reaffirmed: 2019 | 280.0 | 1.8 - 1600 |

BDL = Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- This report relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality or parameter analyzed in the results and/or the performance of the equipment connected to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without the proper permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.LTH@YAHOO.IN, Web.: www.etronde.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of environment, Forest and Climate change, GOVT. Of India under EPA 1986

TC-5469


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/1405/2025 | Date of Report: 29/03/2025 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 21.03.2025 | 7 | Analysis Start Date | 21.03.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 29.03.2025 |

## TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | | APHA 24th Ed. 2023 - 4500H+ | 7.2 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 742.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | 78.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 56.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 184.0 | 2.0 - 600000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500 Cl B | 152.0 | 2.0 - 6000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4500 F- C | 0.38 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 S2- F | 1.88 | 0.04 - 200 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.51 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | ppb | APHA 24th Ed. 2023 - 3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.75 | 0.05 - 80 |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with the applicable standard laboratory practice and that the data reflects our best attempt to generate accurate results for the samples, measurements and report as issued.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages arising as the result of parameter analysis or the results shown and the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain registers are available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Rinu Garg)
QHI

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 4/261, Vishnu Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India Under EPA 1986

TC-5469


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/14084/2025 | **Date of Report:** 29/03/2025 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | ETP Outlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 21.03.2025 | 7 | Analysis Start Date | 21.03.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 29.03.2025 |

### TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023 - 4500H | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 558.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023 - 2540 D | 5.8 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 3.2 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 12.0 | 2.0 - 600000 |
| 6 | Chloride | mg/l | APHA 24th Ed. 2023 - 4500 Cl- B | 20.0 | 2.0 - 5000 |
| 7 | Fluoride as F | mg/l | APHA 24th Ed. 2023 - 4500 F- C | 0.30 | 0.02 - 20 |
| 8 | Sulphide | mg/l | APHA 24th Ed. 2023 - 4500 S2- F | BDL | 0.04 - 800 |
| 9 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 10 | Cadmium as Cd | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.05 - 50 |
| 11 | Copper as Cu | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 50 |
| 12 | Iron as Fe | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.19 | 0.05 - 100 |
| 13 | Lead as Pb | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.01 - 40 |
| 14 | Mercury as Hg | µg/l | APHA 24th Ed. 2023 - 3112 B | BDL | 0.5 - 1000 |
| 15 | Nickel as Ni | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.02 - 80 |
| 16 | Total Chromium as Cr | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | BDL | 0.03 - 300 |
| 17 | Zinc as Zn | mg/l | APHA 24th Ed. 2023 - 3120 B (ICP-OES) | 0.16 | 0.05 - 80 |

BDL = Below Detection Limit

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the report and/or the performance of the equipment conducting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without the written permission in writing.
- Complaint register will be taken in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-in-charge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/261, Ashiyana Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRC1@YAHOO.IN, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

ETRC/PM09/TEST-REP/FT/45

# TEST REPORT

## WATER & WASTE WATER ANALYSIS

| Test Report Ref No.: ETRC/EPA/T-4065/2025 | Date of Report: 29/03/2025 |
|---|---|
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Rewukoot<br>District: Sonebhadra (U.P.) - 231217 |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 21.03.2025 | 7 | Analysis Start Date | 21.03.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 29.03.2025 |

## TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 8.3 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 742.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 126.0 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 98.0 | 1.0 - 160000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 180.0 | 2.0 - 600000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | 6.6 | 5.0 - 200 |
| 7 | Ammoniacal Nitrogen | mg/l | IS: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | 2.20 | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 1.38 | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.11 | 0.05 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 6.20 | - |

BDL= Below Detection Limit

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally, in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample submitted as stated above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment considering to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sanjeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
CMD

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.in, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986 TC-6401


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/14086/2025 | **Date of Report:** 29/03/2025 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhedra (U.P.) - 231217** |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet | 5 | Sample Collected By | ETRC |
| 3 | Sample received date | 21.03.2025 | 7 | Analysis Start Date | 21.03.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 29.03.2025 |

## TEST RESULT

| Sr No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.4 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 666.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 7.4 | 5.0 - 20000 |
| 4 | Bio-Chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.8 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 600000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 B+D | BDL | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 1982 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.05 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 2.16 | - |
| 12 | Faecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 20.0 | 1.8 - 1600 |
| 13 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 220.0 | 1.8 - 1600 |

BDL= Below Detection Limit

End of Report

- ETRC warrants that all analytical work is conducted professionally in accordance with the applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results arising out of performance of the equipment, consulting or the reports.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without prior written permission in writing.
- Complain regarding sample will not entertain by our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 1/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLUCKNOW@GMAIL.COM, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986
TC-5009

ETRC/PM09/TEST-REP/FT/45

# TEST REPORT
## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/14067/2025 | Date of Report: 29/03/2025 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |

## SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Inlet Colony | 6 | Sample Collected by | ETRC |
| 3 | Sample received date | 21.03.2025 | 7 | Analysis Start Date | 21.03.2025 |
| 4 | Sample Quantity | 1.0 liters | 8 | Analysis End Date | 28.03.2025 |

## TEST RESULT

| Sr. No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing /limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.1 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 420.0 | 10 - 90000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 52.6 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 35.0 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 108.0 | 2.0 - 600000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | 5.4 | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | Is. 3025 (Part) 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | 1.10 | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | 0.11 | 0.05 - 20 |
| 11 | SAR | % | IS: 11624:2019 | 5.40 | - |

BDL= Below Detection Limit

----- END OF REPORT -----

- ETRC warrants that all analytical work is conducted professionally in accordance with its applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in the results and/or the performance of the equipment conforming to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint regarding samples in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-In-Charge

Authorized Signatory
(Ravi Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.Tech@Yahoo.in, Web: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/45

## TEST REPORT

## WATER & WASTE WATER ANALYSIS

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/1408/2025 | **Date of Report:** 29/03/2025 |
| **Name /Address/Type of Industry** | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |

### SAMPLE DETAILS

| | | | | | |
|---|---|---|---|---|---|
| 1 | Water/ Waste Water | Waste Water | 5 | Packing Condition | Sealed |
| 2 | Sample Description | STP Outlet Colony | 6 | Sample Collected By | ETRC |
| 3 | Sample received date | 21.03.2025 | 7 | Analysis Start Date | 21.03.2025 |
| 4 | Sample Quantity | 1.0 litare | 8 | Analysis End Date | 29.03.2025 |

### TEST RESULT

| Sr No. | Test Parameter | Unit | Protocol/Test Method | Result | Range of testing/ limit of detection |
|---|---|---|---|---|---|
| 1 | pH | - | APHA 24th Ed. 2023-4500H+ | 7.3 | 1 - 14 |
| 2 | Total Dissolved Solid (TDS) | mg/l | IS: 3025 (Part-16): 2023 | 382.0 | 10 - 40000 |
| 3 | Total Suspended Solid (TSS) | mg/l | APHA 24th Ed. 2023-2540 D | 5.4 | 5.0 - 20000 |
| 4 | Bio-chemical Oxygen Demand (BOD) | mg/l | IS: 3025 (Part-44): 1993 Reaffirmed: 2019 | 2.4 | 1.0 - 150000 |
| 5 | Chemical Oxygen Demand (COD) | mg/l | IS: 3025 (Part-58): 2006 Reaffirmed: 2022 | 8.0 | 2.0 - 600000 |
| 6 | Oil & Grease | mg/l | APHA 24th Ed. 2023 - 5520 A+D | BDL | 5.0 - 200 |
| 7 | Ammonical Nitrogen | mg/l | Is: 3025 (Part): 1988 Reaffirmed: 2019 | BDL | 0.5 - 500 |
| 8 | Total Nitrogen | mg/l | APHA 24th Ed. 2023-4500 $N_{org}$ B+C | BDL | 2.0 - 1200 |
| 9 | Total Phosphorous | mg/l | APHA 24th Ed. 2023-4500 P D | BDL | 0.1 - 1500 |
| 10 | Boron | mg/l | APHA 24th Ed. 2023-3120 B (ICP-OES) | BDL | 0.06 - 20 |
| 11 | SAR | % | IS: 11624: 2019 | 1.84 | - |
| 12 | Fecal Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 24.0 | 1.8 - 1600 |
| 13 | Total Coliform | MPN/ 100 ml | IS: 1622 - 1981 Reaffirmed: 2019 | 200.0 | 1.8 - 1600 |

**BDL= Below Detection Limit**

END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment corresponding to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete log sheet is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Riku Garg)
DH

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/281, Vishwas Khand, Gomti nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT

## AMBIENT NOISE MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/11014/2024 | | Date of Report: 04/05/2024 |
|---|---|---|
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| (a) | Date of monitoring | 28/04/2024 (06:00 AM) to 30/04/2024 (06:00 AM) |
| (b) | Sample Description | Ambient Noise |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981, Reaffirmed: 2020 |

## TEST RESULT

| Ambient Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results Day Time (06:00 AM - 10:00 PM) | Results Night Time (10:00 PM - 06:00 AM) |
| 1 | Main Gate | dB(A) | 62.2 | 54.3 |
| 2 | Hospital | dB(A) | 50.9 | 42.6 |
| 3 | Guest House | dB(A) | 53.9 | 43.8 |
| 4 | Staff Mess | dB(A) | 55.4 | 48.6 |
| 5 | Material Gate | dB(A) | 62.0 | 54.4 |

| Noise Standards as per CPCB Schedule rule 3(1) and 4(1) | | | |
|---|---|---|---|
| Area Code | Category of Area/Zone | Limits in dB(A) Leq | |
| | | Day Time | Night Time |
| A | Industrial Area | 75 | 70 |
| B | Commercial Area | 65 | 55 |
| C | Residential Area | 55 | 45 |
| D | Silence Zone | 50 | 40 |

END OF REPORT

- ETRC makes best all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any opinion or interpretation related to the quality of parameter analysed in the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.IN@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PMG9/TEST-REP/FT/44

## TEST REPORT

## WORK ZONE NOISE MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/11016/2024 | | Date of Report: 04/05/2024 |
|---|---|---|
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Kenukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored By | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| (a) | Date of monitoring | 28/04/2024 (08:00 AM) to 30/04/2024 ( 08:00 AM) |
| (b) | Sample Description | Work Zone Noise ( Industrial Area) |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981 Reaffirmed: 2020 |

## TEST RESULT

| Work Zone Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results | Standard limits as per factory act (of 08 hrs exposure) |
| 1 | ID Fan | dB(A) | 83.2 | 90 |
| 2 | Turbine Area | dB(A) | 85.5 | 90 |
| 3 | PGU Area (Compressor) | dB(A) | 83.1 | 90 |
| 4 | CMP Area | dB(A) | 84.2 | 90 |
| 5 | Transport Area | dB(A) | 82.5 | 90 |
| 6 | Membrane Phase 1 & 2 | dB(A) | 83.1 | 90 |
| 7 | DM Plant | dB(A) | 80.2 | 90 |
| 8 | CD Boiler & Chlorine Filling | dB(A) | 77.9 | 90 |
| 9 | ZLD Compressor | dB(A) | 75.5 | 90 |
| 10 | MEE Plant | dB(A) | 74.4 | 90 |
| 11 | ALCP Area | dB(A) | 73.9 | 90 |
| 12 | SBF & CP - VAP Area | dB(A) | 74.9 | 90 |

Brief of Remarks:

- ETRC maintains high analytical work standards and is committed to meet all applicable statutory laboratory practices and this data reflects our best attempt to generate accurate results for the sample(s) mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the report and/or the performance of the equipment constituting of the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and may not be used as evidence in the court of law and should not be used in any advertising media without the special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.THE@YAHOO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & MNRE Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/44

TC-5489

## TEST REPORT
## AMBIENT NOISE MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/11231/2024 | **Date of Report:** 04/06/2024 |
| **Name /Address/Type of Industry** | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| **Monitored by** | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| (a) | Date of monitoring | 23/05/2024 (06:00 AM) to 25/05/2024 (06:00 AM) |
| (b) | Sample Description | Ambient Noise |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981, Reaffirmed: 2020 |

## TEST RESULT

**Ambient Noise Level**

| Sr. No. | Locations | Unit | Results Day Time (06:00 AM - 10:00 PM) | Results Night Time (10:00 PM - 06:00 AM) |
|---|---|---|---|---|
| 1 | Main Gate | dB(A) | 61.2 | 53.2 |
| 2 | Hospital | dB(A) | 50.9 | 43.3 |
| 3 | Guest House | dB(A) | 52.4 | 44.2 |
| 4 | Staff Mess | dB(A) | 54.6 | 46.8 |
| 5 | Material Gate | dB(A) | 61.3 | 52.2 |

Noise Standards as per CPCB Schedule rule 3(1) and 4(1)

| Area Code | Category of Area/Zone | Limits in dB(A) Leq | |
|---|---|---|---|
| | | Day Time | Night Time |
| A | Industrial Area | 75 | 70 |
| B | Commercial Area | 65 | 55 |
| C | Residential Area | 55 | 45 |
| D | Silence Zone | 50 | 40 |

..... END OF REPORT .....

- ETRC certifies that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed or the results and/or the performance of the equipment pertaining to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

CHECKED

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

email : ETRC.THD@YAHOO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& MAIL Accredited Laboratory)

An approved laboratory from Ministry of environment, forest and Climate change, govt. of India under EPA 1986


ETRC/PMON/TEST-REP/FT/44

## TEST REPORT

## WORK ZONE NOISE MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/11232/2024 | | Date of Report: 04/06/2024 |
| Name /Address/Type of industry | | Gracem Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monnored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| (a) | Date of monitoring | 25/05/2024 (06:00 AM) to 25/05/2024 (06:00 AM) |
| (b) | Sample Description | Work Zone Noise (Industrial Area) |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981, Reaffirmed, 2020 |

## TEST RESULT

| Work Zone Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results | Standard limit as per factory act (of 36 hrs exposure) |
| 1 | ID Fan | dB(A) | 82.5 | 90 |
| 2 | Turbine Area | dB(A) | 84.6 | 90 |
| 3 | PGD Area (Compressor) | dB(A) | 82.0 | 90 |
| 4 | CHP Area | dB(A) | 88.6 | 90 |
| 5 | Transpon Area | dB(A) | 81.3 | 90 |
| 6 | Membrane Phase 1 & 2 | dB(A) | 82.0 | 90 |
| 7 | DM Plant | dB(A) | 79.8 | 90 |
| 8 | CD Boiler & Chlorine Filling | dB(A) | 78.2 | 90 |
| 9 | ZLD Compressor | dB(A) | 74.4 | 90 |
| 10 | MEE Plant | dB(A) | 75.1 | 90 |
| 11 | ALCP Area | dB(A) | 74.3 | 90 |
| 12 | SBP & CP - VAP Area | dB(A) | 74.5 | 90 |

END OF REPORT

- ETRC implies that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result related only to the items tested.
- ETRC does not assume any liability for any claims or damages resulting to the quality of participant products or the results and/or the performance of the equipment / installation in the future.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without any special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-in-charge

Authorized Signatory
(Ritu Garg)
CHE

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/281, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web. : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (UKAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/PM06/TEST-REP/FT/44

## TEST REPORT

## AMBIENT NOISE MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No. : ETRC/EPA/1134/2024 | Date of Report: 25/06/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| (a) | Date of monitoring | 13/06/2024 (06.00 AM) to 15/06/2024 (06.00 AM) |
| (b) | Sample Description | Ambient Noise |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981, Reaffirmed: 2020 |

## TEST RESULT

**Ambient Noise Level**

| Sr. no. | Locations | Unit | Results Day Time (06:00 AM - 10:00 PM) | Results Night Time (10:00 PM - 06:00 AM) |
|---|---|---|---|---|
| 1 | Main Gate | dB(A) | 52.4 | 52.6 |
| 2 | Hospital | dB(A) | 50.9 | 42.5 |
| 3 | Guest House | dB(A) | 51.0 | 42.2 |
| 4 | Staff Quarters | dB(A) | 53.9 | 46.4 |
| 5 | Material Gate | dB(A) | 61.8 | 53.0 |

Noise Standards as per CPCB Schedule rule 3(1) and 4(1)

| Area Code | Category of Area/Zone | Limits in dB(A) Leq | |
|---|---|---|---|
| | | Day Time | Night Time |
| A | Industrial Area | 75 | 70 |
| B | Commercial Area | 65 | 55 |
| C | Residential Area | 55 | 45 |
| D | Silence Zone | 50 | 40 |

END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples submitted in the report as above.
- This report relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analysed, the results and/or the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986




## TEST REPORT

### WORK ZONE NOISE MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11347/2024 | Date of Report: 25/06/2024 |
| Name /Address/Type of Industry | Gesalm Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| (a) | Date of Monitoring | 13/06/2024 (06:00 AM) to 15/06/2024 (05:00 AM) |
| (b) | Sample Description | Work Zone Noise (Industrial Area) |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981, Reaffirmed: 2020 |

## TEST RESULT

**Work Zone Noise Level**

| Sr. No. | Locations | Unit | Results | Standard limit as per factory act (for 8 hrs exposure) |
|---|---|---|---|---|
| 1 | ID Fan | dB(A) | 83.4 | 90 |
| 2 | Turbine Area | dB(A) | 84.1 | 90 |
| 3 | PGD Area (Compressor) | dB(A) | 82.5 | 90 |
| 4 | CHP Area | dB(A) | 84.9 | 90 |
| 5 | Transport Area | dB(A) | 80.2 | 90 |
| 6 | Membrane Phase 1 & 2 | dB(A) | 83.3 | 90 |
| 7 | DM Plant | dB(A) | 80.4 | 90 |
| 8 | CD Boiler & Chlorine Filling | dB(A) | 79.1 | 90 |
| 9 | ZLD Compressor | dB(A) | 73.7 | 90 |
| 10 | MEE Plant | dB(A) | 74.8 | 90 |
| 11 | ALCP Area | dB(A) | 75.2 | 90 |
| 12 | SBP & CP - VAP Area | dB(A) | 75.8 | 90 |

..... END OF REPORT .....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples contained in this report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment conducting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain report is available in our laboratory

Authorized Signatory
(Bandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
CMD

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/261, Vibhuti Khand, Gomti Nagar, Lucknow - 226 010 (U.P.).
Email : ETRC.TH@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

ETRC/PM09/TEST-REP/FT/4a

# TEST REPORT
## AMBIENT NOISE MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/11521/2024 | Date of Report: 22/07/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| (a) | Date of monitoring | 11/07/2024 (06:00 AM) to 13/07/2024 (06:00 AM) |
| (b) | Sample Description | Ambient Noise |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981, Reaffirmed: 2020 |

## TEST RESULT

Ambient Noise Level

| Sr. No. | Locations | Unit | Results<br>Day Time<br>(06:00 AM - 10:00 PM) | Results<br>Night Time<br>(10:00 PM - 06:00 AM) |
|---|---|---|---|---|
| 1 | Main Gate | dB(A) | 61.2 | 53.8 |
| 2 | Hospital | dB(A) | 50.8 | 43.2 |
| 3 | Guest House | dB(A) | 51.4 | 41.9 |
| 4 | Staff Mess | dB(A) | 53.9 | 46.2 |
| 5 | Material Gate | dB(A) | 62.0 | 52.8 |

Noise Standards as per CPCB Schedule rule 3(1) and 4(1)

| Area Code | Category of Area/Zone | Limits in dB(A) Leq | |
|---|---|---|---|
| | | Day Time | Night Time |
| A | Industrial Area | 75 | 70 |
| B | Commercial Area | 65 | 55 |
| C | Residential Area | 55 | 45 |
| D | Silence Zone | 50 | 40 |

END OF REPORT

- ETRC warrants that all analyses were performed according to appropriate methods and procedures and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of raw material supplied or the results and/or the performance of the equipment conforming to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Computer register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Riku Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLKO@YAHOO.IN, etrc@...

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & MoEF Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India (vide EPA 1986)


ETRC/PWM/TEST-REP/FT/44

## TEST REPORT

## WORK ZONE NOISE MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/11522/2024 | | Date of Report: 22/07/2024 |
|---|---|---|
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| (a) | Date of monitoring | 17/07/2024 (06:00 AM) to 13/07/2024 (06.00 AM) |
| (b) | Sample Description | Work Zone Noise (Industrial Area) |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS 9989: 1981, Reaffirmed, 2020 |

## TEST RESULT

| Work Zone Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results | Standard limit as per factory act for 36 hrs exposure |
| 1 | ID Fan | dB(A) | 85.6 | 90 |
| 2 | Turbine Area | dB(A) | 83.4 | 90 |
| 3 | PGD Area (Compressor) | dB(A) | 81.2 | 90 |
| 4 | CHP Area | dB(A) | 85.9 | 90 |
| 5 | Transpon Area | dB(A) | 200 8 | 90 |
| 6 | Membrane Phase 1 & 2 | dB(A) | 84.4 | 90 |
| 7 | DM Plant | dB(A) | 79.6 | 90 |
| 8 | CO Boiler & Chlorine Filling | dB(A) | 80.1 | 90 |
| 9 | ZLD Compressor | dB(A) | 73.5 | 90 |
| 10 | MEE Plant | dB(A) | 75.5 | 90 |
| 11 | ALCP Area | dB(A) | 74.9 | 90 |
| 12 | SBP & CP - VAF Area | dB(A) | 75.2 | 90 |

..... END OF REPORT .....

- ETRC [illegible] to work of analytical work is carefully provided only in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages caused to the quality of parameter analyzed or the results and/or the performance of the equipment consulting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and should not be used as evidence in the court of law and should not be used for any advertising media without our special permission in writing.
- Complaint regarding sample will be entertained only if received within 7 days from the date of issue of report. Sample will be disposed off after 15 days from the date of issue of report unless otherwise requested in writing. Complaint regarding sample will not be entertained after disposal of sample.

Authorized Signatory
(Sandeep Kr Verma)
Lab Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC1HO@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REPORT/44

## TEST REPORT

### AMBIENT NOISE MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/11681/2024 | | **Date of Report:** 20/08/2024 |
| **Name /Address/Type of Industry** | | Grasem Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| **Monitored by** | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| (a) | Date of monitoring | 07/08/2024 (06:00 AM) to 09/08/2024 (06:00 AM) |
| (b) | Sample Description | Ambient Noise |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981 Reammed: 2020 |

## TEST RESULT

| Ambient Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results<br>Day Time<br>(06:00 AM - 10:00 PM) | Results<br>Night Time<br>(10:00 PM - 06:00 AM) |
| 1 | Main Gate | dB(A) | 82.3 | 54.1 |
| 2 | Hospital | dB(A) | 48.2 | 43.1 |
| 3 | Guest House | dB(A) | 50.6 | 42.1 |
| 4 | Staff Mess | dB(A) | 54.3 | 44.8 |
| 5 | Material Gate | dB(A) | 61.9 | 51.8 |

| Noise Standards as per CPCB Schedule rule 3(1) and 4(1) | | | |
|---|---|---|---|
| Area Code | Category of Area/Zone | Limits in dB(A) Leq | |
| | | Day Time | Night Time |
| A | Industrial Area | 75 | 70 |
| B | Commercial Area | 65 | 55 |
| C | Residential Area | 55 | 45 |
| D | Silence Zone | 50 | 40 |

.....END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best efforts to generate accurate results for the samples investigated as per report as above.
- The report relate only to analysed items.
- ETRC does not assume any liability for any claims or damages arising out of the results and/or the performance of the supplies pertaining to this report.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without the special permission in writing.
- Complaints, if any, should be brought to the notice of the laboratory.

Authorized Signatory
(Sanjeev Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : U/251, Vidhulata Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTM@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India vide EPA, 1986


ETRC/PMOG/TEST-REP/FT/4

## TEST REPORT

## WORK ZONE NOISE MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/1168/2024 | | Date of Report: 20/08/2024 |
|---|---|---|
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| (a) | Date of monitoring | 07/08/2024 (06.00 AM) to 08/08/2024 (06.00 AM) |
| (b) | Sample Description | Work Zone Noise (Industrial Area) |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981, Reaffirmed: 2020 |

## TEST RESULT

**Work Zone Noise Level**

| Sr. no. | Location | Unit | Results | Standard limit as per factory act (8 hr/ day exposure) |
|---|---|---|---|---|
| 1 | D Fan | dB(A) | 82.0 | 90 |
| 2 | Turbine Area | dB(A) | 83.6 | 90 |
| 3 | PGD Area (Compressor) | dB(A) | 85.4 | 90 |
| 4 | CHP area | dB(A) | 85.2 | 90 |
| 5 | Transport Area | dB(A) | 81.6 | 90 |
| 6 | Membrane Phase I & 2 | dB(A) | 84.2 | 90 |
| 7 | Dhi Plant | dB(A) | 80.8 | 90 |
| 8 | CD Boiler & Chlorine Filling | dB(A) | 79.6 | 90 |
| 9 | ZLD Compressor | dB(A) | 76.4 | 90 |
| 10 | MEE Plant | dB(A) | 78.2 | 90 |
| 11 | ALCP Area | dB(A) | 74.4 | 90 |
| 12 | SBF & CP - VAP Area | dB(A) | 74.6 | 90 |

**.....END OF REPORT.....**

- ETRC warrants that all analytical work is conducted professionally, in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results on the samples, mentioned in the report as above.
- The results relate only to the items tested.
- ETRC does not assume any liability for arguments or damages related to the quality of parameter analyses or the results and/or the performance of the equipment, consequent to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without obtaining permission in writing.
- Complaints register is available in our laboratory.

Authorized Signatory
(Sanveep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 4/264, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSMS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/44

## TEST REPORT
## AMBIENT NOISE MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/11837/2024 | **Date of Report:** 16/09/2024 |
| **Name /Address/Type of industry** | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| **Monitored by** | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| (a) | Date of monitoring | 06/09/2024 (08:00 AM) to 07/09/2024 (08:00 AM) |
| (b) | Sample Description | Ambient Noise |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981, Reaffirmed: 2020 |

## TEST RESULT

| Ambient Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results Day Time (06:00 AM - 10:00 PM) | Results Night Time (10:00 PM - 06:00 AM) |
| 1 | Main Gate | dB(A) | 61.2 | 54.1 |
| 2 | Hospital | dB(A) | 48.5 | 44.6 |
| 3 | Guest House | dB(A) | 48.3 | 43.5 |
| 4 | Staff Mess | dB(A) | 64.2 | 54.2 |
| 5 | Material Gate | dB(A) | 62.6 | 52.4 |

| Noise Standards as per CPCB Schedule rule 3(1) and 4(1) | | | |
|---|---|---|---|
| Area Code | Category of Area/Zone | Limits in dB(A) Leq | |
| | | Day Time | Night Time |
| A | Industrial Area | 75 | 70 |
| B | Commercial Area | 65 | 55 |
| C | Residential Area | 55 | 45 |
| D | Silence Zone | 50 | 40 |

END OF REPORT

- ETRC maintains due diligence while conducting tests/calibrations in accordance with all applicable standard test/calibration procedures and that the data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of consumables employed in the tests and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : y/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTD@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986




## TEST REPORT

## WORK ZONE NOISE MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/11636/2024 | | Date of Report: 16/09/2024 |
|---|---|---|
| Name /Address/Type of industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| (a) | Date of monitoring | 05/09/2024 (06:00 AM) to 07/09/2024 (06:00 AM) |
| (b) | Sample Description | Work Zone Noise (Industrial Area) |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989 1981, Reaffirmed: 2020 |

## TEST RESULT

| Work Zone Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results | Standard limit as per factory act (of 08 hrs duration) |
| 1 | ID Fan | dB(A) | 85.0 | 90 |
| 2 | Turbine Area | dB(A) | 81.0 | 90 |
| 3 | PGD Area (Compressor) | dB(A) | 82.6 | 90 |
| 4 | CHP Area | dB(A) | 84.1 | 90 |
| 5 | Transport Area | dB(A) | 80.9 | 90 |
| 6 | Membrane Phase I & 2 | dB(A) | 83.9 | 90 |
| 7 | DM Plant | dB(A) | 80.2 | 90 |
| 8 | CD Boiler & Chlorine Filling | dB(A) | 78.6 | 90 |
| 9 | ZLD Compressor | dB(A) | 78.2 | 90 |
| 10 | MEE Plant | dB(A) | 74.2 | 90 |
| 11 | ALCP Area | dB(A) | 75.9 | 90 |
| 12 | SBP & CP - VAP Area | dB(A) | 74.3 | 90 |

End of report

- ETRC monitors that all physical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The report relates only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality or performance and/or the results and/or the performance of the equipment / consistency of the sample.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without a special permission in writing.
- Complaint register available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/284, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTN@YAHOO.IN, Web : www.etrcindia.com

ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, GOVT. of India under EPA 1986

TC-5469


ETRC/PM09/TEST-REP/FT/aa

## TEST REPORT
## AMBIENT NOISE MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/12211/2024 | | **Date of Report:** 02/11/2024 |
| **Name /Address/Type of Industry** | | **Grasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |
| **Monitored by** | | **ETRC, Lucknow** |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| (a) | Date of monitoring | 23/10/2024 (06:00 AM) to 25/10/2024 (06:00 AM) |
| (b) | Sample Description | Ambient Noise |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989 1981, Reaffirmed: 2020 |

## TEST RESULT

| Ambient Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results<br>Day Time<br>(06:00 AM - 10:00 PM) | Results<br>Night Time<br>(10:00 PM - 06:00 AM) |
| 1 | Main Gate | dB(A) | 62.23 | 53.29 |
| 2 | Hospital | dB(A) | 48.25 | 40.05 |
| 3 | Guest House | dB(A) | 48.23 | 43.26 |
| 4 | Staff Mess | dB(A) | 52.20 | 42.55 |
| 5 | Material Gate | dB(A) | 61.33 | 51.86 |

| Noise Standards as per CPCB Schedule rule 3(1) and 4(1) | | | |
|---|---|---|---|
| Area Code | Category of Area/Zone | Limits in dB(A) Leq | |
| | | Day Time | Night Time |
| A | Industrial Area | 75 | 70 |
| B | Commercial Area | 65 | 55 |
| C | Residential Area | 55 | 45 |
| D | Silence zone | 50 | 40 |

**END OF REPORT**

- ETRC warrants that all analytical work is conducted professionally, in accordance with acceptable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample mentioned in the report as above.
- This report relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results under the performance of the equipment conditions in the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India Under EPA 1986

TC-5469


ETRC/PM10/TEST-REP/FT/44

## TEST REPORT

## WORK ZONE NOISE MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| **Test Report Ref No.:** ETRC/EPA/12212/2024 | | **Date of Report:** 02/11/2024 |
| **Name /Address/Type of Industry** | | Graslim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| **Monitored by** | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| (a) | Date of monitoring | 25/10/2024 (08:00 AM) to 25/10/2024 (08.00 AM) |
| (b) | Sample Description | Work Zone Noise (Industrial Area) |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: Noise 1981, Reaffirmed: 2020 |

## TEST RESULT

| Work Zone Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results | Standard limit as per factory act (for 08 hrs exposure) |
| 1 | D Fan | dB(A) | 87.6 | 90 |
| 2 | Turbine Area | dB(A) | 84.5 | 90 |
| 3 | PGD Area (Compressor) | dB(A) | 82.9 | 90 |
| 4 | CMP Area | dB(A) | 83.4 | 90 |
| 5 | Transport Area | dB(A) | 81.2 | 90 |
| 6 | Membrane Phase 1 & 2 | dB(A) | 83.6 | 90 |
| 7 | DM Plant | dB(A) | 80.9 | 90 |
| 8 | CD Boiler & Chlorine Filling | dB(A) | 77.8 | 90 |
| 9 | ZLD Compressor | dB(A) | 78.6 | 90 |
| 10 | MEE Plant | dB(A) | 73.2 | 90 |
| 11 | ALCP Area | dB(A) | 74.9 | 90 |
| 12 | SBP & CP - VAP Area | dB(A) | 73.3 | 90 |

**END OF REPORT**

- ETRC maintains high standards of accuracy, work is carried out in accordance with the applicable standard laboratory practices and trust the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relates only to the items tested.
- ETRC does not assume any liability for any claims or damages resulting to the quality of parameters analysed in the results and/or the performance of the equipment conforming to the items.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our official permission in writing.
- Complete register is available in our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
GM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Ashwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PMon/TEST-REP/FT/44

TC-5469

## TEST REPORT
## AMBIENT NOISE MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/12437/2024 | Date of Report: 27/11/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| (a) | Date of monitoring | 19/11/2024 (06:00 AM) to 21/11/2024 (06:00 AM) |
| (b) | Sample Description | Ambient Noise |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS 9989: 1981, Reaffirmed: 2020 |

## TEST RESULT

| Ambient Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results<br>Day Time<br>(06:00 AM - 10:00 PM) | Results<br>Night Time<br>(10:00 PM - 06:00 AM) |
| 1 | Main Gate | dB(A) | 61.20 | 54.12 |
| 2 | Hospital | dB(A) | 49.23 | 39.68 |
| 3 | Guest House | dB(A) | 48.74 | 44.13 |
| 4 | Staff Mess | dB(A) | 53.10 | 43.25 |
| 5 | Material Gate | dB(A) | 62.45 | 50.74 |

| Noise Standards as per CPCB Schedule rule 3(1) and 4(1) | | | |
|---|---|---|---|
| Area Code | Category of Area/Zone | Limits in dB(A) Leq | |
| | | Day Time | Night Time |
| A | Industrial Area | 75 | 70 |
| B | Commercial Area | 65 | 55 |
| C | Residential Area | 55 | 45 |
| D | Silence Zone | 50 | 40 |

Remarks/Report:

- ETRC warrants that all analysis work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reported has been analysed to generate accurate results for the samples mentioned in the report.
- The report relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment furnished by the client.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sanjeev Kr Verma)
Lab Analyst

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Viswas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986


ETRC/PNGR/TEST-REPAFT/44

TC-5469

## TEST REPORT

### WORK ZONE NOISE MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/12438/2024 | Date of Report: 27/11/2024 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| (a) | Date of monitoring | 19/11/2024 (08:00 AM) to 27/11/2024 (08:00 AM) |
| (b) | Sample Description | Work Zone Noise ( Industrial Area) |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981, Reaffirmed, 2020 |

## TEST RESULT

**Work Zone Noise Level**

| Sr. No. | Locations | Unit | Results | Standard limit as per factory act (of 08 hrs exposure) |
|---|---|---|---|---|
| 1 | ID Fan | dB(A) | 86.4 | 90 |
| 2 | Turbine Area | dB(A) | 83.0 | 90 |
| 3 | HGU Area (Compressor) | dB(A) | **82.5** | 90 |
| 4 | CMP Area | dB(A) | 82.9 | 90 |
| 5 | Transport Area | dB(A) | 82.0 | 90 |
| 6 | Membrane Phase 1 & 2 | dB(A) | **84.9** | 90 |
| 7 | DM Plant | dB(A) | 81.2 | 90 |
| 8 | CD Boiler & Chlorine Filling | dB(A) | 78.5 | 90 |
| 9 | ZLD Compressor | dB(A) | 79.9 | 90 |
| 10 | MEE Plant | dB(A) | 74.2 | 90 |
| 11 | ALCP Area | dB(A) | 73.0 | 90 |
| 12 | SBP & CP - VAP Area | dB(A) | 78.1 | 90 |

..... END OF REPORT .....

- ETRC has only role of analyser work is conducted independently in accordance with the applicable standard laboratory practices and that it is data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed or the results under the performance of the equipment constituting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and may not be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complete record is available in our laboratory.

Authorised Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Rilu Jain)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015& NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

TC-6468


ETRC/PMOW/TEST-REP/FT/44

## TEST REPORT

## AMBIENT NOISE MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/13031/2024 | **Date of Report:** 28/12/2024 |
| **Name /Address/Type of Industry** | **Crasim Industries Limited**<br>**Chemical Division**<br>**P. O. Renukoot**<br>**District: Sonebhadra (U.P.) - 231217** |
| **Monitored by** | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| (a) | Date of Monitoring | 18/12/2024 (08:00 AM) to 20/12/2024 (08:00 AM) |
| (b) | Sample Description | Ambient Noise |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989 - 1981, Reammed: 2020 |

## TEST RESULT

**Ambient Noise Level**

| Sr. No. | Locations | Unit | Results Day Time (06:00 AM - 10:00 PM) | Results Night Time (10:00 PM - 06:00 AM) |
|---|---|---|---|---|
| 1 | Main Gate | dB(A) | 52.32 | 53.44 |
| 2 | Hospital | dB(A) | 49.74 | 38.49 |
| 3 | Guest House | dB(A) | 49.12 | 43.69 |
| 4 | Staff Mess | dB(A) | 53.22 | 44.15 |
| 5 | Material Gate | dB(A) | 51.88 | 51.20 |

**Noise Standards as per CPCB** Schedule rule 3(1) and 3(1)

| Area Code | Category of Area/Zone | Limits in dB(A) Leq | |
|---|---|---|---|
| | | Day Time | Night Time |
| A | Industrial Area | 75 | 70 |
| B | Commercial Area | 65 | 55 |
| C | Residential Area | 55 | 45 |
| D | Silence zone | 50 | 40 |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data meets our best attempt to generate accurate results for the sample(s) mentioned in this report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter are used in the results and/or the performance of the equipment considering to the reports.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint regarding is answerable in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
Lab

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/261, Ashiyana Phand, Sonali Nagar, Lucknow - 226 012 (U.P.)
Email : ETRCLUCKNOW@GMAIL.COM, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (Certified) ISO 14001:2015E NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986
TC-5469

ETRC/PM09/TEST-REP/FT/44

# TEST REPORT

## WORK ZONE NOISE MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/13032/2024 | | Date of Report: 28/12/2024 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| (a) | Date of monitoring | 18/12/2024 (08:00 AM) to 20/12/2024 (06:00 AM) |
| (b) | Sample Description | Work Zone Noise (Industrial Area) |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981, Reaffirmed: 2020 |

## TEST RESULT

| Work Zone Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results | Standard limit as per factory act (of 08 hrs exposure) |
| 1 | ID Fan | dB(A) | 84.4 | 90 |
| 2 | Turbine Area | dB(A) | 85.2 | 90 |
| 3 | POU Area (Compressor) | dB(A) | 80.3 | 90 |
| 4 | CHP Area | dB(A) | 81.4 | 90 |
| 5 | Transport Area | dB(A) | 82.2 | 90 |
| 6 | Membrane Phase 1 & 2 | dB(A) | 83.3 | 90 |
| 7 | DM Plant | dB(A) | 80.5 | 90 |
| 8 | CD Boiler & Chlorine Filling | dB(A) | 79.4 | 90 |
| 9 | ZLD Compressor | dB(A) | 78.6 | 90 |
| 10 | MEE Plant | dB(A) | 74.9 | 90 |
| 11 | ALCP Area | dB(A) | 74.1 | 90 |
| 12 | SBF & CP - VAP Area | dB(A) | 75.8 | 90 |

END OF REPORT

- ETRC warrants that all the work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in the report and/or the performance of the equipment contributing to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without any special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRCLTH@YAHOO.IN, Web : www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986

TC-5469




## TEST REPORT
## AMBIENT NOISE MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| Test Report Ref No.: ETRC/EPA/13474/2025 | Date of Report: 04/02/2026 |
| Name /Address/Type of Industry | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| (a) | Date of monitoring | 28/01/2025 (08:00 AM) to 30/01/2025 (08:00 AM) |
| (b) | Sample Description | Ambient Noise |
| (c) | Parameters | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989 - 1981, Reaffirmed. 2020 |

## TEST RESULT

| Ambient Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results<br>Day Time<br>(06:00 AM - 10:00 PM) | Results<br>Night Time<br>(10:00 PM - 06:00 AM) |
| 1 | Main Gate | dB(A) | 61.23 | 50.23 |
| 2 | Hospital | dB(A) | 49.23 | 39.68 |
| 3 | Guest House | dB(A) | 49.10 | 44.47 |
| 4 | Staff Mess | dB(A) | 52.39 | 44.10 |
| 5 | Material Gate | dB(A) | 60.84 | 51.45 |

| Noise Standards as per CPCB Schedule rule 3(1) and 4(1) | | | |
|---|---|---|---|
| Area Code | Category of Area/Zone | Limits in dB(A) Leq | |
| | | Day Time | Night Time |
| A | Industrial Area | 75 | 70 |
| B | Commercial Area | 65 | 55 |
| C | Residential Area | 55 | 45 |
| D | Silence Zone | 50 | 40 |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data enclosed are the result of a genuine, accurate effort to generate accurate results for the samples mentioned in the report as received.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameters analyzed in the results and/or the performance of the equipment comprising to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaint regarding analysis in our laboratory

Authorized Signatory
(Sandeep Kr Verma)
Lab Incharge

Authorized Signatory
(Ritu Garg)
QM

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 2/261, Ashiana Khand, Sainik Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OH&S) ISC 14001:2015 & NABL Accredited Laboratory)
An approved laboratory from ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986


ETRC/PM09/TEST-REP/FT/44

## TEST REPORT

## WORK ZONE NOISE MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/13475/2025 | | Date of Report: 04/02/2025 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| (a) | Date of monitoring | 28/01/2025 (06:00 AM) to 30/01/2025 (06:00 AM) |
| (b) | Sample Description | Work Zone Noise (Industrial Area) |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS 9989: 1981 Reaffirmed 2020 |

## TEST RESULT

| Work Zone Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results | Standard limit as per factory act (8 hrs time exposure) |
| 1 | ID Fan | dB(A) | 83.4 | 90 |
| 2 | Turbine Area | dB(A) | 85.8 | 90 |
| 3 | PSD Area (Compressor) | dB(A) | 79.9 | 90 |
| 4 | CHP Area | dB(A) | 82.0 | 90 |
| 5 | Transport Area | dB(A) | 81.3 | 90 |
| 6 | Membrane Phase 1 & 2 | dB(A) | 84.2 | 90 |
| 7 | DM Plant | dB(A) | 78.9 | 90 |
| 8 | CO Boiler & Chlorine Filling | dB(A) | 80.0 | 90 |
| 9 | Air Compressor | dB(A) | 78.6 | 90 |
| 10 | MEE Plant | dB(A) | 75.1 | 90 |
| 11 | ALCP Area | dB(A) | 74.4 | 90 |
| 12 | SBP & CP - VAP Area | dB(A) | 75.3 | 90 |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with the applicable standard laboratory practices and that we does exercise our best efforts to generate accurate results for the samples submitted to the specific criteria.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages based on the quality or parameters analyzed in the results and/or the performance of the equipment pertaining to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be produced wholly or in part and cannot be used as evidence in any court of law and should not be used in any advertising media without our special permission in writing.
- Compliance report is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
CMD

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 4/201, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLT@gmail.co.in, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHAS) ISO 14001:2015 Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986
TC-8409

ETRC/PM00/TEST-REP/FT/4a

# TEST REPORT
## AMBIENT NOISE MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/13802/2025 | **Date of Report:** 05/03/2025 |
| **Name /Address/Type of Industry** | Orsam Industries Limited<br>Chemical Division<br>P. O. Kenukoot<br>District: Sonebhadra (U.P.) - 231217 |
| **Monitored by** | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| (a) | Date of monitoring | 28/02/2025 (09:00 AM) to 01/03/2025 (09:00 AM) |
| (b) | Sample Description | Ambient Noise |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS 9989 1981, Reaffirmed: 2020 |

## TEST RESULT

| Ambient noise Level | | | | |
|---|---|---|---|---|
| Sr. no. | Locations | Unit | Results<br>Day Time<br>(06:00 AM - 10:00 PM) | Results<br>Night Time<br>(10:00 PM - 06:00 AM) |
| 1 | Main Gate | dB(A) | 62.23 | 50.46 |
| 2 | Hospital | dB(A) | 50.02 | 39.86 |
| 3 | Guest House | dB(A) | 60.40 | 44.02 |
| 4 | Staff Mess | dB(A) | 53.14 | 44.71 |
| 5 | Material Gate | dB(A) | 61.84 | 52.39 |

| Noise Standards as per CPCB Schedule rule 3(1) and 4(1) | | | |
|---|---|---|---|
| Area Code | Category of Area/Zone | Limits in dB(A) Leq | |
| | | Day Time | Night Time |
| A | Industrial Area | 75 | 70 |
| B | Commercial Area | 65 | 55 |
| C | Residential Area | 55 | 45 |
| D | Silence Zone | 50 | 40 |

END OF REPORT

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate reports for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of parameter analysed in this test which are performance of the equipment resulting in the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complain register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : 2/251, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
email : ETRCLUCKNOW@GMAIL.COM, Web : www.etrcindia.com
(ISO 9001:2015, ISO 45001:2018 (OHSAS) ISO 14001:2015 & MSME Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

ETRC/PMOB/TEST-REP/FT/44

# TEST REPORT

## WORK ZONE NOISE MONITORING AND ANALYSIS REPORT

| Test Report Ref No.: ETRC/EPA/13803/2025 | | Date of Report: 05/03/2025 |
|---|---|---|
| Name /Address/Type of Industry | | Gream Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| (a) | Date of monitoring | 28/02/2025 (06:00 AM) to 01/03/2025 ( 06:00 AM) |
| (b) | Sample Description | Work Zone Noise (Industrial Area) |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981 Reaffirmed. 2020 |

## TEST RESULT

Work Zone Noise Level

| Sr. No. | Locations | Unit | Results | Standard limit as per factory act (for 08 hrs exposure) |
|---|---|---|---|---|
| 1 | ID Fan | dB(A) | 84.6 | 90 |
| 2 | Turbine Area | dB(A) | 85.2 | 90 |
| 3 | PGU Area (Compressor) | dB(A) | 79.5 | 90 |
| 4 | CHP Area | dB(A) | 61.3 | 90 |
| 5 | Transport Area | dB(A) | 82.2 | 90 |
| 6 | Membrane Phase 1 & 2 | dB(A) | 83.0 | 90 |
| 7 | DM Plant | dB(A) | 79.1 | 90 |
| 8 | CO Boiler & Chlorine relng | dB(A) | 73.9 | 90 |
| 9 | ZLD Compressor | dB(A) | 75.4 | 90 |
| 10 | MEE Plant | dB(A) | 74.8 | 90 |
| 11 | ALCP Area | dB(A) | 74.2 | 90 |
| 12 | SBP & CP - VAP Area | dB(A) | 75.5 | 90 |

.....END OF REPORT.....

- ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report as above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality or parameter analyzed in the results and/or the performance of the equipment consequent to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and is not to be used as evidence in the court of law and should not be used in any advertising media without written approval permission in writing.
- Complaint register is available in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab Incharge

Authorized Signatory
(Ritu Garg)
Inc

# ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

Office & Laboratory : 1/263, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email : ETRC.LTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OHSS) ISO 14001:2015 & NABL Accredited Laboratory)

An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986

TC-5469




## TEST REPORT
## AMBIENT NOISE MONITORING AND ANALYSIS REPORT

| | |
|---|---|
| **Test Report Ref No.:** ETRC/EPA/14051/2025 | **Date of Report:** 29/03/2025 |
| **Name /Address/Type of Industry** | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U. P.) - 231217 |
| **Monitored by** | ETRC, Lucknow |

| Sr. No. | GENERAL INFORMATION | DETAILS |
|---|---|---|
| (a) | Date of monitoring | 18/03/2025 (06:00 AM) to 20/03/2025 (06:00 AM) |
| (b) | Sample Description | Ambient Noise |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS: 9989: 1981 Reaffirmed: 2020 |

## TEST RESULT

**Ambient Noise Level**

| Sr. No. | Locations | Unit | Results Day Time (06:00 AM - 10:00 PM) | Results Night Time (10:00 PM - 06:00 AM) |
|---|---|---|---|---|
| 1 | Main Gate | dB(A) | 61.66 | 50.66 |
| 2 | Hospital | dB(A) | 50.12 | 39.92 |
| 3 | Guest House | dB(A) | 49.68 | 44.42 |
| 4 | Staff Mess | dB(A) | 52.20 | 44.82 |
| 5 | Material Gate | dB(A) | 62.14 | 52.46 |

Noise Standards as per CPCB Schedule rule 3(1) and 4(1)

| Area Code | Category of Area/Zone | Limits in dB(A) Leq | |
|---|---|---|---|
| | | Day Time | Night Time |
| A | Industrial Area | 75 | 70 |
| B | Commercial Area | 65 | 55 |
| C | Residential Area | 55 | 45 |
| D | Silence zone | 50 | 40 |

END OF REPORT

- ETRC opinions / test or analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generally accurate results of the samples / equipment tested / inspected.
- The results relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of materials analyzed or the results and/or the performance of the equipment / consulting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- Complaints / queries, if any, should be informed to our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Ritu Garg)
QM

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE
Office & Laboratory : I/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)
Email : ETRCLUCKNOW@GMAIL.COM, Web : WWW.ETRCINDIA.COM
(ISO 9001:2015, ISO 14001:2015 (UKAS) ISO 14001:2015 NABL Accredited Laboratory)
An approved laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India under EPA 1986
TC-6469

ETRC/PMOS/TEST-REP/FT/44

# TEST REPORT

## WORK ZONE NOISE MONITORING AND ANALYSIS REPORT

| | | |
|---|---|---|
| Test Report Ref No.: ETRC/EPA/14052/2025 | | Date of Report: 29/03/2025 |
| Name /Address/Type of Industry | | Grasim Industries Limited<br>Chemical Division<br>P. O. Renukoot<br>District: Sonebhadra (U.P.) - 231217 |
| Monitored by | | ETRC, Lucknow |
| Sr. No. | GENERAL INFORMATION | DETAILS |
| (a) | Date of monitoring | 19/03/2025 (06:00 AM) to 20/03/2025 (06:00 AM) |
| (b) | Sample Description | Work Zone Noise (Industrial Area) |
| (c) | Parameter | Equivalent sound level |
| (d) | Environmental Condition | Normal |
| (e) | Monitoring Protocol | IS 9989: 1981, Reaffirmed: 2020 |

## TEST RESULT

| Work Zone Noise Level | | | | |
|---|---|---|---|---|
| Sr. No. | Locations | Unit | Results | Standard limit as per factory act (of 08 hrs exposure) |
| 1 | ID Fan | dB(A) | 86.2 | 90 |
| 2 | Turbine Area | dB(A) | 85.9 | 90 |
| 3 | PGD Area (Compressor) | dB(A) | 78.8 | 90 |
| 4 | CHP Area | dB(A) | 81.2 | 90 |
| 5 | Transport Area | dB(A) | 82.6 | 90 |
| 6 | Membrane Phase 1 & 2 | dB(A) | 83.1 | 90 |
| 7 | DM Plant | dB(A) | 79.8 | 90 |
| 8 | CD Boiler & Chlorine Filling | dB(A) | 79.7 | 90 |
| 9 | ZLD Compressor | dB(A) | 78.2 | 90 |
| 10 | MEE Plant | dB(A) | 78.4 | 90 |
| 11 | AL CP Area | dB(A) | 75.0 | 90 |
| 12 | SBP & CP - VAP Area | dB(A) | 75.6 | 90 |

END OF REPORT

- ETRC assures that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that the data reflects our best attempt to generate accurate results for the samples mentioned in the report above.
- The result relate only to the items tested.
- ETRC does not assume any liability for any claims or damages related to the quality of consumer analyzed or the results and/or the performance of the equipment consulting to the results.
- All disputes subject to Lucknow jurisdiction.
- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used as any advertising means without the special permission in writing.
- Complaint regarding analysis in our laboratory.

Authorized Signatory
(Sandeep Kr Verma)
Lab-Incharge

Authorized Signatory
(Raj Garg)
QM

**FORM 3**

*[See rules 6(5), 13(7), 14(6), 16(5) and 20 (1)]*

**FORMAT FOR MAINTAINING RECORDS OF HAZARDOUS AND OTHER WASTES**

1. Name and address of the facility: Grasim Industries Limited,Chemical Division

2. Date of issuance of authorization and its reference number: 13583/UPPCB/Sonebhadra(UPPCBRO)/HWM/SONEBHADRA/2020 Date : 02/03/2021

3. Description of hazardous and other wastes handled (Generated or Received)

**Annexure-4**

| Sr. No. | Physical form with description | Physical Form | Total volume and weight (in kg) for FY 2024-25 |
|---|---|---|---|
| 1 | Sch. II B30-PAC Sludge | Semi-solid | 119600 |
| 2 | Sch -I 35.3-ETP Sludge | Semi-solid | 149030 |
| 3 | Sch -I 35.3-MEE Salt | Semi-solid | 1154970 |
| 4 | Sch -I 16.3-Brine Sludge | Semi-solid | 2393290 |
| 5 | Sch. II B30-SBP Sludge | Semi-solid | 217110 |
| 6 | Sch. III B3040-Discarded Rubber Waste | Solid | 3780 |
| 7 | Sch. I 33.1-Used PPEs | Solid | 1400 |
| 8 | Sch. II B21-Asbestos Sheet | Solid | 24090 |
| 9 | Sch. I 11.5-Aluminium Dross | Solid | 7430 |
| 10 | Sch. I 5.1-Used Oil | Oily | 5170 |
| 11 | Sch. II Cat:B28 Discarded Welding Rods | Solid | 180 |
| 12 | Sch -I 35.1-Discarded APCD Filters | Solid | 500 |
| 13 | Sch -I 36.2-Discarded Filter Medium | Solid | 3200 |
| 14 | Sch. I 5.2-Used Cotton Containing Oil | Oily | 1250 |
| 15 | Sch. I 36.2 Spent Carbon | Solid | 1770 |
| 16 | Sch. I 33.1 FRP | Solid | 13900 |

| FY | Month | Date (FY 2024-25) | Type of waste with category as per Schedules I, II and III of these rules | Total quantity (Metric Tonnes) | Waste Cat. | Quantity Kg | TSDF | Form 10 | Method of Storage |
|---|---|---|---|---|---|---|---|---|---|
| 2024-25 | April | 3-Apr-2024 | MEE Salt | 25.750 | 35.3 | 25750 | BOWML | 85131 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | April | 5-Apr-2024 | MEE Salt | 29.920 | 35.3 | 29920 | BOWML | 85132 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | April | 8-Apr-2024 | MEE Salt | 24.550 | 35.3 | 24550 | BOWML | 85133 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | April | 10-Apr-2024 | SBP Sludge | 25.990 | Sch - II Cat : B30 | 25990 | BOWML | 85135 | stored at impervious surface |
| 2024-25 | April | 11-Apr-2024 | SBP Sludge | 12.970 | Sch - II Cat : B30 | 12970 | BOWML | 85134 | stored at impervious surface |
| 2024-25 | April | 11-Apr-2024 | MEE Salt | 13.090 | 35.3 | 13090 | BOWML | 85136 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | April | 18-Apr-2024 | SBP Sludge | 24.840 | Sch - II Cat : B30 | 24840 | BOWML | 85137 | stored at impervious surface |
| 2024-25 | April | 20-Apr-2024 | Asbestos Sheet | 8.080 | Sch - II Cat : B21 | 8080 | BOWML | 85138 | stored at impervious surface |
| 2024-25 | April | 20-Apr-2024 | MEE Salt | 16.380 | 35.3 | 16380 | BOWML | 85139 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | April | 23-Apr-2024 | Brine Sludge | 35.760 | 16.3 | 35760 | BOWML | 85140 | stored at impervious surface |
| 2024-25 | April | 26-Apr-2024 | Asbestos Sheet | 6.020 | Sch - II Cat : B21 | 6020 | BOWML | 85141 | stored at impervious surface |
| 2024-25 | April | 26-Apr-2024 | SBP Sludge | 19.020 | Sch - II Cat : B30 | 19020 | BOWML | 85142 | stored at impervious surface |
| 2024-25 | April | 27-Apr-2024 | MEE Salt | 24.360 | 35.3 | 24360 | BOWML | 85143 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | April | 29-Apr-2024 | SBP Sludge | 24.880 | Sch - II Cat : B30 | 24880 | BOWML | 85144 | stored at impervious surface |
| 2024-25 | April | 29-Apr-2024 | SBP Sludge | 34.850 | Sch - II Cat : B30 | 34850 | BOWML | 85145 | stored at impervious surface |
| 2024-25 | April | 30-Apr-2024 | MEE Salt | 24.480 | 35.3 | 24480 | BOWML | 85146 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | May | 3-May-2024 | Brine Sludge | 35.280 | 16.3 | 35280 | BOWML | 85147 | stored at impervious surface |
| 2024-25 | May | 4-May-2024 | Aluminium Dross | 7.43 | 11.5 | 7430 | Ramky | 5328 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | May | 7-May-2024 | MEE Salt | 25.550 | 35.3 | 25550 | BOWML | 85148 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | May | 7-May-2024 | SBP Sludge | 33.450 | Sch - II Cat : B30 | 33450 | BOWML | 85149 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | May | 14-May-2024 | Brine Sludge | 35.020 | 26.3 | 35020 | BOWML | 85150 | stored at impervious surface |
| 2024-25 | May | 15-May-2024 | MEE Salt | 25.810 | 35.3 | 25810 | BOWML | 88488 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | May | 16-May-2024 | MEE Salt | 24.610 | 35.3 | 24610 | BOWML | 85151 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | May | 21-May-2024 | Brine Sludge | 24.620 | 16.3 | 24620 | BOWML | 85152 | stored at impervious surface |
| 2024-25 | May | 25-May-2024 | Brine Sludge | 40.670 | 16.3 | 40670 | BOWML | 85153 | stored at impervious surface |
| 2024-25 | May | 28-May-2024 | Brine Sludge | 45.770 | 16.3 | 45770 | BOWML | 85154 | stored at impervious surface |
| 2024-25 | May | 28-May-2024 | MEE Salt | 10.760 | 35.3 | 10760 | BOWML | 85155 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | May | 28-May-2024 | ETP Sludge | 19.0 | 35.3 | 18950 | BOWML | 85156 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | May | 30-May-2024 | Brine Sludge | 29.900 | 16.3 | 29900 | BOWML | 85157 | stored at impervious surface |

| FY | Month | Date (FY 2024-25) | Type of waste with category as per Schedules I, II and III of these rules | Total quantity (Metric Tonnes) | Waste Cat. | Quantity Kg | TSDF | Form 10 | Method of Storage |
|---|---|---|---|---|---|---|---|---|---|
| 2024-25 | May | 30-May-2024 | MEE Salt | 26.250 | 35.3 | 26250 | BOWML | 85158 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | May | 31-May-2024 | Brine Sludge | 36.280 | 16.3 | 36280 | BOWML | 85159 | stored at impervious surface |
| 2024-25 | June | 6-Jun-2024 | MEE Salt | 25.190 | 35.3 | 25190 | BOWML | 85160 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | June | 8-Jun-2024 | MEE Salt | 25.030 | 35.3 | 25030 | BOWML | 85161 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | June | 8-Jun-2024 | MEE Salt | 34.680 | 35.3 | 34680 | BOWML | 85162 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | June | 10-Jun-2024 | Brine Sludge | 25.020 | 16.3 | 25020 | BOWML | 85163 | stored at impervious surface |
| 2024-25 | June | 11-Jun-2024 | Brine Sludge | 26.400 | 16.3 | 26400 | BOWML | 85164 | stored at impervious surface |
| 2024-25 | June | 11-Jun-2024 | MEE Salt | 24.730 | 35.3 | 24730 | BOWML | 85165 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | June | 16-Jun-2024 | Brine Sludge | 25.520 | 16.3 | 25520 | BOWML | 85166 | stored at impervious surface |
| 2024-25 | June | 18-Jun-2024 | MEE Salt | 24.890 | 35.3 | 24890 | BOWML | 85167 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | June | 19-Jun-2024 | ETP Sludge | 3.7 | 35.3 | 3700 | BOWML | 85168 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | June | 19-Jun-2024 | MEE Salt | 21.620 | 35.3 | 21620 | BOWML | 85169 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | June | 22-Jun-2024 | Brine Sludge | 29.040 | 16.3 | 29040 | BOWML | 85170 | stored at impervious surface |
| 2024-25 | June | 22-Jun-2024 | Brine Sludge | 24.460 | 16.3 | 24460 | BOWML | 85171 | stored at impervious surface |
| 2024-25 | June | 29-Jun-2024 | Discarded Rubber Waste | 0.5 | Sch-III Cat : B3040 | 500 | BOWML | 85172 | stored at impervious surface |
| 2024-25 | June | 29-Jun-2024 | Discarded Welding Rods | 0.100 | Sch-II Cat : B28 | 100 | BOWML | 85173 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | June | 29-Jun-2024 | Discarded APCD Filters | 0.5 | 35.1 | 500 | BOWML | 85174 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | June | 29-Jun-2024 | Used PPEs | 0.200 | 33.1 | 200 | BOWML | 85175 | stored at impervious surface |
| 2024-25 | June | 29-Jun-2024 | Used Cotton Containing Oil | 0.200 | 5.2 | 200 | BOWML | 88426 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | June | 29-Jun-2024 | Used Oil | 1.240 | 5.1 | 1240 | BOWML | 88427 | Filled in MS Drum and stored at impervious surface |
| 2024-25 | June | 29-Jun-2024 | PAC Sludge | 23.090 | Sch- II Cat : B30 | 23090 | BOWML | 88428 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | July | 6-Jul-2024 | MEE Salt | 29.850 | 35.3 | 29850 | BOWML | 88451 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | July | 9-Jul-2024 | MEE Salt | 28.700 | 35.3 | 28700 | BOWML | 88452 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | July | 17-Jul-2024 | MEE Salt | 25.000 | 35.3 | 25000 | BOWML | 88453 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | July | 19-Jul-2024 | Brine Sludge | 25.330 | 16.3 | 25330 | BOWML | 88454 | stored at impervious surface |
| 2024-25 | July | 19-Jul-2024 | Brine Sludge | 29.410 | 16.3 | 29410 | BOWML | 88455 | stored at impervious surface |
| 2024-25 | July | 20-Jul-2024 | Brine Sludge | 26.580 | 16.3 | 26580 | BOWML | 88456 | stored at impervious surface |
| 2024-25 | July | 27-Jul-2024 | Brine Sludge | 34.960 | 16.3 | 34960 | BOWML | 88457 | stored at impervious surface |
| 2024-25 | July | 29-Jul-2024 | Brine Sludge | 31.450 | 16.3 | 31450 | BOWML | 88458 | stored at impervious surface |
| 2024-25 | July | 29-Jul-2024 | MEE Salt | 25.840 | 35.3 | 25840 | BOWML | 88459 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | July | 30-Jul-2024 | Brine Sludge | 34.520 | 16.3 | 34520 | BOWML | 88460 | stored at impervious surface |
| 2024-25 | August | 1-Aug-2024 | Brine Sludge | 31.140 | 16.3 | 31140 | BOWML | 88461 | stored at impervious surface |
| 2024-25 | August | 6-Aug-2024 | Brine Sludge | 30.190 | 16.3 | 30190 | BOWML | 88462 | stored at impervious surface |
| 2024-25 | August | 6-Aug-2024 | ETP Sludge | 20.5 | 35.3 | 20530 | BOWML | 88463 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | August | 6-Aug-2024 | MEE Salt | 4.880 | 35.3 | 4880 | BOWML | 88464 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | August | 16-Aug-2024 | MEE Salt | 36.090 | 35.3 | 36090 | BOWML | 88465 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | August | 17-Aug-2024 | Brine Sludge | 25.250 | 16.3 | 25250 | BOWML | 88466 | stored at impervious surface |
| 2024-25 | August | 21-Aug-2024 | MEE Salt | 24.420 | 35.3 | 24420 | BOWML | 88467 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | August | 24-Aug-2024 | Brine Sludge | 25.310 | 16.3 | 25310 | BOWML | 88468 | stored at impervious surface |
| 2024-25 | August | 24-Aug-2024 | Brine Sludge | 29.470 | 16.3 | 29470 | BOWML | 88469 | stored at impervious surface |
| 2024-25 | August | 27-Aug-2024 | Brine Sludge | 30.610 | 16.3 | 30610 | BOWML | 88470 | stored at impervious surface |
| 2024-25 | August | 27-Aug-2024 | Brine Sludge | 25.480 | 16.3 | 25480 | BOWML | 88471 | stored at impervious surface |
| 2024-25 | August | 31-Aug-2024 | Brine Sludge | 32.200 | 16.3 | 32200 | BOWML | 88472 | stored at impervious surface |
| 2024-25 | August | 31-Aug-2024 | Brine Sludge | 24.530 | 16.3 | 24530 | BOWML | 88473 | stored at impervious surface |
| 2024-25 | September | 4-Sep-2024 | Brine Sludge | 30.940 | 16.3 | 30940 | BOWML | 88474 | stored at impervious surface |
| 2024-25 | September | 4-Sep-2024 | MEE Salt | 24.910 | 35.3 | 24910 | BOWML | 88475 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | September | 6-Sep-2024 | Brine Sludge | 26.320 | 16.3 | 26320 | BOWML | 91526 | stored at impervious surface |
| 2024-25 | September | 6-Sep-2024 | Brine Sludge | 30.150 | 16.3 | 30150 | BOWML | 91527 | stored at impervious surface |
| 2024-25 | September | 9-Sep-2024 | Brine Sludge | 34.540 | 16.3 | 34540 | BOWML | 88429 | stored at impervious surface |
| 2024-25 | September | 16-Sep-2024 | MEE Salt | 29.830 | 35.3 | 29830 | BOWML | 88430 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | September | 19-Sep-2024 | Brine Sludge | 34.080 | 16.3 | 34080 | BOWML | 88431 | stored at impervious surface |
| 2024-25 | September | 24-Sep-2024 | Used Cotton Containing Oil | 0.500 | 5.2 | 500 | BOWML | 88432 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | September | 24-Sep-2024 | Discarded Filter Medium | 0.900 | 36.2 | 900 | BOWML | 88433 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | September | 24-Sep-2024 | Used PPEs | 0.600 | 33.1 | 600 | BOWML | 88434 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | September | 24-Sep-2024 | Discarded Rubber Waste | 1.1 | Sch III Cat : B3040 | 1100 | BOWML | 88435 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | September | 24-Sep-2024 | Used Oil | 2.060 | 5.1 | 2060 | BOWML | 88436 | Filled in MS Drum and stored at impervious surface |
| 2024-25 | September | 24-Sep-2024 | ETP Sludge | 20.2 | 35.3 | 20170 | BOWML | 88437 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | September | 28-Sep-2024 | Brine Sludge | 29.950 | 16.3 | 29950 | BOWML | 88438 | stored at impervious surface |
| 2024-25 | October | 1-Oct-2024 | Brine Sludge | 36.160 | 16.3 | 36160 | BOWML | 88439 | stored at impervious surface |
| 2024-25 | October | 4-Oct-2024 | Brine Sludge | 29.640 | 16.3 | 29640 | BOWML | 88440 | stored at impervious surface |
| 2024-25 | October | 5-Oct-2024 | PAC Sludge | 25.000 | Sch- II Cat : B30 | 25000 | BOWML | 88441 | Filled in HDPE bags and stored at impervious surface |

| FY | Month | Date (FY 2024-25) | Type of waste with category as per Schedules I, II and III of these rules | Total quantity (Metric Tonnes) | Waste Cat. | Quantity Kg | TSDF | Form 10 | Method of Storage |
|---|---|---|---|---|---|---|---|---|---|
| 2024-25 | October | 8-Oct-2024 | Brine Sludge | 30.940 | 16.3 | 30940 | BOWML | 88442 | stored at impervious surface |
| 2024-25 | October | 9-Oct-2024 | MEE Salt | 31.400 | 35.3 | 31400 | BOWML | 88443 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | October | 10-Oct-2024 | Brine Sludge | 25.060 | 16.3 | 25060 | BOWML | 88444 | stored at impervious surface |
| 2024-25 | October | 10-Oct-2024 | MEE Salt | 3.490 | 35.3 | 3490 | BOWML | 88445 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | October | 10-Oct-2024 | ETP Sludge | 21.0 | 35.3 | 21020 | BOWML | 88446 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | October | 14-Oct-2024 | Brine Sludge | 29.400 | 16.3 | 29400 | BOWML | 88447 | stored at impervious surface |
| 2024-25 | October | 14-Oct-2024 | Brine Sludge | 30.030 | 16.3 | 30030 | BOWML | 88448 | stored at impervious surface |
| 2024-25 | October | 28-Oct-2024 | Brine Sludge | 30.290 | 16.3 | 30290 | BOWML | 88449 | stored at impervious surface |
| 2024-25 | October | 28-Oct-2024 | Brine Sludge | 30.620 | 16.3 | 30620 | BOWML | 88450 | stored at impervious surface |
| 2024-25 | October | 28-Oct-2024 | MEE Salt | 24.170 | 35.3 | 24170 | BOWML | 91528 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | November | 4-Nov-2024 | MEE Salt | 25.540 | 35.3 | 25540 | BOWML | 91529 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | November | 5-Nov-2024 | Brine Sludge | 35.510 | 16.3 | 35510 | BOWML | 91530 | stored at impervious surface |
| 2024-25 | November | 5-Nov-2024 | Brine Sludge | 30.560 | 16.3 | 30560 | BOWML | 91531 | stored at impervious surface |
| 2024-25 | November | 11-Nov-2024 | Brine Sludge | 30.180 | 16.3 | 30180 | BOWML | 91532 | stored at impervious surface |
| 2024-25 | November | 13-Nov-2024 | MEE Salt | 30.130 | 35.3 | 30130 | BOWML | 91533 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | November | 14-Nov-2024 | ETP Sludge | 11.4 | 35.3 | 11420 | BOWML | 91534 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | November | 14-Nov-2024 | MEE Salt | 19.820 | 35.3 | 19820 | BOWML | 91535 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | November | 20-Nov-2024 | Brine Sludge | 34.960 | 16.3 | 34960 | BOWML | 91536 | stored at impervious surface |
| 2024-25 | November | 20-Nov-2024 | Brine Sludge | 30.640 | 16.3 | 30640 | BOWML | 91537 | stored at impervious surface |
| 2024-25 | November | 23-Nov-2024 | PAC Sludge | 30.000 | Sch- II Cat : B30 | 30000 | BOWML | 91538 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | December | 4-Dec-2024 | MEE Salt | 34.920 | 35.3 | 34920 | BOWML | 91539 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | December | 5-Dec-2024 | ETP Sludge | 22.7 | 35.3 | 22720 | BOWML | 91540 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | December | 5-Dec-2024 | MEE Salt | 2.250 | 35.3 | 2250 | BOWML | 91541 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | December | 12-Dec-2024 | Brine Sludge | 34.520 | 16.3 | 34520 | BOWML | 91542 | stored at impervious surface |
| 2024-25 | December | 12-Dec-2024 | Brine Sludge | 35.210 | 16.3 | 35210 | BOWML | 91543 | stored at impervious surface |
| 2024-25 | December | 14-Dec-2024 | Brine Sludge | 25.530 | 16.3 | 25530 | BOWML | 91544 | stored at impervious surface |
| 2024-25 | December | 19-Dec-2024 | MEE Salt | 34.650 | 35.3 | 34650 | BOWML | 91545 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | December | 21-Dec-2024 | Brine Sludge | 25.750 | 16.3 | 25750 | BOWML | 91546 | stored at impervious surface |
| 2024-25 | December | 27-Dec-2024 | Discarded Rubber Waste | 0.68 | Sch III Cat : B3040 | 680 | BOWML | 91547 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | December | 27-Dec-2024 | Used Cotton Containing Oil | 0.250 | 5.2 | 250 | BOWML | 91548 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | December | 27-Dec-2024 | Spent Carbon | 1.100 | 36.2 | 1100 | BOWML | 91549 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | December | 27-Dec-2024 | Discarded Welding Rods | 0.040 | Sch-II Cat : B28 | 40 | BOWML | 91550 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | December | 27-Dec-2024 | Used PPEs | 0.300 | 33.1 | 300 | BOWML | 91501 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | December | 27-Dec-2024 | Discarded Filter Medium | 0.800 | 36.2 | 800 | BOWML | 91502 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | December | 27-Dec-2024 | MEE Salt | 20.770 | 35.3 | 20770 | BOWML | 91503 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | December | 27-Dec-2024 | Used Oil | 0.820 | 5.1 | 820 | BOWML | 91504 | Filled in MS Drum and stored at impervious surface |
| 2024-25 | January | 4-Jan-2025 | Brine Sludge | 29.830 | 16.3 | 29830 | BOWML | 91505 | stored at impervious surface |
| 2024-25 | January | 7-Jan-2025 | MEE Salt | 31.760 | 35.3 | 31760 | BOWML | 91507 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | January | 16-Jan-2025 | Brine Sludge | 32.310 | 16.3 | 32310 | BOWML | 91508 | stored at impervious surface |
| 2024-25 | January | 16-Jan-2025 | FRP Waste | 3.000 | 33.1 | 3000 | BOWML | 91509 | stored at impervious surface |
| 2024-25 | January | 17-Jan-2025 | MEE Salt | 24.020 | 35.3 | 24020 | BOWML | 91510 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | January | 21-Jan-2025 | Brine Sludge | 34.020 | 16.3 | 34020 | BOWML | 91511 | stored at impervious surface |
| 2024-25 | January | 21-Jan-2025 | FRP Waste | 1.680 | 33.1 | 1680 | BOWML | 91512 | stored at impervious surface |
| 2024-25 | January | 24-Jan-2025 | ETP Sludge | 19.2 | 35.3 | 19200 | BOWML | 91513 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | January | 24-Jan-2025 | MEE Salt | 11.060 | 35.3 | 11060 | BOWML | 91514 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | January | 25-Jan-2025 | ETP Sludge | 8.7 | 35.3 | 8680 | BOWML | 91515 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | January | 25-Jan-2025 | PAC Sludge | 26.450 | Sch- II Cat : B30 | 26450 | BOWML | 91516 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | January | 27-Jan-2025 | Brine Sludge | 33.660 | 16.3 | 33660 | BOWML | 91517 | stored at impervious surface |
| 2024-25 | January | 27-Jan-2025 | FRP Waste | 2.020 | 33.1 | 2020 | BOWML | 91518 | stored at impervious surface |
| 2024-25 | February | 5-Feb-2025 | FRP Waste | 2.130 | 33.1 | 2130 | BOWML | 91519 | stored at impervious surface |
| 2024-25 | February | 5-Feb-2025 | Brine Sludge | 33.250 | 16.3 | 33250 | BOWML | 91520 | stored at impervious surface |
| 2024-25 | February | 5-Feb-2025 | FRP Waste | 1.560 | 33.1 | 1560 | BOWML | 91521 | stored at impervious surface |
| 2024-25 | February | 5-Feb-2025 | Brine Sludge | 28.860 | 16.3 | 28860 | BOWML | 91522 | stored at impervious surface |
| 2024-25 | February | 6-Feb-2025 | FRP Waste | 1.470 | 33.1 | 1470 | BOWML | 91523 | stored at impervious surface |
| 2024-25 | February | 6-Feb-2025 | Brine Sludge | 34.040 | 16.3 | 34040 | BOWML | 91524 | stored at impervious surface |
| 2024-25 | February | 6-Feb-2025 | Brine Sludge | 32.730 | 16.3 | 32730 | BOWML | 91525 | stored at impervious surface |
| 2024-25 | February | 6-Feb-2025 | FRP Waste | 2.040 | 33.1 | 2040 | BOWML | 98126 | stored at impervious surface |
| 2024-25 | February | 11-Feb-2025 | MEE Salt | 29.270 | 35.3 | 29270 | BOWML | 98127 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | February | 14-Feb-2025 | Brine Sludge | 35.650 | 16.3 | 35650 | BOWML | 98128 | stored at impervious surface |
| 2024-25 | February | 17-Feb-2025 | Asbestos Sheet | 9.990 | Sch- II Cat : B21 | 9990 | BOWML | 98129 | stored at impervious surface |
| 2024-25 | February | 17-Feb-2025 | MEE Salt | 24.650 | 35.3 | 24650 | BOWML | 98130 | Filled in HDPE bags and stored at impervious surface |

| FY | Month | Date (FY 2024-25) | Type of waste with category as per Schedules I, II and III of these rules | Total quantity (Metric Tonnes) | Waste Cat. | Quantity Kg | TSDF | Form 10 | Method of Storage |
|---|---|---|---|---|---|---|---|---|---|
| 2024-25 | February | 20-Feb-2025 | Brine Sludge | 30.990 | 16.3 | 30990 | BOWML | 98131 | stored at impervious surface |
| 2024-25 | February | 20-Feb-2025 | Brine Sludge | 31.430 | 16.3 | 31430 | BOWML | 98132 | stored at impervious surface |
| 2024-25 | March | 1-Mar-2025 | Brine Sludge | 35.370 | 16.3 | 35370 | BOWML | 98133 | stored at impervious surface |
| 2024-25 | March | 3-Mar-2025 | Brine Sludge | 25.330 | 16.3 | 25330 | BOWML | 98134 | stored at impervious surface |
| 2024-25 | March | 8-Mar-2025 | PAC Sludge | 15.060 | Sch- II Cat : B30 | 15060 | BOWML | 98135 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 8-Mar-2025 | ETP Sludge | 2.6 | 35.3 | 2640 | BOWML | 98136 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 8-Mar-2025 | MEE Salt | 30.890 | 35.3 | 30890 | BOWML | 98137 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 10-Mar-2025 | Brine Sludge | 34.610 | 16.3 | 34610 | BOWML | 98138 | stored at impervious surface |
| 2024-25 | March | 10-Mar-2025 | Brine Sludge | 36.360 | 16.3 | 36360 | BOWML | 98139 | stored at impervious surface |
| 2024-25 | March | 12-Mar-2025 | SBP Sludge | 25.110 | Sch- II Cat : B30 | 25110 | BOWML | 98140 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 13-Mar-2025 | Brine Sludge | 38.650 | 16.3 | 38650 | BOWML | 98141 | stored at impervious surface |
| 2024-25 | March | 20-Mar-2025 | Brine Sludge | 30.280 | 16.3 | 30280 | BOWML | 98142 | stored at impervious surface |
| 2024-25 | March | 20-Mar-2025 | Brine Sludge | 31.670 | 16.3 | 31670 | BOWML | 98143 | stored at impervious surface |
| 2024-25 | March | 21-Mar-2025 | Brine Sludge | 30.080 | 16.3 | 30080 | BOWML | 98144 | stored at impervious surface |
| 2024-25 | March | 21-Mar-2025 | Brine Sludge | 24.970 | 16.3 | 24970 | BOWML | 98145 | stored at impervious surface |
| 2024-25 | March | 22-Mar-2025 | Discarded Rubber Waste | 1.5 | Sch III Cat : B3040 | 1500 | BOWML | 98146 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 22-Mar-2025 | Discarded Filter Medium | 1.500 | 36.2 | 1500 | BOWML | 98147 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 22-Mar-2025 | Spent Carbon | 0.670 | 36.2 | 670 | BOWML | 98148 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 22-Mar-2025 | Used PPEs | 0.300 | 33.1 | 300 | BOWML | 98149 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 22-Mar-2025 | Used Cotton Containing Oil | 0.300 | 5.2 | 300 | BOWML | 98150 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 22-Mar-2025 | Discarded Welding Rods | 0.040 | Sch-II Cat : B28 | 40 | BOWML | 100226 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 22-Mar-2025 | MEE Salt | 19.350 | 35.3 | 19350 | BOWML | 100227 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 22-Mar-2025 | Used Oil | 1.050 | 5.1 | 1050 | BOWML | 100228 | Filled in MS Drum and stored at impervious surface |
| 2024-25 | March | 24-Mar-2025 | Brine Sludge | 19.800 | 16.3 | 19800 | BOWML | 100229 | stored at impervious surface |
| 2024-25 | March | 24-Mar-2025 | Brine Sludge | 25.090 | 16.3 | 25090 | BOWML | 100230 | stored at impervious surface |
| 2024-25 | March | 24-Mar-2025 | Brine Sludge | 40.980 | 16.3 | 40980 | BOWML | 100231 | stored at impervious surface |
| 2024-25 | March | 24-Mar-2025 | Brine Sludge | 29.470 | 16.3 | 29470 | BOWML | 100232 | stored at impervious surface |
| 2024-25 | March | 25-Mar-2025 | Brine Sludge | 31.410 | 16.3 | 31410 | BOWML | 100233 | stored at impervious surface |
| 2024-25 | March | 25-Mar-2025 | MEE Salt | 23.600 | 35.3 | 23600 | BOWML | 100234 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 26-Mar-2025 | MEE Salt | 31.620 | 35.3 | 31620 | BOWML | 100235 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 26-Mar-2025 | MEE Salt | 29.970 | 35.3 | 29970 | BOWML | 100236 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 27-Mar-2025 | Brine Sludge | 41.300 | 16.3 | 41300 | BOWML | 100237 | stored at impervious surface |
| 2024-25 | March | 27-Mar-2025 | SBP Sludge | 16.000 | Sch- II Cat : B30 | 16000 | BOWML | 100238 | Filled in HDPE bags and stored at impervious surface |
| 2024-25 | March | 27-Mar-2025 | MEE Salt | 14.470 | 35.3 | 14470 | BOWML | 100239 | Filled in HDPE bags and stored at impervious surface |

| FY | Month | Date (FY 2024-25) | Type of waste with category as per Schedules I, II and III of these rules | Total quantity (Metric Tonnes) | Waste Cat. | Quantity Kg | TSDF | Form 10 | Method of Storage |
|---|---|---|---|---|---|---|---|---|---|

4 Date wise description of management of hazardous and other wastes including products Sent and to whom in case of recyclers or pre-processor or utilizer: **NA**

5 Date of environmental monitoring (as per authorization or guidelines of Central Pollution Control Board): **NA**

**Date :** **31/03/2025**

**Place :** **Renukoot**

for **Signature of occupier**

Grasim Industries Ltd. ★ Renukoot U.P. ★ Chemical Division Renukoot

Annexure - 5

ABCIL/ENV/2014/259

28/07/2014

The Chief Environmental officer,
U.P. Pollution Control Board,
T.C. – 12 V, Vibhuti Khand,
Gomti Nagar,
Lucknow (U.P.) 226010

Sub: **Regarding the installation and maintenance of Roof Top Rain Water Harvesting System**

Ref: **F45585/C-4/No.-15/2014, Dated 04.07.2014**

Dear Sir

This has references to the above subject. Please be informed that we are withdrawing water from Rihand reservoir for industrial as well as domestic purpose. We are using only surface water and are not using ground water. All rain water runoff are following to the Rihand Reservoir which is 1.5 Km from our factory to continuous down level.

Further we requisitioned services of M/s Central Ground Water Board (CGWB), Govt. of India, Allahabad, to assess rain water harvesting potential at our site. After surveying and studying, CGWB vide their letter dated 26 September-2012 have conveyed that "There is no need of sub surface recharge in the area as mentioned in the letter as well as in the map". The letter from CGWB is being enclosed herewith for your reference.

Thanking You,

Yours faithfully,
*For* Aditya Birla Chemicals (India) Ltd.

(R.K. Maheshwari)
Sr. Vice President (Tech)

Encl: As above.

CC: The Regional Officer
U.P. Pollution Control Board
H.No. – 162, Uttar Mohal
Near Chandi Hotel
Robertsganj, Sonebhadra - 231

**ADITYA BIRLA CHEMICALS (INDIA) LIMITED**
**RENUKOOT CHEMICAL DIVISION**
P. O. Renukoot 231 217, Dist. : Sonebhadra (U.P.) INDIA
PH. : 05446-252044/55/75, FAX : 05446-252088, E-mail : abcil.renukoot@adityabirla.com
Regd. Office : GARHWA ROAD, REHLA : 822 124, DIST. PALAMAU, (JHARKHAND) INDIA

No: 4(7)/CGWB/SUO/ALD/06- 300
Central Ground Water Board
Ministry of Water Resources
State Unit Office
276, Kaushambi Road
Chakia,Allahabad-211016
Date: 26/9/12

To

The Joint President
Aditya Birla Chemicals ( India) Limited
Renukoot Chemical Division,
Renukoot, Sonbhadra ( U.P.)

Sub: Regarding Rainwater Harvesting for Groundwater Recharge

Sir,

Please refer to your letter No.ABCIL/ENV/12-13/100 dated 17.08.12 on the subject cited above, since, the area is characterized by steep slope and rocky terrain the sub-surface groundwater recharge would be futile exercise. Secondaly, industry is utilizing the surface water only for both industrial as well as domestic purpose. **Hence, there is no need of sub-surface recharge in the area as mentioned in the letter as well as in the map**. However, attempt should be made to recycle and reuse the water after industrial process.

Yours faithfully
H.K. Pandey
( Dr.H.K.Pandey) 26/09/12
Scientist C
For Officer-in-Charge

Annexure -6

## DETAILS OF PLANTATION AT GRASIM INDUSTRIES LIMITED PREMISES

We have planted more than 4.75 Lacs trees in and around factory premises and develop a green belt in-house as well as outside the plant. Further plantation work is going on wherever space is available.

| Sr. No. | Name of Plant | No of Saplings | Area Covered in Acre | Area covered in Sq. Meter (1Acre=4046.85642 Sq. Mtr.) |
|---|---|---|---|---|
| 1 | Teak | 84294 | 58 | 234718 |
| 2 | Eucalyptus | 272000 | 85 | 343983 |
| 3 | Karan | 45000 | 15 | 60703 |
| 4 | Ashok (Pendula) | 17143 | 12 | 48562 |
| 5 | Jangle Jalewi | 22000 | 10 | 40469 |
| 6 | Casia Semia | 20625 | 11 | 44515 |
| 7 | Casia our Culifarmis | 6000 | 4 | 16187 |
| 8 | Arjun | 1333 | 2 | 8094 |
| 9 | Bamboo | 4000 | 2 | 8094 |
| 10 | Mix Variety (Jatropha,Kachnar,Gulmohar etc.) | 3400 | 4 | 16187 |
| | **Total** | **475795** | **203.0 Acre** | **821511.9 Sq. Mtr.** |

# Grasim Industries Ltd. Renukoot Sonebhadra U.P. 231217

## Chlorine (Cl2) and Hydrogen Sensor List Annexure-7

| Sr. No. | Plant | Tag No. | Type | Range | Location of sensor |
|---|---|---|---|---|---|
| 1 | Mem-PH-I &II | AT_1151 | Cl2 Sensor | 0-5 ppm | Cell house PH-I&II Gr.Floor |
| 2 | Mem-PH-I &II | AI_1151X | Cl2 Sensor | 0-5 ppm | Cell house PH-I&II Gr.Floor |
| 3 | Mem-PH-I &II | AT_1151A | Cl2 Sensor | 0-5 ppm | Cell house PH-I&II Gr.Floor |
| 4 | Mem-PH-I &II | AT_1151AX | Cl2 Sensor | 0-5 ppm | Cell house PH-I&II Gr.Floor |
| 5 | Mem-PH-I &II | AT_2201 | Cl2 Sensor | 0-5 ppm | $Cl_2$ Comp.A&B Gr.Floor |
| 6 | Mem-PH-I &II | AI_2201X | Cl2 Sensor | 0-5 ppm | $Cl_2$ Comp.C&D Gr.Floor |
| 7 | Mem-PH-I &II | AT_2202X | Cl2 Sensor | 0-5 ppm | $Cl_2$ Comp. Gr.Floor |
| 8 | Mem-PH-I &II | AT_2301 | Cl2 Sensor | 0-5 ppm | $Cl_2$ Comp. Gr.Floor |
| 9 | Mem-PH-I&II | AT_2301X | Cl2 Sensor | 0-5 ppm | Chlorine Liquefier Top Floor |
| 10 | Mem-PH-I&II | AT_2602 | Cl2 Sensor | 0-5 ppm | Top Floor Sod.Hypo Blower |
| 11 | Mem-PH-I&II | AT_2605 | Cl2 Sensor | 0-5 ppm | Near 78% HCL tank |
| 12 | Mem-PH-III | AI1151N | Cl2 Sensor | 0-5 ppm | Cell house Gr.Floor Area |
| 13 | Mem-PH-III | AI1155N | Cl2 Sensor | 0-5 ppm | Cell house Gr.Floor Area |
| 14 | Mem-PH-III | AI1156N | Cl2 Sensor | 0-5 ppm | Cell house Gr.Floor Area |
| 15 | Mem-PH-III | AI1154N | Cl2 Sensor | 0-5 ppm | Cell house Gr.Floor Area |
| 16 | Mem-PH-III | AI2201N | Cl2 Sensor | 0-5 ppm | $Cl_2$comp.B Gr.Floor Area |
| 17 | Mem-PH-III | AI2202N | Cl2 Sensor | 0-5 ppm | Liquid Chlorine Pump-Ground Floor |
| 18 | Mem-PH-III | AI2301N | Cl2 Sensor | 0-5 ppm | $Cl_2$comp. 1st.Floor Area |
| 19 | Mem-PH-III | AI2501N | Cl2 Sensor | 0-5 ppm | $Cl_2$comp. top.Floor Area |
| 20 | Mem-PH-III | AI2602N | Cl2 Sensor | 0-5 ppm | Sod.Hypo Stack |
| 21 | Mem-PH-III | AI2101N | Cl2 Sensor | 0-5 ppm | HCL Furnace-Gr. Floor |
| 22 | Cl2 Storage | AT_1702 | Cl2 Sensor | 0-5 ppm | Beside $Cl_2$ tank No.1 road side |
| 23 | Cl2 Storage | AT_1703 | Cl2 Sensor | 0-5 ppm | Near $Cl_2$ Vaporizer Gr. Floor |
| 24 | Cl2 Storage | AT_2510 | Cl2 Sensor | 0-5 ppm | Between Cl2 St. Tank 3 & 4 |
| 25 | Cl2 Storage | AT_2511 | Cl2 Sensor | 0-5 ppm | Between Cl2 St. Tank 2 & 3 |
| 26 | Cl2 Storage | AT_2512 | Cl2 Sensor | 0-5 ppm | Between Cl2 St. Tank 4 & 5 |
| 27 | Cl2 Bottling | AT_2001 | Cl2 Sensor | 0-5 ppm | At balance no.2 |
| 28 | Cl2 Bottling | AT_2002 | Cl2 Sensor | 0-5 ppm | Tonner checking area |
| 29 | Cl2 Bottling | AT_2003 | Cl2 Sensor | 0-5 ppm | Tonner filling area |
| 30 | Cl2 Bottling | AT_2004 | Cl2 Sensor | 0-5 ppm | At Balance no.7 |
| 31 | Cl2 Bottling | AT_2005 | Cl2 Sensor | 0-5 ppm | Near Chlorine maint area (way No 5) |
| 32 | Cl2 Bottling | AT_2006 | Cl2 Sensor | 0-5 ppm | Way No 3 |
| 33 | Cl2 Bottling | AT_2007 | Cl2 Sensor | 0-5 ppm | Way no 2 |
| 34 | Cl2 Bottling | AT_2008 | Cl2 Sensor | 0-5 ppm | way no 1 at road side. |
| 35 | Chlorine Vap.- MEG | AT_2802 | Cl2 Sensor | 0-5 ppm | Near Vaporiser & Buffer vessel |
| 36 | Chlorine Vap. -MEG | AT_2803 | Cl2 Sensor | 0-5 ppm | Near Vaporiser Top Floor |
| 37 | Chlorine Vap. - MEG | AT_2804 | Cl2 Sensor | 0-5 ppm | Near MEG Tank |
| 38 | Chlorine Vap. - MEG | AT_2805 | Cl2 Sensor | 0-5 ppm | Near Liquid Chlorine Control valve |

| | | | | | |
|---|---|---|---|---|---|
| **39** | SBP New | AT_301D | Cl2 Sensor | 0-5 ppm | Near drum no.D |
| **40** | SBP New | AT_301C | Cl2 Sensor | 0-5 ppm | Near drum no.E |
| **41** | SBP New | AT_301B | Cl2 Sensor | 0-5 ppm | Near drum no.B(New Area) |
| **42** | SBP New | AT_301A | Cl2 Sensor | 0-5 ppm | Near drum no.A(New Area) |
| **43** | SBP New | AT_701A | Cl2 Sensor | 0-5 ppm | SBP Godown |
| **44** | SBP New | AT_701B | Cl2 Sensor | 0-5 ppm | SBP Godown |
| **45** | SBP New | AT_701C | Cl2 Sensor | 0-5 ppm | SBP Godown |
| **46** | SBP New | AT_701D | Cl2 Sensor | 0-5 ppm | SBP Godown |
| **47** | CP New | AT_2601 | Cl2 Sensor | 0-5 ppm | Near Cl2 Vaporizer |
| **48** | CP New | AT_2602 | Cl2 Sensor | 0-5 ppm | Near R-7 |
| **49** | CP New | AT_2603 | Cl2 Sensor | 0-5 ppm | Reactor area near R-11 |
| **50** | CP New | AT_2604 | Cl2 Sensor | 0-5 ppm | Reactor area near R-3 |
| **51** | CP Old | AT_2501 | Cl2 Sensor | 0-5 ppm | Near Degasser |
| **52** | CP Old | AT_2504 | Cl2 Sensor | 0-5 ppm | Reactor area |
| **53** | CP Old | AT_2502 | Cl2 Sensor | 0-5 ppm | Hypo area |
| **54** | ALCP | AT_5001 | Cl2 Sensor | 0-5 ppm | Chlorine Tank Area |
| **55** | ALCP | AT_5002 | Cl2 Sensor | 0-5 ppm | Chlorine Vaporiser Area |
| **56** | ALCP | AT_5003 | Cl2 Sensor | 0-5 ppm | Hypo Area |
| **57** | ALCP | AT_5004 | Cl2 Sensor | 0-5 ppm | Reactor area |
| **58** | PGD End/CP OLD | AT_2503 | Cl2 Sensor | 0-5 ppm | CP-old /PGD end |
| **59** | Main Gate | AT_1704 | Cl2 Sensor | 0-5 ppm | At the roof of Time Office near siren |
| **60** | WEIGH BRIDGE | AT_2605 | Cl2 Sensor | 0-5 ppm | ROOF OF WEIGH BRIDGE ROOM |
| **61** | ETP/RO | AT_4281 | Cl2 Sensor | 0-5 ppm | ETP/MEE |
| **62** | Mem-PH-I &II | AT_1152 | H2 sensor | 0-100% LEL | Cell House |
| **63** | Mem-PH-I &II | AI_1152X | H2 sensor | 0-100% LEL | Cell House |
| **64** | Mem-PH-III | AI1152N | H2 sensor | 0-100% LEL | Cell House |
| **65** | Mem-PH-III | AI1153N | H2 sensor | 0-100% LEL | Cell House |
| **66** | H2 Bottling | AT-2101 | H2 sensor | 0-100% LEL | H2 DETECTOR-1 BETWEEN COMP.-1 & 2 |
| **67** | H2 Bottling | AT-2102 | H2 sensor | 0-100% LEL | H2 DETECTOR-2 NEAR FILLING HEADER |
| **68** | H2 Bottling | AT-2103 | H2 sensor | 0-100% LEL | H2 DETECTOR-3 NEAR COMP.-3 |
| **69** | H2 Bottling | AT-2104 | H2 sensor | 0-100% LEL | H2 DETECTOR-4 NEAR OPERATOR ROOM |
| **70** | Central LAB | AT-6501 | H2 sensor | 0-100% LEL | Near H2 generator |

**Uttar Pradesh Pollution Control Board**
Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010
Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.in, Website: www.uppcb.com

**Category : RED** **Application Id : 28400150**

**222667/UPPCB/Sonebhadra(UPPCBRO)/CTO/both/SONBHADRA/2024** **Date: 16/12/2024**

**To,**

**M/s**

**GRASIM INDUSTRIES LIMITED CHEMICAL DIVISION RENUKOOT**

**GRASIM INDUSTRIES LIMITED CHEMICAL DIVISION RENUKOOT,SONBHADRA,213217**

**Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & authorization) (Fresh) under Section-25 of the Water (Prevention & Control of Pollution) Act, 1974 and under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981**

CCA is hereby granted to **GRASIM INDUSTRIES LIMITED CHEMICAL DIVISION RENUKOOT** located at **GRASIM INDUSTRIES LIMITED CHEMICAL DIVISION RENUKOOT,SONBHADRA,213217**. subject to the provisions of **the Water Act, Air Act** and the orders that may be made further and subject to following terms and conditions :-

1. This CCA GRASIM INDUSTRIES LIMITED CHEMICAL DIVISION RENUKOOT **granted for the period from 01/01/2025 to 31/12/2029** and valid for manufacturing of following products.

| S No | Product | Quantity | Unit |
|---|---|---|---|
| 1 | Caustic Soda | 10950 | Metric Tonnes/Month |
| 2 | Liquid Chlorine | 8630 | Metric Tonnes/Month |
| 3 | Hydrogen | 275 | Metric Tonnes/Month |
| 4 | Hydrochloric Acid | 2107 | Metric Tonnes/Month |
| 5 | Sodium Hypo Chlorite | 1000 | Metric Tonnes/Day |
| 6 | Stable Bleaching Powder | 5400 | Metric Tonnes/Month |
| 7 | Chlorinated Parafin Wax (CPW) | 1800 | Metric Tonnes/Month |
| 8 | Aluminium Chloride | 1500 | Metric Tonnes/Month |
| 9 | Poly Aluminium Chloride (PAC) | 6000 | Metric Tonnes/Month |

**2. Conditions under Water(Prevention and Control of Pollution) Act -1974 as amended :-**

(i) The daily quantity of effluent discharge (KLD) :-

| Kind of Effluent | Quantity(KLD) | Treatment facility | Discharge point |
|---|---|---|---|
| **Domestic** | **300 KLD treated effluent shall be reused in irrigation and other purposes** | **STP** | **Irrigation.** |

| | | | |
|---|---|---|---|
| **Industrial** | **650 KLD treated effluent through Double stage RO Plant & MEE shall be 100% recycled to ensure ZLD** | **ETP** | **ZLD** |

(ii) Trade Effluent Treatment and Disposal :-The applicant shall operate Effluent Treatment Plant consisting of primary/secondary and tertiary treatment as is required with reference to influent quantity and quality.

In case of stoppage of functioning of ETP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(iii) The treated effluent shall be recycled to the maximum extent and should be reused within the premises for gardening etc. Quality of the treated effluent shall meet to the following general and specific standards as prescribed under Environment (Protection) Rules, 1986 and applicable to the unit from time-to-time :-

**Industrial Effluent Quality Standard**

| S.No. | Parameter | Standard |
|---|---|---|
| 1 | BOD | 30 mg/l |
| 2 | COD | 250 mg/l |
| 3 | TSS | 100 mg/l |
| 4 | Oil and Grease | 10 mg/l |
| 5 | Chloride as Cl | 1000 mg/l |
| 6 | Mercury as Hg | 0.01 mg/l |
| 7 | Free Chlorine | 1.0 mg/l |
| 8 | pH | 5.5 to 9.0 |

(iv) Sewage Treatment and Disposal :- The applicant shall provide comprehensive STP as is required with reference to influent quantity and quality.In case of stoppage of functioning of STP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(v) The treated sewage shall be reused in gardening as far as possible. The STP shall be maintained continuously so as to achieve the quality of the treated sewage to the following standards.

| S No. | Parameters | Standards |
|---|---|---|
| 1 | pH | As per E(P) Act 1986 |
| 2 | BOD (mg/L) | As per E(P) Act 1986 |
| 3 | TSS (mg/L) | As per E(P) Act 1986 |
| 4 | Fecal Coliform (MPN/100ml) | As per E(P) Act 1986 |

**3. Conditions under Air (Prevention and Control of Pollution) Act -1981 as amended :-**

i) The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as required with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards.

**Air Pollution Source Details**

| S No. | Air Pollution Source | Type of fuel | Stack no | Control Device | Height of Stack |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 1 | Boiler-1 (capacity-14 TPH) | Coal | 01 | Particulate Matter | 55 meter high stack from ground level with Bag filter. |
| 2 | Boiler-2 (capacity-14 TPH) | Coal | 02 | Particulate Matter | 61 meter high stack from ground level with Bag filter. |
| 3 | Hydrogen gas fired Boiler-12 TPH | Hydrogen Gas | 03 | Particulate Matter | 30 meter high stack from Ground Level. |
| 4 | D.G. Set (Capacity 1875 KVA) | HSD | 04 | Particulate Matter | 40 meter high stack with acoustic enclosure. |

**Emmission Quality Standards**

| S No. | Stack no | Parameters | Standards |
|---|---|---|---|
| 1 | 01 | Particulate Matter | 150 mg/Nm3 |
| 2 | 02 | Particulate Matter | 150 mg/Nm3 |
| 3 | 03 | Particulate Matter | Mercury (Hg)- 0.2 mg/Nm3 |
| 4 | 04 | Particulate Matter | less than of equal to 0.2 g/kW-hr |

In case of stoppage of functioning of air pollution control equipment, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately

(ii) The unit will not use any type of restricted fuel.

iii) Noise from the D.G. Set and other source(s) should be controlled by providing an acoustic enclosure as is required for meeting the ambient noise standards for night and day time as prescribed for respective areas/zones (Industrial, Commercial, Residential, Silence) which are as follows :-

Day time : from 6.00 a.m. to 10.00 p.m., Night time: from 10.00 p.m. to 6.00 a.m.

| Standards for Noise level in db(A) Leq | Industrial Area | | Commercial Area | | Residential Area | | Silence Zone | |
|---|---|---|---|---|---|---|---|---|
| | Day Time | Night Time | Day Time | Night Time | Day Time | Night Time | Day Time | Night Time |
| | 75 | 70 | 65 | 55 | 55 | 45 | 50 | 40 |

**4. Essential documents to be submitted by the Industry/Unit as Applicable :-**

(i) Environment Statement in Form-V of Environment (Protection) Rules, 1986.

(ii) Quarterly compliance report of the CCA, photograph of ETP/APCs/Waste Storage Area.

5. Competent Authority reserves the right to change/modify/add any time any condition of this CCA.

6. Unit has to comply with the following specific & general conditions. Non compliance of any provision of this CCA and provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 will results in legal action under the aforesaid Acts and Rules.

7. In compliance to the G.O 1011/81-7-2021-09 (Writ)/2016 dated.13.10.2021 issued by Department of Environment, Forest and Climate Change, Uttar Pradesh. You are directed to develop Miyawaki Forest as per the SOP available at URL:-http://www.upecp.in/TrainingSession.aspx for ensuring timely compliance of this direction, you are hereby directed to submit a bank guarantee with minimum validity of one year of the

amount equivalent to the sum of initial consent fees (Air and Water) or Rs. 50,000/- (Rs. Fifty Thousand Only) whichever is more, within 30 days from the date of issuance of this certificate. In case of non-compliance of this direction, your consent will be revoked by the Board.
8. If the unit uses the ground water and requires the permission from SGWA/CGWA for water abstraction then the industry will have to obtain No objection certificate for abstraction of ground water. It will be the responsibility of the industry to comply with the various conditions of the NOC obtained from the competent authority and submit to the Board, within 3 months time failing which CTO will be revoked.

**General Conditions:-**

1. The applicant shall get analysed the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF and shall report to the UPPCB.
2. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.
3. Treated Industial waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement equipment at final disposal point.
4. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions within 30 days of receipt of this CCA. If at any point of time, it is found that the industry is not complying with stipulated conditions or any further direction/instruction issued by the Board, legal action shall be initiated against the applicant.
5. The applicant shall maintain good house keeping. All valves/pipes/sewer/drains etc. must be leak-proof
6. The industry shall provide uninterrupted entry to the STP/ETP inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control systems.
7. The industry shall provide Inspection Book at the time of inspection to the Board's officials.
8. Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall be reported to the Board's offices and all other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect.
9. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.
10. In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry shall be liable to pay compensation also in such cases as decided by the Competent Authority.
11. The applicant shall apply before the 60 days of expiry of CCA or any change in production types/ production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point
12. The Board reserves the right to revoke/add/modify any stipulated condition issued along with CCA, as may be necessary.

**Specific Conditions:-**

1. This CTO is valid for production of Caustic Soda- 10950 MT/Month, By Products Liquid Chlorine-8630 MT/Month, Hydrogen-275 MT/Month, Hydrochloric Acid-2107 MT/Month and Value Added products Sodium Hypo Chlorite-1000 MT/Month, Stable Bleaching Powder-5400 MT/Month, Chlorinated Parafin Wax (CPW)-1800 MT/Month, Aluminium Chloride-1500 MT/Month, Poly Aluminium Chloride (PAC)-6000 MT/Month.
2. For production industry shall use raw material, Soda Ash 217.06 MTA, Salt 191927 MTA, Magnafloc-0.95 MTA, Barium Carbonate-695.60 MTA, Sulphuric Acid-1675.37 MTA, Sodium Sulphite-62.18 MTA, Hydrated Lime-26781.11 MTA, Aluminum Ingots-10220.8 MTA, Parafin Oil-6655.72 MTA, Alumina

Hydrate-5006.25 MTA.

3. Industry shall treat industrial effluent through ETP in such a manner, to achieve the standards prescribed under Environment (Protection) Rules, 1986. Industrial effluent after treatment followed by Double Stage RO Plant and Multi Effect Evaporator shall be 100% recycled in the process to ensure zero liquid discharge.

4. The domestic effluent shall be treated through STP of capacity 1000 KLD. The STP shall be operated properly and treated water shall be reused in irrigation of green belt and other purposes. No effluent shall be discharged outside the premises.

5. Industry shall submit the STP and ETP outlet sample analysis report of NABL accredited laboratory on monthly basis.

6. Industry shall ensure the compliance of orders passed by Hon'ble Supreme Court/Hon'ble National Green Tribunal, regarding the shifting of stored mercury bearing brine sludge.

7. Industry shall install and operate electromagnetic flow meters at inlet and outlet of STP & ETP, water extraction sources, Inlet of MEE and outlet of condensate. The logbook of flow meter readings shall be maintained.

8. Industry shall construct covered pucca sheds for storage of raw salt, MEE salt and Membrane Cell brine within 02 months and inform to the Board.

9. Industry should operate and maintain installed APCS effectively and continuously to achieve the standards prescribed under E(P) Rules, 1986 and submit stack monitoring / Ambient air monitoring reports on quarterly basis to the Board.

10. The concentration of Chlorine (from hypo tower) should not exceed 15.0 mg/Nm3 and Hydro Chloric acid vapours and mist should not exceed 35.0 mg/Nm3.

11. The industry shall operate and maintain Online Continuous Emission Monitoring System effectively and ensure its continuous connectivity to CPCB and UPPCB server. OCEMS system shall be calibrated on six monthly basis through recognized agency and calibration certificate should be submitted to UPPCB.

12. Industry shall install and effectively operate water sprinkling system around the coal crushing area for dust suppression.

13. Industry shall maintain acoustic enclosure on 1875 KVA D.G. Set and shall ensure the provisions of Noise Pollution (Regulation and control) Rules 2000.

14. Industry shall comply with the office memorandum No. H 48273/C-1/NGT-83/2020 dated 27-02-2020 issued by UPPCB for industries situated in Critically polluted areas.

15. Proponent shall establish Miyawaki forest as per the GO no. 1011/81-7-2021-09(rit)/2016 dated 13.10.2021 of Deptt. of Environment, forest and climate change.

16. Industry should comply with the provisions of Hazardous and Other waste (Management & Trans boundary Movement) Rules 2016 and shall submit details of Hazardous waste disposal in Form-10.

17. Industry shall take insurance under Public Liability Insurance Act, 1991 and copy of insurance premium should be submitted to the Board.

18. Industry shall ensure the compliance of orders passed by Hon'ble Supreme Court/Hon'ble National Green Tribunal, regarding the shifting of stored mercury bearing brine sludge.

19. Industry shall install rain water harvesting system as per guideline of Ground Water Authority.

20. Fly Ash/Solid waste shall be disposed in such manner so that no air, water and soil pollution takes place.

21. Industry shall develop and maintain green belt as per the guidelines issued by the Board vide office order dated 16/02/2018, which is available on Board's Website- www.uppcb.com.

22. Industry shall submit environmental statement in prescribed format as per rule 14 of Environment (Protection) Act, 1986.

23. Industry shall abide by directions given by Hon'ble Court, Central Pollution Control Board and UPPCB for protection of safeguard of environment from time to time.

24. Industry shall comply with the directions issued under Singrauli Action Plan in time bound manner.

25. Industry shall comply with the recommendations of Core Committee constituted by Hon'ble NGT and

submit the compliance report to the Board on quarterly basis.

26. Industry shall comply with the directions given by Fly Ash Utilization Mission constituted by Hon'ble NGT.

27. Industry shall comply with the relevant provisions of Environmental Laws.

28. If closure order is issued by CPCB or UPPCB against the unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective with additional conditions mentioned in the closure revocation order.

ATULESH YADAV Digitally signed by ATULESH YADAV Date: 2024.12.26 18:41:30 +05'30'

**Chief Environmental Officer (circle-2)**

Copy to:

Regional Officer, UPPCB Sonbhadra with direction to send the compliance report of CTO conditions on quarterly basis to Head Office

ATULESH YADAV Digitally signed by ATULESH YADAV Date: 2024.12.26 18:41:38 +05'30'

**Chief Environmental Officer (circle-2)**

# मिशन LiFE - पर्यावरण के लिए जीवन शैली

**(Lifestyle For Environment )**

**जनसहभागिता का सन्देश**

- **स्वच्छता** – देशसेवा में अपने परिवेश की स्वच्छता हेतु अपना सक्रिय योगदान सुनिश्चित करें
- संकल्प लें -एकल उपयोग प्लास्टिक उत्पाद जैसे कप, तश्तरी, चम्मच, स्ट्रॉ, ईयरबड्स आदि का उपयोग न हो एवं पर्यावरण अनुकूल विकल्पों जैसे कागज/पत्तों से बने दोने या कटलरी को प्राथमिकता दी जाय |
- एकल उपयोग प्लास्टिक उत्पाद के प्रयोग को रोकने एवं प्लास्टिक बैग के बजाय कपड़े के थैले का उपयोग करने मात्र से 375 मिलियन टन ठोस (प्लास्टिक) कचरे का उत्सर्जन बचाया जा सकता है
- चक्रीय अर्थव्यवस्था (सर्कुलर इकोनॉमी) का समुचित कार्यान्वयन वर्ष 2030 तक लगभग 14 लाख करोड़ रुपये की अतिरिक्त बचत उत्पन्न कर सकता है | वेस्ट /अपशिष्ट फेंकने के पूर्व सोचें, ये किसी का संसाधन तो नहीं ...?
- अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को कचरे में फेंकने से रुकें | इसके उपयुक्त निस्तारण हेतु इसे प्राधिकृत ई – वेस्ट रीसाइकलर को दें | प्राधिकृत ई-रीसाइक्लिंग इकाई में अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को देने मात्र से 0.75 मिलियन टन तक ई-कचरे का पुनर्चक्रण किया जा सकता है एवं ई-कचरे के विषम पर्यावरणीय दुष्प्रभाव से बचा जा सकता है
- बाहर जाते समय - सोचें कि क्या आपको वास्तव में परिवहन की आवश्यकता है - वह भी क्या व्यक्तिगत रूप से ? छोटी दूरी के लिए पैदल चलना पसंद करें, अथवा सम्भव हो तो कार पूल के रूप में संसाधन को साझा करें अथवा सार्वजनिक परिवहन पर विचार करें
- घरेलू स्तर पर कम से कम ठोस अपशिष्ट का उत्सर्जन करें और इनका प्रथाक्कीकरण करें
- उपयोगी शेष खाद्य सामग्री आपके स्वयं प्रयास अथवा निकटस्थ सक्रिय स्वयं सेवी संस्थाओं की सहायता से समाज के वंचित वर्ग तक पहुंचाई जा सकती है | वहीं अनुपयोगी भोजन /खाद्य सामग्री को कंपोस्ट (वर्मी कम्पोस्ट) करने से 15 अरब टन भोजन को नष्ट होने से बचाया जा सकता है
- ध्यान रखें - उपयुक्त नल और शावर के उपयोग से पानी की खपत को 30 - 40% तक कम किया जा सकता है। एवं उपयोग में न होने पर नलों को बंद रखने मात्र से 9 ट्रिलियन लीटर पानी बचाया जा सकता है
- ट्रैफिक लाइट/रेलवे क्रॉसिंग पर कार/स्कूटर के इंजन बंद करने मात्र से 22.5 बिलियन kWh तक ऊर्जा की बचत हो सकती है
- परम्परागत बल्ब के स्थान पर CFL का उपयोग बिजली की खपत में प्रभावी कमी लाते हैं | उपयोग में न होने पर बिजली उपकरणों को बंद करें | स्टार रेटेड विद्युत उपकरणों के उपयोग को प्राथमिकता दें

**हमारे द्वारा अपनी जीवन शैली की प्राथमिकताओं का उचित और पर्यावरण अनुकूल पुनर्निर्धारण समाज और पर्यावरण के प्रति हमारा दायित्व है |**

**Uttar Pradesh Pollution Control Board**
Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010
Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.in, Website: www.uppcb.com

**Category : RED** **Application Id : 27970775**

**220187/UPPCB/Sonebhadra(UPPCBRO)/CTO/both/SONBHADRA/2024** **Date: 15/12/2024**

**To,**

**M/s**

**GRASIM INDUSTRIES LIMITED POWER DIVISION RENUKOOT**

**p.o. renukoot, district-sonbhadra(u.p.),SONBHADRA,231217**

**Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & authorization) (Fresh) under Section-25 of the Water (Prevention & Control of Pollution) Act, 1974 and under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981**

CCA is hereby granted to **GRASIM INDUSTRIES LIMITED POWER DIVISION RENUKOOT** located at **p.o. renukoot, district-sonbhadra(u.p.),SONBHADRA,231217**. subject to the provisions of **the Water Act, Air Act** and the orders that may be made further and subject to following terms and conditions :-

1. This CCA GRASIM INDUSTRIES LIMITED POWER DIVISION RENUKOOT **granted for the period from 01/01/2025 to 31/12/2029** and valid for manufacturing of following products.

| S No | Product | Quantity | Unit |
|---|---|---|---|
| 1 | electricity generation - 50 MW (2x25 MW) | 50 | Megawatt |

**2. Conditions under Water(Prevention and Control of Pollution) Act -1974 as amended :-**

(i) The daily quantity of effluent discharge (KLD) :-

| Kind of Effluent | Quantity(KLD) | Treatment facility | Discharge point |
|---|---|---|---|
| **Domestic** | **150 KLD to be used in irrigation, dust suppression.** | **STP** | **Irrigation.** |
| **Industrial** | **250 KLD after neutralization and treatment through ETP shall be 100% reused to ensure ZLD** | **ETP** | **ZLD** |

(ii) Trade Effluent Treatment and Disposal :-The applicant shall operate Effluent Treatment Plant consisting of primary/secondary and tertiary treatment as is required with reference to influent quantity and quality.

In case of stoppage of functioning of ETP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(iii) The treated effluent shall be recycled to the maximum extent and should be reused within the premises for gardening etc. Quality of the treated effluent shall meet to the following general and specific standards as prescribed under Environment (Protection) Rules, 1986 and applicable to the unit from time-to-time :-

**Industrial Effluent Quality Standard**

| S.No. | Parameter | Standard |
|---|---|---|
| 1 | BOD | 30 mg/l |
| 2 | COD | 250 mg/l |
| 3 | TSS | 100 mg/l |
| 4 | Oil and Grease | 10 mg/l |

(iv) Sewage Treatment and Disposal :- The applicant shall provide comprehensive STP as is required with reference to influent quantity and quality.In case of stoppage of functioning of STP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(v) The treated sewage shall be reused in gardening as far as possible. The STP shall be maintained continuously so as to achieve the quality of the treated sewage to the following standards.

| S No. | Parameters | Standards |
|---|---|---|
| 1 | pH | As per E(P) Act 1986 |
| 2 | BOD (mg/L) | As per E(P) Act 1986 |
| 3 | TSS (mg/L) | As per E(P) Act 1986 |
| 4 | Fecal Coliform (MPN/100ml) | As per E(P) Act 1986 |

**3. Conditions under Air (Prevention and Control of Pollution) Act -1981 as amended :-**

i) The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as required with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards.

**Air Pollution Source Details**

| S No. | Air Pollution Source | Type of fuel | Stack no | Control Device | Height of Stack |
|---|---|---|---|---|---|
| 1 | Boiler-105 TPH | Coal-18000 MT/month and HSD-3.5 KL/month | 01 | Particulate Matter | 75 meter high stack from ground level with ESP. |
| 2 | Boiler-110 TPH | Coal-18000 MT/month and HSD-3.5 KL/month | 02 | Particulate Matter | 75 meter high stack from ground level with ESP. |
| 3 | Coal Crushing house | - | - | Particulate Matter | Dry fog system, Dust Extraction and Bag filters are installed |

**Emmission Quality Standards**

| S No. | Stack no | Parameters | Standards |
|---|---|---|---|
| 1 | 01 | Particulate Matter | 100 mg/Nm3 |

| | | | |
|---|---|---|---|
| 2 | 01 | Sulphur Dioxide | 600 mg/Nm3 |
| 3 | 01 | Oxides of Nitrogen | 600 mg/Nm3 |
| 4 | 01 | Quantity of Emission | Mercury (Hg)- 0.03 mg/Nm3 |
| 5 | 02 | Particulate Matter | 50 mg/Nm3 |
| 6 | 02 | Sulphur Dioxide | 600 mg/Nm3 |
| 7 | 02 | Oxides of Nitrogen | 300 mg/Nm3 |
| 8 | 02 | Quantity of Emission | Mercury (Hg)- 0.03 mg/Nm3 |
| 9 | | Quantity of Emission | Ambient Air Quality Standard- PM10-100 microgram/m3, PM2.5-60 microgram/m3, SO2 - 80 microgram/m3, NO2-80 microgram/m3, Lead Pb-1.0 microgram/m3 |

In case of stoppage of functioning of air pollution control equipment, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately

(ii) The unit will not use any type of restricted fuel.

iii) Noise from the D.G. Set and other source(s) should be controlled by providing an acoustic enclosure as is required for meeting the ambient noise standards for night and day time as prescribed for respective areas/zones (Industrial, Commercial, Residential, Silence) which are as follows :-

Day time : from 6.00 a.m. to 10.00 p.m., Night time: from 10.00 p.m. to 6.00 a.m.

| **Standards for Noise level in db(A) Leq** | **Industrial Area** | | **Commercial Area** | | **Residential Area** | | **Silence Zone** | |
|---|---|---|---|---|---|---|---|---|
| | Day Time | Night Time | Day Time | Night Time | Day Time | Night Time | Day Time | Night Time |
| | 75 | 70 | 65 | 55 | 55 | 45 | 50 | 40 |

**4. Essential documents to be submitted by the Industry/Unit as Applicable :-**

(i) Environment Statement in Form-V of Environment (Protection) Rules, 1986.

(ii) Quarterly compliance report of the CCA, photograph of ETP/APCs/Waste Storage Area.

5. Competent Authority reserves the right to change/modify/add any time any condition of this CCA.

6. Unit has to comply with the following specific & general conditions. Non compliance of any provision of this CCA and provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 will results in legal action under the aforesaid Acts and Rules.

7. In compliance to the G.O 1011/81-7-2021-09 (Writ)/2016 dated.13.10.2021 issued by Department of Environment, Forest and Climate Change, Uttar Pradesh. You are directed to develop Miyawaki Forest as per the SOP available at URL:-http://www.upecp.in/TrainingSession.aspx for ensuring timely compliance of this direction, you are hereby directed to submit a bank guarantee with minimum validity of one year of the amount equivalent to the sum of initial consent fees (Air and Water) or Rs. 50,000/- (Rs. Fifty Thousand Only) whichever is more, within 30 days from the date of issuance of this certificate. In case of non-compliance of this direction, your consent will be revoked by the Board.

8. If the unit uses the ground water and requires the permission from SGWA/CGWA for water abstraction then the industry will have to obtain No objection certificate for abstraction of ground water. It will be the responsibility of the industry to comply with the various conditions of the NOC obtained from the

competent authority and submit to the Board, within 3 months time failing which CTO will be revoked.

**General Conditions:-**

1. The applicant shall get analysed the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF and shall report to the UPPCB.
2. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.
3. Treated Industial waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement equipment at final disposal point.
4. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions within 30 days of receipt of this CCA. If at any point of time, it is found that the industry is not complying with stipulated conditions or any further direction/instruction issued by the Board, legal action shall be initiated against the applicant.
5. The applicant shall maintain good house keeping. All valves/pipes/sewer/drains etc. must be leak-proof
6. The industry shall provide uninterrupted entry to the STP/ETP inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control systems.
7. The industry shall provide Inspection Book at the time of inspection to the Board's officials.
8. Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall be reported to the Board's offices and all other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect.
9. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.
10. In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry shall be liable to pay compensation also in such cases as decided by the Competent Authority.
11. The applicant shall apply before the 60 days of expiry of CCA or any change in production types/ production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point
12. The Board reserves the right to revoke/add/modify any stipulated condition issued along with CCA, as may be necessary.

**Specific Conditions:-**

1. This consent is valid for electricity generation -50 MW (2x25 MW).
2. The industry shall install and operate Electro Magnetic Flow meter at water withdrawal source, inlet of ETP and STP. The logbook of flow meter reading shall be maintained.
3. Industry shall comply with the emission standards for Thermal Power Plants as per MoEF&CC Notification S.O. 3305(E) dated 07.12.2015, G.S.R. 593(E) dated 28.06.2018 and as amended from time to time.
4. Industry shall ensure specific water consumption upto maximum of 3.5 Cm/MWh as per MoEF&CC notification S.O. 3305(E) dated 07.12.2015.
5. The industry shall operate and maintain Online Continuous Emission Monitoring System effectively and data shall be transmitted to CPCB and UPPCB server. OCEMS system shall be calibrated on six monthly basis through recognized agency and calibration certificate should be submitted to UPPCB.
6. The industry shall comply with the conditions of Environmental Clearance issued by MoEF&CC Govt of India and its compliance report should be submitted to UPPCB from time to time.
7. Fly Ash shall be disposed in such manner, so that no water, air and soil pollution takes place. Industry

shall comply with provisions of Fly Ash notification S.O. 5481(E) dated 31.12.2021 and its amendment issued on 01.01.2024.

8. Industry shall develop and maintain green belt as per the guidelines issued by the Board vide office order no. H16405/220/2018/02, dated 16/02/2018, which is available at URL "http:// www.uppcb.com/pdf/Green-Belt-Guidle_160218.pdf". A time bound program for the development of green belt shall be submitted within 01 month.

9. Industry shall treat DM plant effluent through ETP to recycle treated effluent in the process, sprinkling in coal handling plant for dust suppression & greenery etc. Industry shall not discharge the effluent outside the premises and shall maintain Zero liquid discharge.

10. The transportation of Fly Ash/Bottom ash shall be done as per the guidelines of CPCB.

11. Industry shall maintain effective operate Dry Fog System and dust extraction system at Coal Handling Plant in such manner so that Ambient Air Quality is not affected at near by places and Ambient air quality shall be monitored on regular basis and its report shall be submitted on quarterly basis to the UPPCB.

12. Industry shall maintain the logbook of chemicals consumed in neutralization pit and sent to Board on monthly basis.

13. Industry shall maintain the records of fly ash/bottom ash generation and its disposal and sent to the Board on regularly.

14. Industry shall establish adequate number of water sprinklers around the coal yard area and regularly operate the sprinklers for dust suppression.

15. Ground water shall be monitored on quarterly basis nearby ash dikes and analysis report with respect to heavy metals shall be sent to UPPCB.

16. Storm Water drain shall be kept separate in such manner that, industrial effluent does not get mixed with storm water.

17. All approach roads shall be sprinkled with water to suppress the dust emission.

18. Industry shall install PTZ cameras at each strategic location such Effluent Recycling Points, Coal Handling Points for monitoring purpose. The URLs and password shall be provided to the Board.

19. Industry shall establish Miyawaki forest as per the GO no. 1011/81-7-2021-09(rit)/2016 dated 13.10.2021 of Deptt. of Environment, Forest and Climate Change and shall submit time bound proposal for proposed plantation. STP treated water shall be used for forestation.

20. Domestic effluent shall be treated though STPs of capacity 400 KLD and treated water shall be reused for dust suppression and irrigation purposes within the premises.

21. Industry shall comply with various provisions of Hazardous and Other waste (Management & Trans-boundary Movement) Rule 2016.

22. Industry shall submit environmental statement in prescribed format as per rule 14 of Environment (Protection) Act, 1986.

23. Industry shall abide by directions given by Hon'ble Courts, MoEF&CC, Central Pollution Control Board and UPPCB for protection and safe guard of environment from time to time.

24. Loading and unloading of coal shall be done in such manner so that no air, water and soil pollution takes place.

25. Unit shall ensure the compliance of office memorandum dated 28-08-2019 issued by MoEF&CC regarding disposal of fly ash.

26. Treated effluent/sewage shall not be discharged in any drain and river and shall be 100% utilized within the premises. Storm Water drain shall be kept separate in such manner that, industrial effluent does not get mixed with storm water.

27. Industry shall strictly comply with the directions given by Mission for Fly Ash Management and Utilization Committee from time to time and submit the compliance report to UPPCB regularly.

28. Industry shall comply with the relevant provisions of Environmental Laws.

ATULESH YADAV Digitally signed by ATULESH YADAV
Date: 2024.12.18 16:51:20 +05'30'

**Chief Environmental Officer Circle-2**

Copy to:

Regional Officer, UPPCB, Sonbhadra with direction to send the compliance report of CTO conditions on quarterly basis to Head Office.

ATULESH YADAV Digitally signed by ATULESH YADAV Date: 2024.12.18 16:51:32 +05'30'

**Chief Environmental Officer Circle-2**

## मिशन LiFE - पर्यावरण के लिए जीवन शैली

**(Lifestyle For Environment )**

**जनसहभागिता का सन्देश**

- स्वच्छता – देशसेवा में अपने परिवेश की स्वच्छता हेतु अपना सक्रिय योगदान सुनिश्चित करें
- संकल्प लें -एकल उपयोग प्लास्टिक उत्पाद जैसे कप, तश्तरी, चम्मच, स्ट्रॉ, ईयरबड्स आदि का उपयोग न हो एवं पर्यावरण अनुकूल विकल्पों जैसे कागज/पत्तों से बने दोने या कटलरी को प्राथमिकता दी जाय |
- एकल उपयोग प्लास्टिक उत्पाद के प्रयोग को रोकने एवं प्लास्टिक बैग के बजाय कपड़े के थैले का उपयोग करने मात्र से 375 मिलियन टन ठोस (प्लास्टिक) कचरे का उत्सर्जन बचाया जा सकता है
- चक्रीय अर्थव्यवस्था (सर्कुलर इकोनॉमी) का समुचित कार्यान्वयन वर्ष 2030 तक लगभग 14 लाख करोड़ रुपये की अतिरिक्त बचत उत्पन्न कर सकता है | वेस्ट /अपशिष्ट फेकने के पूर्व सोचें, ये किसी का संसाधन तो नहीं ...?
- अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को कचरे में फेकने से रुकें | इसके उपयुक्त निस्तारण हेतु इसे प्राधिकृत ई – वेस्ट रीसाइकलर को दें | प्राधिकृत ई-रीसाइक्लिंग इकाई में अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को देने मात्र से 0.75 मिलियन टन तक ई-कचरे का पुनर्चक्रण किया जा सकता है एवं ई-कचरे के विषम पर्यावरणीय दुष्प्रभाव से बचा जा सकता है
- बाहर जाते समय - सोचें कि क्या आपको वास्तव में परिवहन की आवश्यकता है - वह भी क्या व्यक्तिगत रूप से ? छोटी दूरी के लिए पैदल चलना पसंद करें, अथवा सम्भव हो तो कार पूल के रूप में संसाधन को साझा करें अथवा सार्वजनिक परिवहन पर विचार करें
- घरेलू स्तर पर कम से कम ठोस अपशिष्ट का उत्सर्जन करें और इनका प्रथाक्कीकरण करें
- उपयोगी शेष खाद्य सामग्री आपके स्वयं प्रयास अथवा निकटस्थ सक्रिय स्वयं सेवी संस्थाओं की सहायता से समाज के वंचित वर्ग तक पहुंचाई जा सकती है | वहीं अनुपयोगी भोजन /खाद्य सामग्री को कंपोस्ट (वर्मी कम्पोस्ट) करने से 15 अरब टन भोजन को नष्ट होने से बचाया जा सकता है
- ध्यान रखें - उपयुक्त नल और शावर के उपयोग से पानी की खपत को 30 - 40% तक कम किया जा सकता है। एवं उपयोग में न होने पर नलों को बंद रखने मात्र से 9 ट्रिलियन लीटर पानी बचाया जा सकता है
- ट्रैफिक लाइट/रेलवे क्रॉसिंग पर कार/स्कूटर के इंजन बंद करने मात्र से 22.5 बिलियन kWh तक ऊर्जा की बचत हो सकती है
- परम्परागत बल्ब के स्थान पर CFL का उपयोग बिजली की खपत में प्रभावी कमी लाते हैं | उपयोग में न होने पर बिजली उपकरणों को बंद करें | स्टार रेटेड विद्युत उपकरणों के उपयोग को प्राथमिकता दे

**हमारे द्वारा अपनी जीवन शैली की प्राथमिकताओं का उचित और पर्यावरण अनुकूल पुनर्निर्धारण समाज और पर्यावरण के प्रति हमारा दायित्व है |**

Annexure - 9

# UTTAR PRADESH POLLUTION CONTROL BOARD

TC-12V, Vibhuti Khand,Gomti Nagar, Lucknow-226010

**Phone:0522-2720828,2720831 Fax:0522-2720764 Email: info@uppcb.com Website: www.uppcb.com**

**Ref. No : 13583/UPPCB/Sonebhadra(UPPCBRO)/HWM/SONBHADRA/2020**

**Dated :02/03/2021**

To,

M/s GRASIM INDUSTRIES LIMITED CHEMICAL DIVISION RENUKOOT

GRASIM INDUSTRIES LIMITED CHEMICAL DIVISION RENUKOOT ,SONBHADRA,231217

**Tehsil :**Duddhi

**District :**SONBHADRA

**Sub :-** Authorisation issued under the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

1. Number of authorization and date of issue 13583 and 02/03/2021 .
2. Reference of application (No. and date) 10586194 and 31/12/2020 .
3. Mr SHRIDHARA SASTRY of M/s GRASIM INDUSTRIES LIMITED CHEMICAL DIVISION RENUKOOT is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, utilization, storage and disposal or any other use of hazardous or other wastes or both on the premises situated at GRASIM INDUSTRIES LIMITED CHEMICAL DIVISION .

**Details of Authorisation**

| S No. | Category of Hazardous Waste as per the Schedules I,II and III of these rules | Authorised mode of disposal or recycling or utilization or co-processing, etc. | Quantity(ton/annum) |
|---|---|---|---|
| 1 | Spent ion exchange resin containing toxic metals (Sch-1, S.No. 35.2) | Through TSDF | 50 Ton/Annum |
| 2 | Spent Carbon or filter medium (Sch.-1, S No.-36.2) | Through TSDF | 20 Ton/Annum |
| 3 | Used or spent oil (Sch.-1, S.No.-5.1) | Authorized Recyclers | 50 Ton/Annum |
| 4 | Wastes or residues containing oil (Sch.-1, Cat.-5.2) | Through TSDF | 5 Ton/Annum |
| 5 | Brine Sludge (Sch.1, S.No. 16.3) | Through TSDF | 10000 Ton/Annum |
| 6 | Residue or sludges and filter cakes (Sch-1, S.No. 16.2) | Through TSDF | 6 Ton/Annum |
| 7 | Asbestos (Sch-II, B21) | Through TSDF | 100 Ton/Annum |
| 8 | Spent Carbon or filter medium (Sch.-1, Cat.-36.2) | Through TSDF | 5 ton/annum |
| 9 | Empty barrels/ containers/liners contaminated with hazardous chemicals /wastes (Sch.-1, Cat.-33.1) | Through TSDF | 100 Ton/Annum |
| 10 | Rubber Wastes (Sch-III, B3040) | Through TSDF | 5 Ton/Annum |
| 11 | Ferro Silicate and alloys (Sch-II, B28) | Through TSDF | 1 Ton/Annum |
| 12 | Chemical sludge from waste water treatment (Sch.-1, Cat.-35.3) | Through TSDF | 150 Ton/Annum |
| 13 | Chemical sludge from waste water treatment (Sch.-1, Cat.-35.3) | Through TSDF | 2800 Ton/Annum |
| 14 | Drosses and Waste from treatment of salt sludge (Schedule-1 S.No. 11.5) | Through TSDF | 100 Ton/Annum |
| 15 | Exhaust Air or Gas cleaning residue (Sch-I, S.No. 35.1) | Through TSDF | 10 ton/annum |
| 16 | Halogen- containing compounds which produce acidic vapours on contact with humid air or water e.g. silicon tetrachloride, aluminum chloride, titanium tetrachloride (Sch-II, B30) | Through TSDF | 120 Ton/Annum |
| 17 | Halogen- containing compounds which produce acidic vapours on contact with humid air or water e.g. silicon tetrachloride, aluminum chloride, titanium tetrachloride (Sch-II, B30) | Through TSDF | 800 Ton/Annum |

1. The authorization shall be valid for a period of 02/03/2026 from the date of issue of this letter .
2. The authorization is subject to the following general and specific conditions (please specify any conditions that need to be imposed over and above general conditions, if any) .

**A General Conditions of Authorization -**

1. The authorised person shall comply with the provisions of the Environment (Protection Act, 1986, and the rules made there under .

2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Board .
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization .
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorisation .
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time .
6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and penalty .
7. It is the duty of the authorised person to take prior permission ot the State Pollution Control Board to close down the facility .
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation .
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained .
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation .
11. The importer or exporter shall bear the cost of Import or export and mitigation of damages if any
12. An application for the renewal of an authorisation shall be made as laid down under these Rules .
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Changes or Central Pollution Control Board from time to time .
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year .
15. The Unit will file the renewal application at least 2 months prior to the expiry of this Order.

## B Specific Conditions of Authorization

1. The wastes must be safely collected in leak proof containers and shall be duly marked in a manner suitable for handling, storage and transport and the packaging shall be easily visible and be able to withstand physical conditions and climatic factors. All hazardous waste containers / bags shall be provided with a general label. The storage area should be at an isolated spot in the premises and must be fenced, covered and duly marked.
2. The authorized person/agency shall ensure that no adverse impact on the air, soil and water including groundwater takes place due to activities for which authorization has been requested. Comprehensive safety measures must be followed in handling of wastes and the staff must be properly trained.
3. An application for the renewal of an authorization shall be made in form 1, before its expiry as laid down in rule. It is further brought to your notice that as per the order dated 14-11-2003 passed by the Hon'ble Supreme Court in W.P. (c) No. 657 of 1995, no industry covered under Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 shall be allowed to operate without valid authorization. It is also provided in the same orders that industries which are not complying with the conditions of authorization shall not be allowed to operate. Hence in case

you fail to apply for authorization, before its expiry or fail to comply with conditions of the earlier authorization issued to you, closure order shall be issued against your industry without any further notice.

4. The applicant must file returns on prescribed Form 4 along with a compliance report of this letter and should also maintain records on Form 3 and present it to Board's inspecting officials.

5. In case of occurrence of an accident, complete details on form must be sent to U.P. Pollution Control Board at the earliest along with details of mitigative and remedial measures taken.

6. The authorized person shall not receive, collect, or store any hazardous waste from any unauthorized occupier or generator of hazardous wastes. In case any hazardous wastes is sold to any other reprocessing unit it must be ensured that such unit is fully complying with environmental requirements and has a valid authorization of the Board.

7. In no case any hazardous wastes shall be disposed off on land, in any drain or stream. All spillages of hazardous chemicals, used containers, of hazardous chemicals such as flammable corrosive, explosive and toxic nature must be safely collected and stored. Non-compatible wastes must be suitably and safely handled.

8. It is within the powers and functions of the U.P. Pollution Control Board to modify / revoke the terms and conditions of the authorization issued under the Rule – 7 of Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

9. You are directed to display board outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emission and solid hazardous waste generated within the factory premises. Necessary compliance should be sent within 15 days of receipt of this letter.

10. It is the mandatory duty of the authorized person to comply with the guidelines for transportation of hazardous waste in accordance with rule 18 of Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016.

11. It should be ensured that hazardous wastes shall be properly collected and packed in HDPE bags and then temporarily stored in a lined RCC tank/pit with suitable shed.

12. An ETP sludge/salt test report of a laboratory approved under E.P. Act shall be submitted along with compliance of this letter of this office.

13. Used oil shall be sold only to recyclers registered with U.P. Pollution Control Board. The record shall be maintained.

14. The occupier, transporter and operator of a facility shall be liable for damages caused to the environment resulting due to improper handling and disposal of hazardous waste listed in schedule 1,2, and 3 and shall be liable to pay a fine as levied by the State Pollution Control Board under the rules.

15. You shall have the valid membership of any common TSDF for S.L.F. (M/S U.P. Waste Management Project Kumbhi Kanpur Dehat or M/s Bharat Oil and Waste Management Ltd., Kumbhi, Akbarpur, Kanpur Dehat. permitted by U.P.P.C.B)., and start sending the stored hazardous wastes for final disposal to the TSDF and report back to U.P.P.C.B. with the required manifesto (document of proof) within three month of this letter. The authorized incinerator is with M/s Bharat Oil Company, Sahibabad, Ghaziabad for oily waste and paint sludge only.

16. You are required to store the hazardous waste safely and send it to TSDF/incinerator within stipulated time period.

17. This authorization is valid till the industry is having valid consent as per the provisions of Air (Prevention and Control of Pollution) Act 1981 and Water (Prevention and Control of Pollution) Act, 1974.

**( Authorized Signatory )**

**UTTAR PRADESH POLLUTION CONTROL BOARD**

Copy to: To the Regional Officer, U.P.Pollution Control Board, Sonbhadra for information and necessary action .

**CEO/EE, I/C Circle_____**

| Consolidated PME (Periodical Medical Examination) Status-2024-25 (MC & Staff, Worker & Supply) | | | | | | | | | Annexure-10 |
|---|---|---|---|---|---|---|---|---|---|
| PME PLAN DURATION | Category | Sr.No | Code | Employee Name | Designation | Contractor | Function/ Sub Function | Department/ Section | REMARKS |
| 12 Month | MANAGEMENT | 1 | 2091 | SHAILESH KUMAR VERMA | ASSISTANT MANAGER | | VAP | PAC | FIT |
| 12 Month | MANAGEMENT | 2 | 2176 | VIVEK BHUSHAN BAJPAI | ASSISTANT MANAGER | | ENGINEERING | PROJECT - SPL | FIT |
| 12 Month | MANAGEMENT | 3 | 2196 | GIRDHAR GOPAL SHARMA | OFFICER | | Finance & Commercial and IT | ACCOUNTS | FIT |
| 12 Month | MANAGEMENT | 4 | 2246 | RAJENDRA KUMAR | Deputy Manager | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 5 | 2256 | SAMEER KUMAR MISHRA | Senior ENGINEER | | VAP | PAC | FIT |
| 12 Month | STAFF | 6 | 2279 | KUMAR ASHUTOSH | DEPUTY OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | MANAGEMENT | 7 | 2289 | VIMAL KUMAR VERMA | MANAGER | | Power | PGD (ELECTRICAL) | FIT |
| 12 Month | STAFF | 8 | 2290 | ASHOK KUMAR CHATURVEDI | OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 9 | 2344 | PRAMOD KUMAR | DEPUTY OFFICER | | Human Resources | Admin | FIT |
| 12 Month | STAFF | 10 | 2346 | DHIRENDRA MISHRA | DEPUTY ENGINEER | | ENGINEERING | C&I | FIT |
| 12 Month | STAFF | 11 | 2351 | JAI KUMAR SHUKLA | DEPUTY OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | STAFF | 12 | 2353 | BYOMESH DUTT PANDEY | DEPUTY OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | MANAGEMENT | 13 | 2359 | DURGA SHANKAR SINGH | Deputy Manager | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 14 | 2361 | HARI PRASAD SINGH | DEPUTY OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | MANAGEMENT | 15 | 2364 | CHHATRA DHARI SINGH | OFFICER | | Sales and Marketing | SALES | FIT |
| 12 Month | STAFF | 16 | 2373 | PRAMOD SINGH | DEPUTY OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 17 | 2396 | SHAILESH KUMAR | DEPUTY OFFICER | | Logistic | Logistic | FIT |
| 12 Month | STAFF | 18 | 2398 | SATISH KUMAR | DEPUTY OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 19 | 2402 | SANJAY KUMAR SINGH | ENGINEER | | CAP | BRINE | FIT |
| 12 Month | STAFF | 20 | 2410 | B.S.RATHORE | DEPUTY OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 21 | 2414 | BHOLA SHANKER SINGH | DEPUTY OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 22 | 2429 | ANIL KUMAR SINGH | DEPUTY OFFICER | | Human Resources | ER | FIT |
| 12 Month | STAFF | 23 | 2430 | RAM PRAVESH SINGH | ENGINEER | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | STAFF | 24 | 2445 | VINOD KUMAR SINGH | OFFICER | | Logistic | Logistic | FIT |
| 12 Month | STAFF | 25 | 2446 | BINDESH PRAKASH SRIVASTAVA | DEPUTY OFFICER | | Human Resources | ER | FIT |
| 12 Month | MANAGEMENT | 26 | 2449 | RADHEY SHYAM YADAV | ASSISTANT MANAGER | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 27 | 2453 | SUMITRA NANDAN MISHRA | ENGINEER | | CAP | BRINE | FIT |
| 12 Month | MANAGEMENT | 28 | 2454 | SANJAY KUMAR | ASSISTANT MANAGER | | CAP | CHLORINE FILLING | FIT |
| 12 Month | STAFF | 29 | 2458 | PRADEEP KUMAR SINGH | ASSISTANT OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 30 | 2460 | UGRASEN VISHWAKARMA | ASSISTANT ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | MANAGEMENT | 31 | 2475 | ASHUTOSH RAI | OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 32 | 2479 | JAI SHANKAR PRASAD SIN | ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | MANAGEMENT | 33 | 2488 | OM PRAKASH RAI | ASSISTANT MANAGER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 34 | 2494 | RAM PRATAP SINGH | ENGINEER | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | STAFF | 35 | 2500 | SUNIL KUMAR PANDEY | DEPUTY OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | STAFF | 36 | 2502 | JAY RAM RAI | ASSISTANT OFFICER | | Human Resources | HORTICULTURE | FIT |
| 12 Month | MANAGEMENT | 37 | 2505 | THOMAS T.A. | OFFICER | | STRATEGY | UH OFFICE | FIT |
| 12 Month | MANAGEMENT | 38 | 2531 | S.S.GUPTA | Senior ENGINEER | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | MANAGEMENT | 39 | 2533 | MADAN MOHAN TIWARI | ASSISTANT MANAGER | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 40 | 2534 | ISHTIYAK KHAN | ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | MANAGEMENT | 41 | 2542 | AJAY BAHADUR SINGH | ASSISTANT MANAGER | | ENGINEERING | ELECTRICAL | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | STAFF | 42 | 2544 | OM PRAKASH | ASSISTANT ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 43 | 2545 | MANOHAR LAL | JUNIOR ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 44 | 2548 | B.K. TIWARI | ASSISTANT ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 45 | 2550 | DHAVANENDRA SHUKLA | DEPUTY ENGINEER | | Power | PGD (ELECTRICAL) | FIT |
| 12 Month | STAFF | 46 | 2552 | SUDHIR KUMAR | ASSISTANT ENGINEER | | Power | PGD (ELECTRICAL) | FIT |
| 12 Month | STAFF | 47 | 2559 | SHAILENDRA KUMAR SINGH | ASSISTANT ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 48 | 2560 | SANJAI KUMAR SHARMA | DEPUTY ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | MANAGEMENT | 49 | 2563 | LAL CHANDRA | MANAGER | | Power | D.M.PLANT | FIT |
| 12 Month | STAFF | 50 | 2572 | PRADUMAN YADAV | ASSISTANT ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 51 | 2575 | NAVIN CHANDRA PANDEY | JUNIOR ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | MANAGEMENT | 52 | 2576 | SHASHI KANT PANDEY | Senior ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 53 | 2577 | BRIJESH KUMAR RAI | ASSISTANT ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 54 | 2587 | NIRAJ KUMAR | ASSISTANT ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 55 | 2617 | RAM PRAVESH | DEPUTY OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | STAFF | 56 | 2720 | AMAL KUMAR ROY | DEPUTY ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | MANAGEMENT | 57 | 2764 | PANKAJ KUMAR SINGH | Senior OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 58 | 2787 | CHANDRA SWAROOP SINGH | JUNIOR OFFICER | | Human Resources | O.H.C. | FIT |
| 12 Month | MANAGEMENT | 59 | 2792 | ARSHAD JAMIL | Senior Manager | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 60 | 2798 | DIWAKAR TIWARI | DEPUTY ENGINEER | | CAP | CHLORINE FILLING | FIT |
| 12 Month | STAFF | 61 | 2800 | DHIRENDRA BAHADUR SING | JUNIOR ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | MANAGEMENT | 62 | 2804 | SUKHRAJ SINGH | MANAGER | | Power | OPERATIONS | FIT |
| 12 Month | MANAGEMENT | 63 | 2844 | MAHENDRA KUMAR SHUKLA | ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 64 | 2847 | AJAY KUMAR SRIVASTAVA | DEPUTY ENGINEER | | CAP | CHLORINE FILLING | FIT |
| 12 Month | STAFF | 65 | 2857 | KAMAL KUMAR | OFFICER | | Human Resources | Admin | FIT |
| 12 Month | STAFF | 66 | 2861 | CHANDRA PRAKASH PANDEY | ASSISTANT OFFICER | | Power | D.M.PLANT | FIT |
| 12 Month | STAFF | 67 | 2867 | UMESH KUMAR SINGH | JUNIOR OFFICER | | Finance & Commercial and IT | IT | FIT |
| 12 Month | STAFF | 68 | 2873 | MOHD.JAVED KHAN | JUNIOR ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 69 | 2874 | ACHHE LAL PATEL | JUNIOR ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 70 | 2877 | ANAND KUMAR MISHRA | ASSISTANT ENGINEER | | CAP | CHLORINE FILLING | FIT |
| 12 Month | MANAGEMENT | 71 | 2885 | MAHENDRA PRASAD | ENGINEER | | ENGINEERING | C&I | FIT |
| 12 Month | MANAGEMENT | 72 | 2890 | SYED EHTESHAM ALI | ENGINEER | | Power | PGD (C&I ) | FIT |
| 12 Month | MANAGEMENT | 73 | 2893 | PRAVEEN AWASTHI | DEPUTY GENERAL MANAGER | | Finance & Commercial and IT | IT | FIT |
| 12 Month | MANAGEMENT | 74 | 2894 | MANOJ KUMAR MISHRA | Senior ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 75 | 2895 | DINESH KUMAR SINGH | DEPUTY ENGINEER | | CAP | FUSION | FIT |
| 12 Month | MANAGEMENT | 76 | 2897 | SATYENDRA PRASAD | ENGINEER | | CAP | FUSION | FIT |
| 12 Month | STAFF | 77 | 2898 | JAI PRAKASH SETH | JUNIOR ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 78 | 2900 | SUBHASH KUMAR GUPTA | JUNIOR ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 79 | 2901 | AMIT KUMAR RAI | TECHNICAL ASSOCIATE | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 80 | 2902 | SURESH KUMAR JAISWAL | Senior Technical Associate | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 81 | 2903 | SANJAY KUMAR | Senior Technical Associate | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 82 | 2904 | RAJESH KUMAR SINGH | Senior Technical Associate | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 83 | 2905 | NAVEEN KUMAR CHAUBEY | DEPUTY ENGINEER | | CAP | CHLORINE | FIT |
| 12 Month | STAFF | 84 | 2906 | DIVYA NAND TRIPATHI | DEPUTY ENGINEER | | VAP | CP | FIT |
| 12 Month | STAFF | 85 | 2907 | CHANDAN KUMAR | JUNIOR ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 86 | 2909 | ANIL KUMAR YADAV | ASSISTANT ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 87 | 2915 | SANTOSH KUMAR SINGH | TECHNICAL ASSOCIATE | | ENGINEERING | C&I | FIT |
| 12 Month | STAFF | 88 | 2916 | KAMLESH KUMAR YADAV | TECHNICAL ASSOCIATE | | ENGINEERING | C&I | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | STAFF | 89 | 2918 | GANESH PRASAD VISHWAKARMA | ASSISTANT ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | MANAGEMENT | 90 | 2919 | SUBRATA JANA | ENGINEER | | Power | P.G.D.(MECH.) | FIT |
| 12 Month | STAFF | 91 | 2925 | MANOJ KUMAR SINGH | DEPUTY ENGINEER | | CAP | CHLORINE | FIT |
| 12 Month | STAFF | 92 | 2926 | VIKRANT KUMAR RAI | ASSISTANT OFFICER | | Power | D.M.PLANT | FIT |
| 12 Month | STAFF | 93 | 2929 | SOORAJ KUMAR MISHRA | DEPUTY ENGINEER | | VAP | CP | FIT |
| 12 Month | MANAGEMENT | 94 | 2935 | RAKESH SINGH | OFFICER | | TECHNICAL SERVICES | EHS | FIT |
| 12 Month | MANAGEMENT | 95 | 2941 | SUNIL KUMAR | ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 96 | 2943 | ASHWANI KUMAR PANDEY | ASSISTANT ENGINEER | | CAP | FUSION | FIT |
| 12 Month | MANAGEMENT | 97 | 2948 | VINOD KUMAR SINGH | ASSISTANT MANAGER | | Power | OPERATIONS | FIT |
| 12 Month | MANAGEMENT | 98 | 2951 | DHANANJAY SINGH | ENGINEER | | ENGINEERING | C&I | FIT |
| 12 Month | MANAGEMENT | 99 | 2952 | YOGESH PAL SINGH | Deputy Manager | | ENGINEERING | C&I | FIT |
| 12 Month | STAFF | 100 | 2953 | NAGENDRA KUMAR | JUNIOR ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 101 | 2966 | SHYAM SUNDAR VISHWAKAR | Senior Technical Associate | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 102 | 2967 | RAJESH KUMAR | Senior Technical Associate | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 103 | 2968 | KUMAR SIDDHARTH SINGH | DEPUTY ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 104 | 2970 | ARVIND KUMAR SINGH | JUNIOR ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | MANAGEMENT | 105 | 2984 | JAI PRAKASH | Deputy Manager | | Power | P.G.D.(MECH.) | FIT |
| 12 Month | STAFF | 106 | 2985 | RAMICHCHHA SHARMA | DEPUTY ENGINEER | | CAP | CHLORINE | FIT |
| 12 Month | MANAGEMENT | 107 | 2986 | PRADEEP KUMAR RAI | MANAGER | | Power | OPERATIONS | FIT |
| 12 Month | MANAGEMENT | 108 | 2987 | BIJAY KUMAR TIWARI | ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 109 | 2995 | SRIPATI SUVAN | ASSISTANT ENGINEER | | Power | PGD (C&I ) | FIT |
| 12 Month | STAFF | 110 | 2996 | VIDYA SAGAR SINGH | Senior Technical Associate | | Power | PGD (C&I ) | FIT |
| 12 Month | MANAGEMENT | 111 | 3001 | NIMISHA SINGH | MANAGER | | Human Resources | ER | FIT |
| 12 Month | STAFF | 112 | 3002 | AZAD AHMED ANSARI | Sub-Staff | | Human Resources | Admin | FIT |
| 12 Month | STAFF | 113 | 3006 | SANJAY KUMAR SHARMA | DEPUTY ENGINEER | | CAP | CHLORINE | FIT |
| 12 Month | STAFF | 114 | 3020 | JITENDRA KUMAR RAO | JUNIOR OFFICER | | Finance & Commercial and IT | ACCOUNTS | FIT |
| 12 Month | MANAGEMENT | 115 | 3022 | SHYAMJI UPADHYAY | ASSISTANT MANAGER | | VAP | CP | FIT |
| 12 Month | STAFF | 116 | 3023 | MAHANTH SINGH | JUNIOR ENGINEER | | VAP | CP | FIT |
| 12 Month | STAFF | 117 | 3025 | RAMJIYAWAN SINGH | JUNIOR ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 118 | 3026 | SATYA DEV MADHUR | ASSISTANT ENGINEER | | CAP | CHLORINE FILLING | FIT |
| 12 Month | STAFF | 119 | 3027 | ANIL KUMAR SINGH | ASSISTANT ENGINEER | | VAP | CP | FIT |
| 12 Month | STAFF | 120 | 3028 | BINDU KUMAR | Senior Technical Associate | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 121 | 3029 | OM PRAKASH SRIVASTAVA | ASSISTANT ENGINEER | | VAP | SBP | FIT |
| 12 Month | MANAGEMENT | 122 | 3030 | SATISH KUMAR SINGHI | OFFICER | | Human Resources | HORTICULTURE | FIT |
| 12 Month | STAFF | 123 | 3032 | KRISHNA KANT DUBEY | ASSISTANT OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 124 | 3033 | RAJESHWAR KUMAR | ASSISTANT OFFICER | | Logistic | Logistic | FIT |
| 12 Month | STAFF | 125 | 3034 | UMA SHANKAR GAUTHAM | ASSISTANT ENGINEER | | CAP | CHLORINE FILLING | FIT |
| 12 Month | STAFF | 126 | 3035 | ANIL KUMAR TIWARI | JUNIOR ENGINEER | | VAP | CP | FIT |
| 12 Month | STAFF | 127 | 3036 | SUNIL KUMAR SINGH | JUNIOR ENGINEER | | VAP | CP | FIT |
| 12 Month | STAFF | 128 | 3038 | RAM NARESH SHARMA | JUNIOR ENGINEER | | VAP | CP | FIT |
| 12 Month | STAFF | 129 | 3041 | MANOJ KUMAR | DEPUTY ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 130 | 3042 | MD. ANIS | JUNIOR ENGINEER | | VAP | CP | FIT |
| 12 Month | STAFF | 131 | 3043 | RAKESH KUMAR UPADHYAY | DEPUTY ENGINEER | | VAP | SBP | FIT |
| 12 Month | STAFF | 132 | 3044 | KRISHNA PRASAD RAI | DEPUTY ENGINEER | | VAP | PAC | FIT |
| 12 Month | STAFF | 133 | 3051 | INDRA DEV YADAV | JUNIOR ENGINEER | | VAP | CP | FIT |
| 12 Month | STAFF | 134 | 3052 | VIJAY KUMAR TRIPATHI | Senior ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | MANAGEMENT | 135 | 3054 | ASHUTOSH PANDEY | Senior ENGINEER | | Power | OPERATIONS | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | MANAGEMENT | 136 | 3063 | ASIT KUMAR SINGH | ASSISTANT MANAGER | | Power | PGD (C&I ) | FIT |
| 12 Month | MANAGEMENT | 137 | 3064 | CHITRA SEN SINGH | ASSISTANT MANAGER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 138 | 3066 | CHHOTE LAL SINGH | JUNIOR ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 139 | 3067 | UMA SHANKER RAM | DEPUTY ENGINEER | | ENGINEERING | C&I | FIT |
| 12 Month | STAFF | 140 | 3071 | AJAY KUMAR SINGH | DEPUTY ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | MANAGEMENT | 141 | 3075 | NRIPENDRA KUMAR SHUKLA | ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 142 | 3078 | PRADEEP KUMAR | ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 143 | 3079 | NARSINGH CHAUHAN | JUNIOR ENGINEER | | ENGINEERING | CIVIL | FIT |
| 12 Month | STAFF | 144 | 3080 | BALDEV SINGH | JTA | | ENGINEERING | CIVIL | FIT |
| 12 Month | MANAGEMENT | 145 | 3083 | RAKESH KUMAR MISHRA | Senior Manager | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 146 | 3084 | CHANDRA BHUSHAN | DEPUTY ENGINEER | | ENGINEERING | CIVIL | FIT |
| 12 Month | MANAGEMENT | 147 | 3088 | ABHISHEK SHARMA | DESK ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 148 | 3093 | RAJESH KUMAR SAHNI | DEPUTY ENGINEER | | CAP | CHLORINE | FIT |
| 12 Month | MANAGEMENT | 149 | 3096 | RAJESH KUMAR PATHAK | OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | MANAGEMENT | 150 | 3098 | RAJNEESH KUMAR PANDEY | ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 151 | 3100 | ANKIT KUMAR SINGH | DEPUTY ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 152 | 3104 | DILIP KUMAR OJHA | ASSISTANT ENGINEER | | ENGINEERING | CIVIL | FIT |
| 12 Month | MANAGEMENT | 153 | 3105 | ASHISH KUMAR SHARMA | ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | MANAGEMENT | 154 | 3111 | VIKRAM RANA | Senior ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | MANAGEMENT | 155 | 3141 | ABHIJEET BHARALI | Senior Manager | | ENGINEERING | PROJECT - SPL | FIT |
| 12 Month | STAFF | 156 | 3151 | MANOJ KUMAR SINGH | DEPUTY ENGINEER | | CAP | CHLORINE | FIT |
| 12 Month | STAFF | 157 | 3158 | PARMANAND PATEL | ASSISTANT ENGINEER | | CAP | CHLORINE | FIT |
| 12 Month | MANAGEMENT | 158 | 3162 | DINESH CHANDRA PANDEY | DESK ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 159 | 3167 | HRISHIKESH SINGH | DEPUTY ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | MANAGEMENT | 160 | 3169 | ANIL MISHRA | ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | MANAGEMENT | 161 | 3170 | IRSHAD AHAMAD | ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 162 | 3181 | SUSHIL KUMAR | Senior Technical Associate | | ENGINEERING | C&I | FIT |
| 12 Month | STAFF | 163 | 3187 | SUNIL KUMAR SINGH | JUNIOR ENGINEER | | Power | PGD (ELECTRICAL) | FIT |
| 12 Month | STAFF | 164 | 3189 | RAKESH KUMAR | ASSISTANT OFFICER | | Human Resources | O.H.C. | FIT |
| 12 Month | STAFF | 165 | 3190 | RAVI KUMAR PANDEY | DEPUTY ENGINEER | | CAP | CHLORINE FILLING | FIT |
| 12 Month | MANAGEMENT | 166 | 3195 | PRADEEP KUMAR | ASSISTANT MANAGER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 167 | 3211 | MANTU KUMAR | JUNIOR ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | MANAGEMENT | 168 | 3212 | UDAY PRATAP CHAUDHARI | ENGINEER | | VAP | CP | FIT |
| 12 Month | STAFF | 169 | 3213 | DIGVIJAY | DEPUTY ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 170 | 3215 | AKHILESH KUMAR | TECHNICAL ASSOCIATE | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 171 | 3218 | EVANGLINE HIMANI OBEDIAH | ASSISTANT OFFICER | | Human Resources | O.H.C. | FIT |
| 12 Month | MANAGEMENT | 172 | 3220 | KUNAL SHARMA | ASSISTANT MANAGER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | MANAGEMENT | 173 | 3223 | ASHISH SRIVASTAVA | ASSISTANT MANAGER | | VAP | DRUM PLANT | FIT |
| 12 Month | MANAGEMENT | 174 | 3226 | PRAMOD  KUMAR MOHANTY | Senior Manager | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | MANAGEMENT | 175 | 3227 | AMIT KUMAR | ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | MANAGEMENT | 176 | 3230 | GIRIDHAR S.RAUT | Assistant General Manager | | Power | P.G.D.(MECH.) | FIT |
| 12 Month | MANAGEMENT | 177 | 3234 | VIVEK GUPTA | General Manager | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 178 | 3237 | RAGHVENDRA NARAYAN MISHRA | JUNIOR OFFICER | | Human Resources | O.H.C. | FIT |
| 12 Month | STAFF | 179 | 3239 | DILIP KUMAR PATEL | Senior Technical Associate | | Human Resources | O.H.C. | FIT |
| 12 Month | STAFF | 180 | 3242 | SUSHIL KUMAR SACHAN | JUNIOR OFFICER | | Human Resources | O.H.C. | FIT |
| 12 Month | STAFF | 181 | 3248 | MAN SINGH | ASSISTANT ENGINEER | | VAP | PAC | FIT |
| 12 Month | STAFF | 182 | 3252 | CHANDAN THAPA | JUNIOR ENGINEER | | Power | P.G.D.(MECH.) | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | STAFF | 183 | 3259 | NIKHIL KUMAR GUPTA | DEPUTY ENGINEER | | CAP | BRINE | FIT |
| 12 Month | STAFF | 184 | 3263 | RAJESH KUMAR SHUKLA | JUNIOR ENGINEER | | Power | PGD (ELECTRICAL) | FIT |
| 12 Month | MANAGEMENT | 185 | 3270 | AWADHESH KUMAR | ASSISTANT MANAGER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | MANAGEMENT | 186 | 3277 | DHANANJAY KUMAR | ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 187 | 3283 | VIJENDRA YADAV | DRIVER CUM PUMP OPERATOR | | Human Resources | SECURITY | FIT |
| 12 Month | STAFF | 188 | 3284 | SUNIL KUMAR PRASAD | JUNIOR ENGINEER | | Human Resources | SECURITY | FIT |
| 12 Month | STAFF | 189 | 3285 | ASHUTOSH KUMAR SINGH | ASSISTANT ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 190 | 3289 | DEEP CHAND VERMA | DEPUTY ENGINEER | | VAP | CP | FIT |
| 12 Month | MANAGEMENT | 191 | 3291 | ARUN  KUMAR MAHATO | ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | MANAGEMENT | 192 | 3301 | SHIBENDRA SINGH | ENGINEER | | VAP | CP | FIT |
| 12 Month | STAFF | 193 | 3307 | CHHOTE LAL PRASAD YADAV | CHEMIST | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 194 | 3309 | RAM BUJHAVAN YADAV | TECHNICAL ASSOCIATE | | ENGINEERING | mechanical | FIT |
| 12 Month | MANAGEMENT | 195 | 3311 | RAKESH  SINGH | General Manager | | VAP | VAP | FIT |
| 12 Month | MANAGEMENT | 196 | 3313 | VINAY  KUMAR YADAV | Senior Manager | | TECHNICAL SERVICES | EHS | FIT |
| 12 Month | STAFF | 197 | 3314 | AMIR KUMAR PRUSTY | PHARMACIST | | Human Resources | O.H.C. | FIT |
| 12 Month | MANAGEMENT | 198 | 3320 | VINOD PANDEY | ASSISTANT MANAGER | | ENGINEERING | C&I | FIT |
| 12 Month | MANAGEMENT | 199 | 3329 | ANAND RAJAN | ASSISTANT MANAGER | | Logistic | Logistic | FIT |
| 12 Month | STAFF | 200 | 3333 | DINESH PRASAD | Senior Technical Associate | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | MANAGEMENT | 201 | 3336 | GOUTAM GUPTA | PRINCIPLE | | ADMINISTRATION | KDKVM SCHOOL | FIT |
| 12 Month | MANAGEMENT | 202 | 3337 | AMIT KUMAR  SETH | OFFICER | | Finance & Commercial and IT | ACCOUNTS | FIT |
| 12 Month | MANAGEMENT | 203 | 3341 | ADITYA BIKRAM SINGH | MANAGER | | VAP | SBP | FIT |
| 12 Month | MANAGEMENT | 204 | 3345 | DHARMENDRA  KUMAR  DUBEY | ASSISTANT MANAGER | | Sales and Marketing | SALES | FIT |
| 12 Month | STAFF | 205 | 3349 | VASU DEV SHARMA | ASSISTANT ENGINEER | | VAP | SBP | FIT |
| 12 Month | STAFF | 206 | 3351 | SANTOSH KUMAR | Sub-Staff | | Human Resources | O.H.C. | FIT |
| 12 Month | STAFF | 207 | 3352 | SURENDRA KUMAR TIWARI | Sub-Staff | | Human Resources | Admin | FIT |
| 12 Month | STAFF | 208 | 3353 | RAJENDRA PRASAD YADAV | JTA | | VAP | SBP | FIT |
| 12 Month | STAFF | 209 | 3354 | VINOD KUMAR | TECHNICAL ASSOCIATE | | VAP | SBP | FIT |
| 12 Month | STAFF | 210 | 3355 | JITENDRA KUMAR SRIVASTAVA | JTA | | CAP | CHLORINE FILLING | FIT |
| 12 Month | STAFF | 211 | 3356 | PREM  SHANKAR RAI | JTA | | CAP | CHLORINE FILLING | FIT |
| 12 Month | STAFF | 212 | 3357 | HEERA LAL YADAV | JTA | | CAP | CHLORINE | FIT |
| 12 Month | STAFF | 213 | 3358 | SHYAM  NARAYAN SINGH | JTA | | CAP | CHLORINE FILLING | FIT |
| 12 Month | STAFF | 214 | 3359 | GUDDU KUMAR SINGH | TECHNICAL ASSOCIATE | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | STAFF | 215 | 3360 | RANJIT SINGH | Sub-Staff | | Human Resources | Admin | FIT |
| 12 Month | STAFF | 216 | 3361 | NITESH SINGH | JTA | | VAP | SBP | FIT |
| 12 Month | STAFF | 217 | 3362 | ANJANI KUMAR SINGH | JTA | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | STAFF | 218 | 3363 | NIJAMUDDIN | JTA | | VAP | PAC | FIT |
| 12 Month | STAFF | 219 | 3364 | PRABHU LAL RAI | Sub-Staff | | Human Resources | Admin | FIT |
| 12 Month | STAFF | 220 | 3365 | SURENDRA CHANDRAVANSHI | Sub-Staff | | Human Resources | Admin | FIT |
| 12 Month | STAFF | 221 | 3367 | SUNIL KUMAR | TECHNICAL ASSOCIATE | | Logistic | Logistic | FIT |
| 12 Month | MANAGEMENT | 222 | 3369 | VIJAY VERMA | MANAGER | | ENGINEERING | C&I | FIT |
| 12 Month | MANAGEMENT | 223 | 3373 | ANIL  KUMAR TRIPATHI | Assistant General Manager | | Human Resources | O.H.C. | FIT |
| 12 Month | STAFF | 224 | 3374 | MANGESH JAISWAL | ASSISTANT ENGINEER | | CAP | CHLORINE | FIT |
| 12 Month | STAFF | 225 | 3375 | SHYAM BABU | DEPUTY ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 226 | 3377 | ANKIT KUMAR | DEPUTY ENGINEER | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | STAFF | 227 | 3378 | AVANISH  KUMAR | DEPUTY ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 228 | 3380 | ANURADHA MAURYA | DEPUTY ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 229 | 3383 | AKASH | DEPUTY ENGINEER | | Power | PGD (ELECTRICAL) | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | MANAGEMENT | 230 | 3393 | RAJAN KISHAN PATHAK | Assistant VICE PRESIDENT | | Power | PGD | FIT |
| 12 Month | STAFF | 231 | 3395 | MITHILESH KUMAR SINGH YADAV | TECHNICAL ASSOCIATE | | VAP | SBP | FIT |
| 12 Month | STAFF | 232 | 3397 | GYAN GUPTA | Senior Technical Associate | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 233 | 3401 | PRINCE YADAV | TECHNICAL ASSOCIATE | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 234 | 3403 | SONAM KUMARI | STAFF NURSE | | Human Resources | O.H.C. | FIT |
| 12 Month | STAFF | 235 | 3404 | SUNIL KUMAR | Senior Technical Associate | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 236 | 3406 | ONKAR NATH PANDEY | Senior Technical Associate | | VAP | SBP | FIT |
| 12 Month | STAFF | 237 | 3408 | ARUN KUMAR VERMA | ASSISTANT OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | STAFF | 238 | 3409 | ABHISHEK KUMAR TIVARI | TECHNICAL ASSOCIATE | | CAP | CHLORINE | FIT |
| 12 Month | STAFF | 239 | 3410 | AMIT TIWARI | DEPUTY OFFICER | | CAP | FUSION | FIT |
| 12 Month | STAFF | 240 | 3411 | SUSHANT CHOUBEY | DEPUTY ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | MANAGEMENT | 241 | 3413 | PREM CHANDRA MAURYA | DEPUTY GENERAL MANAGER | | TECHNICAL SERVICES | EHS | FIT |
| 12 Month | STAFF | 242 | 3414 | PARVEEN KUMAR | ASSISTANT OFFICER | | Logistic | Logistic | FIT |
| 12 Month | MANAGEMENT | 243 | 3416 | PRAMOD KUMAR CHANDRA | DEPUTY GENERAL MANAGER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 244 | 3417 | AZAD SINGH | Senior Technical Associate | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 245 | 3418 | SUMIT KUMAR SINGH | DRIVER CUM PUMP OPERATOR | | Human Resources | SECURITY | FIT |
| 12 Month | MANAGEMENT | 246 | 3421 | RAKESH KUMAR | ASSISTANT MANAGER | | CAP | FUSION | FIT |
| 12 Month | MANAGEMENT | 247 | 3423 | ARVIND KUMAR UPADHYAY | Deputy Manager | | Finance & Commercial and IT | ACCOUNTS | FIT |
| 12 Month | STAFF | 248 | 3424 | RAKESH KUMAR PANDEY | TECHNICAL ASSOCIATE | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 249 | 3427 | PRADEEP KUMAR SHUKLA | DEPUTY OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 250 | 3428 | AMIT KUMAR PRADHAN | ASSISTANT ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | MANAGEMENT | 251 | 3430 | AJAY KUMAR SINGH | Senior Manager | | ENGINEERING | CIVIL | FIT |
| 12 Month | STAFF | 252 | 3436 | SHUBHAM PAL | ASSISTANT ENGINEER | | VAP | PAC | FIT |
| 12 Month | STAFF | 253 | 3437 | MANISH KUMAR | ASSISTANT ENGINEER | | CAP | CAP | FIT |
| 12 Month | STAFF | 254 | 3439 | AKHILESH MISHRA | ASSISTANT ENGINEER | | VAP | CP | FIT |
| 12 Month | STAFF | 255 | 3440 | ANJALI CHAURSIYA | DEPUTY ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 256 | 3446 | POOJA KUMARI | ASSISTANT ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 257 | 3448 | REGULAGADDA KALISHANKAR | DEPUTY ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 258 | 3449 | KAMLESH PAL | Senior Technical Associate | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 259 | 3451 | ADITYA VISHWAKARMA | Senior Technical Associate | | VAP | PAC | FIT |
| 12 Month | STAFF | 260 | 3457 | RAHUL KUMAR SHARMA | JTA | | ENGINEERING | BOILER HOUSE | FIT |
| 12 Month | STAFF | 261 | 3458 | BRIJESH KUMAR YADAV | ASSISTANT OFFICER | | Human Resources | HRD | FIT |
| 12 Month | STAFF | 262 | 3460 | SHIV KUMAR | JTA | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | STAFF | 263 | 3464 | ABHINASH YADAV | JUNIOR OFFICER | | Human Resources | O.H.C. | FIT |
| 12 Month | STAFF | 264 | 3465 | AMIT KUMAR VYAS | CHEMIST | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | STAFF | 265 | 3469 | VED PRAKASH SINGH | ASSISTANT OFFICER | | TECHNICAL SERVICES | EHS | FIT |
| 12 Month | STAFF | 266 | 3470 | SHASHI BHUSHAN | ASSISTANT OFFICER | | Human Resources | SECURITY | FIT |
| 12 Month | STAFF | 267 | 3479 | ASHOK KUMAR | TECHNICAL ASSOCIATE | | ENGINEERING | C&I | FIT |
| 12 Month | STAFF | 268 | 3481 | SUSHEEL KUMAR TIWARI | TECHNICAL ASSOCIATE | | CAP | CHLORINE FILLING | FIT |
| 12 Month | STAFF | 269 | 3482 | SUSHIL KUMAR YADAV | JUNIOR ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 270 | 3483 | VIKASH KHERWAR | Senior Technical Associate | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | MANAGEMENT | 271 | 3485 | RANDHIR KUMAR SINGH | ENGINEER | | Power | P.G.D.(MECH.) | FIT |
| 12 Month | STAFF | 272 | 3486 | VINAY KUMAR THAKUR | ASSISTANT OFFICER | | Human Resources | ER | FIT |
| 12 Month | STAFF | 273 | 3487 | SUSHIL KUMAR | JTA | | CAP | FUSION | FIT |
| 12 Month | MANAGEMENT | 274 | 3489 | INDRAJIT KUNDU | ASSISTANT MANAGER | | Power | PGD (ELECTRICAL) | FIT |
| 12 Month | STAFF | 275 | 3490 | PRASHANT KUMAR SINGH | ASSISTANT OFFICER | | Human Resources | O.H.C. | FIT |
| 12 Month | STAFF | 276 | 3492 | VIVEK KUMAR | DEPUTY OFFICER | | Finance & Commercial and IT | ACCOUNTS | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | STAFF | 277 | 3493 | SURAJ KUMAR | JTA | | VAP | SBP | FIT |
| 12 Month | STAFF | 278 | 3494 | SHIV SHANKAR PRASAD | JTA | | CAP | CHLORINE FILLING | FIT |
| 12 Month | STAFF | 279 | 3495 | RAMESH KUMAR VISHWAKARMA | DRIVER | | Human Resources | Admin | FIT |
| 12 Month | STAFF | 280 | 3496 | GHAN SHYAM SHARMA | TECHNICAL ASSOCIATE | | CAP | CHLORINE FILLING | FIT |
| 12 Month | STAFF | 281 | 3499 | RAJENDRA KUMAR | JTA | | VAP | SBP | FIT |
| 12 Month | STAFF | 282 | 3505 | AMIT KUMAR | JTA | | CAP | CHLORINE | FIT |
| 12 Month | STAFF | 283 | 3506 | AMEEN SHEKH | JTA | | CAP | CHLORINE | FIT |
| 12 Month | STAFF | 284 | 3507 | MANISH KUMAR SINGH | JTA | | CAP | CHLORINE FILLING | FIT |
| 12 Month | STAFF | 285 | 3508 | RAHUL KUMAR | JTA | | CAP | FUSION | FIT |
| 12 Month | STAFF | 286 | 3509 | SUSHIL KUMAR SINGH | ASSISTANT ENGINEER | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | STAFF | 287 | 3513 | RAMESH GUPTA | JTA | | CAP | FUSION | FIT |
| 12 Month | STAFF | 288 | 3514 | RAMESH KUMAR | DEPUTY ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 289 | 3515 | BRIJESH KUMAR PANDEY | ASSISTANT ENGINEER | | VAP | SBP | FIT |
| 12 Month | STAFF | 290 | 3516 | PANKAJ KUMAR DUBEY | DEPUTY OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | STAFF | 291 | 3518 | SHASHWAT KUMAR RAI | JUNIOR OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | STAFF | 292 | 3520 | KRIPASHANKAR CHAUBEY | TECHNICAL ASSOCIATE | | VAP | SBP | FIT |
| 12 Month | STAFF | 293 | 3523 | LAL BAHADUR PAL | TECHNICAL ASSOCIATE | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 294 | 3524 | VED PRAKASH | JUNIOR OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | MANAGEMENT | 295 | 3525 | VIKAS MAHESHWARI | Assistant VICE PRESIDENT | | Finance & Commercial and IT | Finance & Commercial and IT | FIT |
| 12 Month | STAFF | 296 | 3526 | ABHISHEK KUMAR | ASSISTANT ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | MANAGEMENT | 297 | 3527 | PRADEEP SRIVASTAVA | MANAGER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | MANAGEMENT | 298 | 3528 | AJAY PARSHOTAMDAS MAMTORA | Assistant General Manager | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | MANAGEMENT | 299 | 3529 | MUKESH MISHRA | ASSISTANT MANAGER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 300 | 3530 | SACHITA NAND VISHWAKARMA | TECHNICAL ASSOCIATE | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 301 | 3531 | KAUSHLESH DUBEY | JUNIOR ENGINEER | | ENGINEERING | CIVIL | FIT |
| 12 Month | MANAGEMENT | 302 | 3532 | ABHAY KUMAR | ASSISTANT MANAGER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 303 | 3534 | KHILENDRA SINGH | TECHNICAL ASSOCIATE | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 304 | 3535 | SHUBHAM SAINI | JTA | | ENGINEERING | C&I | FIT |
| 12 Month | MANAGEMENT | 305 | 3537 | SANDEEP KUMAR SINGH | MANAGER | | TECHNICAL SERVICES | EHS | FIT |
| 12 Month | STAFF | 306 | 3538 | HAFEEZ AHMAD ANSARI | JTA | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 307 | 3539 | VAISHNAVI KUSHWAHA | ASSISTANT ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 308 | 3540 | NAINA SHARMA | ASSISTANT ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 309 | 3541 | KUMKUM TIWARI | ASSISTANT ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 310 | 3542 | SUPRIYA SHUKLA | ASSISTANT ENGINEER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 311 | 3543 | SHUBHAM TIWARI | ASSISTANT ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 312 | 3544 | SHIVAM KUMAR | ASSISTANT ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 313 | 3545 | SHIVANI DUBEY | ASSISTANT ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 314 | 3546 | NEETU SAHU | ASSISTANT ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 315 | 3547 | ARPIT SINGH GAUR | ASSISTANT ENGINEER | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | STAFF | 316 | 3548 | KAMLESH | ASSISTANT ENGINEER | | VAP | PAC | FIT |
| 12 Month | STAFF | 317 | 3549 | RANJEET KUMAR CHAUBEY | JTA | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | MANAGEMENT | 318 | 3550 | KUMAR RAJAN ROSHAN | Deputy Manager | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 319 | 3551 | VARSHA KUMARI | ASSISTANT ENGINEER | | VAP | VAP | FIT |
| 12 Month | STAFF | 320 | 3552 | ANSHU KUMAR | ASSISTANT ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 321 | 3554 | AMRIT RAJ | ASSISTANT ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 322 | 3555 | AMISHA BHARTI | ASSISTANT ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 323 | 3559 | AKASH PANDEY | ASSISTANT ENGINEER | | CAP | MEMBRANE PLANT | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | STAFF | 324 | 3560 | ANKIT PANDEY | ASSISTANT ENGINEER | | VAP | VAP | FIT |
| 12 Month | STAFF | 325 | 3561 | MANOJ KUMAR | ASSISTANT ENGINEER | | VAP | CP | FIT |
| 12 Month | STAFF | 326 | 3564 | NARENDRA YADAV | JTA | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 327 | 3565 | AKASH YADAV | JTA | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | STAFF | 328 | 3566 | JEMS BISWAS | JTA | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | STAFF | 329 | 3568 | SANJEEV KUMAR | JTA | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 330 | 3569 | AKHILESH KUMAR | JTA | | VAP | PAC | FIT |
| 12 Month | STAFF | 331 | 3570 | DURGESH PANDEY | JTA | | VAP | SBP | FIT |
| 12 Month | MANAGEMENT | 332 | 3571 | RAVI RANJAN KUMAR | ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 333 | 3572 | HARIOM YOGI | JUNIOR ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 334 | 3575 | MAHESH KUMAR SHAW | ASSISTANT ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 335 | 3576 | GYANA RANJAN JENA | ASSISTANT ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 336 | 3579 | SHAILESH KUMAR SRIVASTAVA | DEPUTY OFFICER | | Finance & Commercial and IT | ACCOUNTS | FIT |
| 12 Month | STAFF | 337 | 3580 | DEEPA KUMARI | ASSISTANT OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | MANAGEMENT | 338 | 3583 | ASHISH GUPTA | ASSISTANT MANAGER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | MANAGEMENT | 339 | 3584 | SUBHASHREE NAYAK | ASSISTANT MANAGER | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | STAFF | 340 | 3589 | SANDHYA KUMARI | ASSISTANT OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | MANAGEMENT | 341 | 3591 | SOUMYA RANJAN PATRA | ASSISTANT MANAGER | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 342 | 3592 | SANDEEP KUMAR SINGH | TECHNICAL ASSOCIATE | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 343 | 3593 | UTKARSH | JUNIOR ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 344 | 3594 | SURENDRA KUMAR | TECHNICAL ASSOCIATE | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 345 | 3595 | AMIT KUMAR SINGH | JTA | | VAP | PAC | FIT |
| 12 Month | STAFF | 346 | 3596 | MITHILESH KUMAR SINGH | JTA | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 347 | 3597 | NARAD KUMAR | JTA | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | STAFF | 348 | 3598 | PRIYA PANDEY | JUNIOR OFFICER | | TECHNICAL SERVICES | EHS | FIT |
| 12 Month | STAFF | 349 | 3599 | PAWAN KUMAR | DEPUTY OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 350 | 3600 | RADHA SRIVASTAVA | JUNIOR OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | MANAGEMENT | 351 | 3601 | BIBHU DHAR PANDEY | DEPUTY GENERAL MANAGER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | MANAGEMENT | 352 | 3602 | SUBEENA | ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 353 | 3603 | SATYA PRAKASH PANDEY | ASSISTANT OFFICER | | Finance & Commercial and IT | ACCOUNTS | FIT |
| 12 Month | STAFF | 354 | 3604 | MUKENDRA PRATAP VISHWAKARMA | TECHNICAL ASSOCIATE | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 355 | 3606 | VIRAT KUMAR SINGH | TECHNICAL ASSOCIATE | | VAP | SBP | FIT |
| 12 Month | MANAGEMENT | 356 | 3607 | ASHOK KUMAR SINGH | General Manager | | STRATEGY | UH OFFICE | FIT |
| 12 Month | MANAGEMENT | 357 | 3608 | AMIT KUMAR | Senior ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | STAFF | 358 | 3609 | ANCHAL JHA | ASSISTANT OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | MANAGEMENT | 359 | 3610 | SHRAVAN KUMAR SHAW | Senior Manager | | Finance & Commercial and IT | ACCOUNTS | FIT |
| 12 Month | STAFF | 360 | 3612 | JEETOO MALL | JUNIOR ENGINEER | | VAP | CP | FIT |
| 12 Month | STAFF | 361 | 3613 | NEERAJ MAURYA | ASSISTANT ENGINEER | | VAP | SBP | FIT |
| 12 Month | MANAGEMENT | 362 | 3614 | HARDIK AGARWAL | ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | MANAGEMENT | 363 | 3616 | KARTHIK SAJIV | ENGINEER | | STRATEGY | UH OFFICE | FIT |
| 12 Month | STAFF | 364 | 3617 | ANURAG MOHAPATRA | DEPUTY ENGINEER | | Power | P.G.D.(MECH.) | FIT |
| 12 Month | STAFF | 365 | 3618 | APAR BHATNAGAR | DEPUTY OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | MANAGEMENT | 366 | 3619 | DHAVALGIR GOSWAMI | ENGINEER | | VAP | VAP | FIT |
| 12 Month | STAFF | 367 | 3620 | ASHWANI KUMAR SINGH | ASSISTANT ENGINEER | | Power | P.G.D.(MECH.) | FIT |
| 12 Month | STAFF | 368 | 3621 | DINESH VISHWAKARMA | ASSISTANT ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | MANAGEMENT | 369 | 3623 | ADARSH KUMAR | Deputy Manager | | Logistic | Logistic | FIT |
| 12 Month | MANAGEMENT | 370 | 3624 | RAJEEV DUBEY | General Manager | | Human Resources | HRD | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | STAFF | 371 | 3625 | AVIJEET BHTTACHARYA | JTA | | CAP | FUSION | FIT |
| 12 Month | STAFF | 372 | 3626 | GYANAND KUMAR CHOUBEY | JTA | | Power | PGD (C&I ) | FIT |
| 12 Month | STAFF | 373 | 3627 | VINAY DUBEY | ASSISTANT OFFICER | | Logistic | Logistic | FIT |
| 12 Month | STAFF | 374 | 3631 | JATESWAR PANDA | ASSISTANT OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 375 | 3632 | ROHIT KUMAR SINGH | JUNIOR OFFICER | | Human Resources | ER | FIT |
| 12 Month | STAFF | 376 | 3633 | ASHUTOSH DIXIT | ASSISTANT OFFICER | | Finance & Commercial and IT | ACCOUNTS | FIT |
| 12 Month | MANAGEMENT | 377 | 3634 | ANKIT KUMAR | ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 378 | 3635 | SUNIL KUMAR VAISHYA | ASSISTANT ENGINEER | | Power | PGD (ELECTRICAL) | FIT |
| 12 Month | MANAGEMENT | 379 | 3636 | MUKUL ANAND | OFFICER | | TECHNICAL SERVICES | EHS | FIT |
| 12 Month | STAFF | 380 | 3637 | ABHISHEK KUMAR YADAV | ASSISTANT ENGINEER | | CAP | CAP | FIT |
| 12 Month | STAFF | 381 | 3638 | SHIVANGI | ASSISTANT ENGINEER | | CAP | CAP | FIT |
| 12 Month | STAFF | 382 | 3639 | SAKSHI KATIYAR | ASSISTANT ENGINEER | | CAP | CAP | FIT |
| 12 Month | STAFF | 383 | 3642 | DIVYA SAVITA | ASSISTANT ENGINEER | | CAP | CAP | FIT |
| 12 Month | STAFF | 384 | 3645 | ANAMIKA PAL | ASSISTANT ENGINEER | | VAP | VAP | FIT |
| 12 Month | STAFF | 385 | 3646 | SUBHAM SINGH | ASSISTANT ENGINEER | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 386 | 3648 | DEEPAK SONI | ASSISTANT OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | STAFF | 387 | 3649 | PAWAN KUMAR | ASSISTANT OFFICER | | Human Resources | SECURITY | FIT |
| 12 Month | MANAGEMENT | 388 | 3650 | SHAILENDRA DUBEY | General Manager | | Finance & Commercial and IT | LEGAL | FIT |
| 12 Month | STAFF | 389 | 3651 | SHYAM KUMAR SINGH | JUNIOR OFFICER | | Human Resources | SECURITY | FIT |
| 12 Month | MANAGEMENT | 390 | 3652 | RAM KRISHNA SAHOO | Deputy Manager | | Human Resources | O.H.C. | FIT |
| 12 Month | MANAGEMENT | 391 | 3653 | VIDYABHUSAN SEN | Senior ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | MANAGEMENT | 392 | 3654 | ANURAG SINGH | ENGINEER | | ENGINEERING | CIVIL | FIT |
| 12 Month | MANAGEMENT | 393 | 3656 | MOHD ARAF SIDDIQUI | OFFICER | | TECHNICAL SERVICES | EHS | FIT |
| 12 Month | STAFF | 394 | 3657 | JAYA VERMA | ASSISTANT ENGINEER | | Power | P.G.D.(MECH.) | FIT |
| 12 Month | STAFF | 395 | 3658 | RAJENDRA SINGH | DEPUTY OFFICER | | Human Resources | SECURITY | FIT |
| 12 Month | STAFF | 396 | 3659 | YASHWARDHAN | ASSISTANT OFFICER | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | MANAGEMENT | 397 | 3660 | PRADEEP SANKLA | Deputy Manager | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | STAFF | 398 | 3661 | VIKRAM SINGH | JTA | | VAP | PAC | FIT |
| 12 Month | MANAGEMENT | 399 | 3662 | KRISHANVENDRA PRATAP SINGH | ASSISTANT MANAGER | | VAP | VAP | FIT |
| 12 Month | MANAGEMENT | 400 | 3663 | RANDHEER YADAV | General Manager | | STRATEGY | UH OFFICE | FIT |
| 12 Month | MANAGEMENT | 401 | 3665 | MANURAJ PANICKER | Assistant General Manager | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 402 | 3666 | VIJAY KUMAR | ASSISTANT OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 403 | 3667 | RAJESH KUMAR PANDEY | ASSISTANT ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | MANAGEMENT | 404 | 3668 | BIJAN SADHUKHAN | Senior ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | MANAGEMENT | 405 | 3669 | VISHAL CHANDEL | Senior ENGINEER | | ENGINEERING | C&I | FIT |
| 12 Month | MANAGEMENT | 406 | 3670 | TANUJA KUMARI | ENGINEER | | VAP | VAP | FIT |
| 12 Month | STAFF | 407 | 3671 | NISHA | JUNIOR OFFICER | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | STAFF | 408 | 3672 | NITISH PATHAK | ASSISTANT OFFICER | | Logistic | Logistic | FIT |
| 12 Month | STAFF | 409 | 3673 | ASHISH KUMAR TRIPATHI | Sub-Staff | | Human Resources | Admin | FIT |
| 12 Month | STAFF | 410 | 3674 | SURESH KUMAR | ASSISTANT ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | MANAGEMENT | 411 | 3675 | SURBHI AGRAWAL | TRAINEE STAFF | | Finance & Commercial and IT | ACCOUNTS | FIT |
| 12 Month | STAFF | 412 | 3676 | KARUNENDRA SINGH | JUNIOR ENGINEER | | Power | D.M.PLANT | FIT |
| 12 Month | MANAGEMENT | 413 | 3677 | ROHAN CHOUDHURY | Deputy Manager | | Human Resources | HRD | FIT |
| 12 Month | MANAGEMENT | 414 | 3678 | SAKSHI CHAUDHARY | ASST MGR | | Finance & Commercial and IT | ACCOUNTS | FIT |
| 12 Month | MANAGEMENT | 415 | 3679 | MANISH GURG | JOINT PRESIDENT | | STRATEGY | UH OFFICE | FIT |
| 12 Month | STAFF | 416 | 3680 | DEEPENDRA KUMAR DAS | Senior Technical Associate | | Power | P.G.D.(MECH.) | FIT |
| 12 Month | STAFF | 417 | 3681 | RAKESH KUMAR RAI | TECHNICAL ASSOCIATE | | Power | OPERATIONS | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | MANAGEMENT | 418 | 3682 | PRAVEEN PANDEY | ENGINEER | | Power | PGD (C&I ) | FIT |
| 12 Month | MANAGEMENT | 419 | 3683 | VIVEK KUMAR PATHAK | Senior ENGINEER | | ENGINEERING | C&I | FIT |
| 12 Month | MANAGEMENT | 420 | 3684 | NITESH KUMAR SINGH | Senior OFFICER | | Human Resources | HRD | FIT |
| 12 Month | MANAGEMENT | 421 | 3685 | BIRENDRA KUMAR RAI | Vice President | | ENGINEERING | PROJECT - SPL | FIT |
| 12 Month | STAFF | 422 | 3686 | LAKSHMI SHANKAR YADAV | ASSISTANT ENGINEER | | Power | P.G.D.(MECH.) | FIT |
| 12 Month | MANAGEMENT | 423 | 3689 | NAMIT PATEL | Senior OFFICER | | TECHNICAL SERVICES | EHS | FIT |
| 12 Month | STAFF | 424 | 3691 | AMIT KUMAR RAJBHAR | JTA | | CAP | FUSION | FIT |
| 12 Month | MANAGEMENT | 425 | 3692 | BINITA KARMAKAR | OFFICER | | Finance & Commercial and IT | ACCOUNTS | FIT |
| 12 Month | MANAGEMENT | 426 | 3693 | VIBHASH KUMAR | Senior ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | MANAGEMENT | 427 | 3694 | JASPREET KAUR | OFFICER | | Human Resources | Admin | FIT |
| 12 Month | MANAGEMENT | 428 | 3695 | CHANDANI NIRMAL | OFFICER | | Human Resources | ER | FIT |
| 12 Month | STAFF | 429 | 3696 | PRADEEP KUMAR | JTA | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | STAFF | 430 | 3697 | RAM PRAVESH SINGH | JTA | | ENGINEERING | mechanical | FIT |
| 12 Month | MANAGEMENT | 431 | 3698 | SUJEET YADAV | ENGINEER | | CAP | MEMBRANE PLANT | FIT |
| 12 Month | TRAINEE STAFF | 432 | 3699 | SAMEER SHARMA | TRAINEE ENGINEER | | ENGINEERING | C&I | FIT |
| 12 Month | MANAGEMENT | 433 | 3700 | MANISH NAMBIAR | MANAGER | | Human Resources | HRD | FIT |
| 12 Month | TRAINEE STAFF | 434 | 3701 | ASTHA SRIVASTAVA | Diploma Engineer Trainee | | ENGINEERING | C&I | FIT |
| 12 Month | TRAINEE STAFF | 435 | 3702 | RAJAN BHARTI | Diploma Engineer Trainee | | ENGINEERING | mechanical | FIT |
| 12 Month | TRAINEE STAFF | 436 | 3703 | KAJAL SINGH | Diploma Engineer Trainee | | ENGINEERING | mechanical | FIT |
| 12 Month | TRAINEE STAFF | 437 | 3706 | SNEHA MISHRA | Diploma Engineer Trainee | | ENGINEERING | C&I | FIT |
| 12 Month | TRAINEE STAFF | 438 | 3707 | VIPIN KUMAR | Diploma Engineer Trainee | | ENGINEERING | mechanical | FIT |
| 12 Month | STAFF | 439 | 3708 | SADHANA SINGH | JUNIOR OFFICER | | Human Resources | O.H.C. | FIT |
| 12 Month | MANAGEMENT | 440 | 3709 | RAJEEV RANJAN RAI | ENGINEER | | Power | OPERATIONS | FIT |
| 12 Month | STAFF | 441 | 3710 | TARKESHWAR SINGH | ASSISTANT ENGINEER | | VAP | mechanical | FIT |
| 12 Month | STAFF | 442 | 3711 | PAWAN KUMAR | TECHNICAL ASSOCIATE | | ENGINEERING | C&I | FIT |
| 12 Month | MANAGEMENT | 443 | 3712 | RAKESH JAISWAL | Senior ENGINEER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | MANAGEMENT | 444 | 3713 | RATISH  MISHRA | Deputy Manager | | Power | P.G.D.(MECH.) | FIT |
| 12 Month | STAFF | 445 | 3714 | SATYA PRAKASH SINGH | ASSISTANT ENGINEER | | Power | PGD (C&I ) | FIT |
| 12 Month | MANAGEMENT | 446 | 3715 | ASHISH PANCHAL | Senior OFFICER | | Finance & Commercial and IT | IT | FIT |
| 12 Month | STAFF | 447 | 3716 | VIKASH PATHAK | JTA | | VAP | SBP | FIT |
| 12 Month | MANAGEMENT | 448 | 3717 | BABU LAL BHATIA | Deputy Manager | | Finance & Commercial and IT | MATERIALS | FIT |
| 12 Month | MANAGEMENT | 449 | 3718 | NITIN JAISWAL | Deputy Manager | | Finance & Commercial and IT | LEGAL | FIT |
| 12 Month | STAFF | 450 | 3719 | SHAILESH KUMAR | ASSISTANT ENGINEER | | ENGINEERING | C&I | FIT |
| 12 Month | RETAINER | 451 | 7093 | ANIL CHAUHAN | RETAINER | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | RETAINER | 452 | 7065 | VIJAY LAXMI TRIPATHI | RETAINER | | Human Resources | O.H.C. | FIT |
| 12 Month | ELP | 453 | 7066 | DEEPA JHA | ELP | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | ELP | 454 | 7071 | MANOJ KUMAR | ELP | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | RETAINER | 455 | 7079 | SUJEET CHOUDHARY | RETAINER | | Human Resources | HORTICULTURE | FIT |
| 12 Month | RETAINER | 456 | 7084 | ARCHANA TIWARI | RETAINER | | Human Resources | ER | FIT |
| 12 Month | RETAINER | 457 | 7085 | GAYATRI DEVI | RETAINER | | Human Resources | O.H.C. | FIT |
| 12 Month | RETAINER | 458 | 7086 | NEELAM SINGH | RETAINER | | Human Resources | O.H.C. | FIT |
| 12 Month | RETAINER | 459 | 7087 | LALIT KUMAR SRIVASTAVA | RETAINER | | ENGINEERING | CIVIL | FIT |
| 12 Month | RETAINER | 460 | 7089 | ASTHA | RETAINER | | Human Resources | HRD | FIT |
| 12 Month | RETAINER | 461 | 7090 | G.M.KUMARAN | RETAINER | | Logistic | Logistic | FIT |
| 12 Month | RETAINER | 462 | 7091 | SUJEET CHAUHAN | RETAINER | | ENGINEERING | C&I | FIT |
| 12 Month | RETAINER | 463 | 7092 | NEEKITA SINHA | RETAINER | | Human Resources | ER | FIT |
| 12 Month | APPRENTICES | 464 | 8835 | RUPESH PANDEY | APP.TRAINEE | | Power | PGD (ELECTRICAL) | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | APPRENTICES | 465 | 8836 | VIKASH KUMAR | APP.TRAINEE | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | APPRENTICES | 466 | 8837 | NEERAJ SHARMA | APP.TRAINEE | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | APPRENTICES | 467 | 8838 | PANKAJ KUMAR | APP.TRAINEE | | ENGINEERING | ELECTRICAL | FIT |
| 12 Month | APPRENTICES | 468 | 8839 | SURYA NARAYAN NISHAD | APP.TRAINEE | | VAP | SBP | FIT |
| 12 Month | APPRENTICES | 469 | 8840 | PAPPU KUMAR SINGH | APP.TRAINEE | | VAP | SBP | FIT |
| 12 Month | APPRENTICES | 470 | 8842 | RAJESH KUMAR | APP.TRAINEE | | VAP | PAC | FIT |
| 12 Month | APPRENTICES | 471 | 8843 | SUDHIR KUMAR | APP.TRAINEE | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | APPRENTICES | 472 | 8844 | RISHU KUMAR | APP.TRAINEE | | Power | PGD (ELECTRICAL) | FIT |
| 12 Month | APPRENTICES | 473 | 8845 | VIKASH KUMAR | APP.TRAINEE | | ENGINEERING | C&I | FIT |
| 12 Month | APPRENTICES | 474 | 8846 | VIKASH YADAV | APP.TRAINEE | | ENGINEERING | C&I | FIT |
| 12 Month | APPRENTICES | 475 | 8847 | HEMANT KUMAR | APP.TRAINEE | | CAP | FUSION | FIT |
| 12 Month | WORKER | 476 | 2041 | ASHOK KUMAR PANDEY | DRIVER | | ENGINEERING | mechanical | FIT |
| 12 Month | WORKER | 477 | 2085 | ARBIND SINGH | OPERATOR | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | WORKER | 478 | 2086 | DHRUW JEE | OPERATOR | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | WORKER | 479 | 2242 | DHRUW DEO SHARMA | OPERATOR | | CAP | FUSION | FIT |
| 12 Month | WORKER | 480 | 2277 | HARENDRA BAHADUR SINGH | OPERATOR | | VAP | SBP | FIT |
| 12 Month | WORKER | 481 | 2688 | JATA SHANKAR SINGH | OPERATOR | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | WORKER | 482 | 2689 | RAKESH KUMAR PANDEY | OPERATOR | | CAP | FUSION | FIT |
| 12 Month | WORKER | 483 | 2691 | SUBHASH CHAUDHARY | OPERATOR | | CAP | FUSION | FIT |
| 12 Month | WORKER | 484 | 2692 | AJAY KUMAR | LAB BOY | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | WORKER | 485 | 2695 | SHAILANI PD.JAISWAL | Assistant OPERATOR | | CAP | CHLORINE FILLING | FIT |
| 12 Month | WORKER | 486 | 2698 | RAM BILASH | OPERATOR | | CAP | FUSION | FIT |
| 12 Month | WORKER | 487 | 2699 | MOTI LAL | Assistant OPERATOR | | CAP | CHLORINE | FIT |
| 12 Month | WORKER | 488 | 2701 | ALIM ANSARI | Assistant OPERATOR | | CAP | CHLORINE | FIT |
| 12 Month | WORKER | 489 | 2702 | AKHILESH KUMAR | ATTENDENT | | Human Resources | Admin | FIT |
| 12 Month | WORKER | 490 | 2703 | RAVINDRA PRASAD GUPTA | OPERATOR | | CAP | FUSION | FIT |
| 12 Month | WORKER | 491 | 2706 | JANARDAN YADAV | Assistant OPERATOR | | CAP | CHLORINE FILLING | FIT |
| 12 Month | WORKER | 492 | 2708 | ASHARFI YADAV | OPERATOR | | CAP | FUSION | FIT |
| 12 Month | WORKER | 493 | 2710 | RAM ASHRYA SINGH | OPERATOR | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | WORKER | 494 | 2714 | RAM KESHWAR | Assistant OPERATOR | | CAP | CHLORINE FILLING | FIT |
| 12 Month | WORKER | 495 | 2716 | RAVINDRA KUMAR DUBEY | SUPERVISOR | | Human Resources | SECURITY | FIT |
| 12 Month | WORKER | 496 | 2717 | YOGENDRA YADAV | OPERATOR | | CAP | FUSION | FIT |
| 12 Month | WORKER | 497 | 2719 | RAMA NAND KUSHWAHA | Assistant OPERATOR | | CAP | CHLORINE FILLING | FIT |
| 12 Month | WORKER | 498 | 2721 | MANOJ KUMAR SINGH | OPERATOR | | ENGINEERING | mechanical | FIT |
| 12 Month | WORKER | 499 | 2722 | SURENDRA PRASAD MISHRA | Assistant OPERATOR | | CAP | CHLORINE FILLING | FIT |
| 12 Month | WORKER | 500 | 2723 | OM PRAKASH DUBEY | Assistant SUPERVISOR | | VAP | SBP | FIT |
| 12 Month | WORKER | 501 | 2725 | CHANDRIKA PRASAD | LAB BOY | | TECHNICAL SERVICES | QC | FIT |
| 12 Month | WORKER | 502 | 2726 | RAMESHWAR PAL SINGH | Assistant OPERATOR | | CAP | CHLORINE FILLING | FIT |
| 12 Month | WORKER | 503 | 2731 | CHANDA LAL YADAV | WELDER | | Power | P.G.D.(MECH.) | FIT |
| 12 Month | WORKER | 504 | 2770 | RANJEET KUMAR | Assistant OPERATOR | | CAP | CHLORINE FILLING | FIT |
| 12 Month | WORKER | 505 | 2771 | PRADEEP KUMAR PRAJAPAT | Assistant OPERATOR | | CAP | CHLORINE FILLING | FIT |
| 12 Month | WORKER | 506 | 2772 | ARVIND KUMAR | Assistant OPERATOR | | CAP | CHLORINE FILLING | FIT |
| 12 Month | WORKER | 507 | 2773 | SANGEET KUMAR | Assistant OPERATOR | | CAP | CHLORINE FILLING | FIT |
| 12 Month | WORKER | 508 | 2776 | RAM BILAS GUPTA | Assistant OPERATOR | | CAP | CHLORINE | FIT |
| 12 Month | WORKER | 509 | 2939 | SHIV KUMAR | TELEPHONE Mechanic | | ENGINEERING | C&I | FIT |
| 12 Month | WORKER | 510 | 2940 | SUSHIL KUMAR UPADHYAY | Assistant SUPERVISOR | | Human Resources | SECURITY | FIT |
| 12 Month | WORKER | 511 | 2944 | RAJESH KUMAR | OPERATOR | | VAP | ALUMINIUM CHLORIDE | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | WORKER | 512 | 2945 | ANAND KUMAR SINGH | OPERATOR | | VAP | PAC | FIT |
| 12 Month | WORKER | 513 | 2946 | SHIV JEE RAI | OPERATOR | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | WORKER | 514 | 2947 | DEEPAK KUMAR | OPERATOR | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | WORKER | 515 | 2955 | UPENDRA TIWARI | OPERATOR | | VAP | PAC | FIT |
| 12 Month | WORKER | 516 | 2956 | RAM BACHAN SINGH | OPERATOR | | VAP | PAC | FIT |
| 12 Month | WORKER | 517 | 2957 | MUNNA LAL RAM | OPERATOR | | CAP | CHLORINE FILLING | FIT |
| 12 Month | WORKER | 518 | 2958 | NARESH SHARMA | OPERATOR | | CAP | CHLORINE FILLING | FIT |
| 12 Month | WORKER | 519 | 2959 | AWADHESH KUMAR BHARTI | OPERATOR | | ENGINEERING | mechanical | FIT |
| 12 Month | WORKER | 520 | 2972 | RAJU PRASAD | OPERATOR | | VAP | PAC | FIT |
| 12 Month | WORKER | 521 | 2973 | SANJAY KUMAR PRAJAPATI | OPERATOR | | VAP | ALUMINIUM CHLORIDE | FIT |
| 12 Month | WORKER | 522 | 2974 | SHAH ALAM | OPERATOR | | CAP | CHLORINE | FIT |
| 12 Month | WORKER | 523 | 2975 | SUNIL KUMAR | OPERATOR | | VAP | SBP | FIT |
| 12 Month | WORKER | 524 | 2976 | SUNIL KUMAR SINGH | OPERATOR | | ENGINEERING | mechanical | FIT |
| 12 Month | WORKER | 525 | 2990 | ARUN KUMAR SINGH | Assistant OPERATOR | | VAP | SBP | FIT |
| 12 Month | WORKER | 526 | 3136 | KALICHARAN | Assistant GARDENER | | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 527 | BPS00117 | RAM PRASAD MAURIYA | FITTER | M/S B P SINGH & BROTHERS | VAP | MEW SBP M | FIT |
| 12 Month | SUPPLY | 528 | BPS00062 | RAM JATAN SINGH | FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP M | FIT |
| 12 Month | SUPPLY | 529 | BPS00065 | PRADEEP KR. MEHTO | FITTER | M/S B P SINGH & BROTHERS | CAP | CL2 (M) DEPTT. | FIT |
| 12 Month | SUPPLY | 530 | BPS00067 | NAND KISHORE VISHWAKARMA | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | CSF (M) DEPTT. | FIT |
| 12 Month | SUPPLY | 531 | BPS00008 | PRAMOD KUMAR GAUTAM | FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 532 | BPS00120 | MD ASLAM | HELPER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 533 | BPS00016 | RAM CHAND PASWAN | HELPER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 534 | BPS00011 | SHIV KUMAR PASWAN | HELPER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 535 | BPS00012 | RADHEY SHYAM | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 536 | BPS00024 | SOBH NATH | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 537 | BPS00013 | VIKASH KUMAR | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 538 | BPS00018 | RAM ASHISH SINGH YADAV | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 539 | BPS00019 | RANJAN PRASAD | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 540 | BPS00014 | AMAR NATH | FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 541 | BPS00037 | RAHUL | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 542 | BPS00092 | BALRAM SAHANI | FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 543 | BPS00020 | ARVIND KUMAR | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 544 | BPS00021 | RAJU SHARMA | HELPER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 545 | BPS00044 | MANOJ RAM | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 546 | BPS00033 | RAJESH KUMAR SINGH | HELPER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 547 | BPS00094 | INDRA SEN SINGH | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 548 | BPS00048 | SURAJ KUMAR PRAJAPATI | HELPER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 549 | BPS00084 | SANTOSH SINGH | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 550 | BPS00100 | NIRAJ SINGH | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 551 | BPS00115 | PRAMOD KUMAR VISHWAKRMA | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 552 | BPS00002 | VINOD KUMAR CHOUBEY | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 553 | BPS00007 | DEVENDRA KUMAR SINGH | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 554 | BPS00112 | RAM PRAKASH MISHRA | HELPER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 555 | BPS00034 | SAHDEO YADAV | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | OLD CP | FIT |
| 12 Month | SUPPLY | 556 | BPS00039 | MAKAR DHWAJ | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 557 | BPS00040 | BALINDAR | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 558 | BPS00083 | AMBE LAL | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | SUPPLY | 559 | BPS00097 | DEEPAK YADAV | HELPER | M/S B P SINGH & BROTHERS | CAP | NEW CP | FIT |
| 12 Month | SUPPLY | 560 | BPS00086 | MAHESH KUMAR RAM | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 561 | BPS00087 | UDAY PANDEY | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 562 | BPS00090 | VISHNU PD. GUPTA | FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 563 | BPS00091 | VIJAY KUMAR YADAV | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 564 | BPS00136 | RAMESH KUMAR | ASTT FITTER | M/S B P SINGH & BROTHERS | Finance & Commercial and IT | RAW MAT. | FIT |
| 12 Month | SUPPLY | 565 | BPS00058 | ABHAY SINGH PATEL | FITTER | M/S B P SINGH & BROTHERS | Finance & Commercial and IT | STORES | FIT |
| 12 Month | SUPPLY | 566 | BPS00031 | SAMEER CHAKRAVARTI | HELPER | M/S B P SINGH & BROTHERS | Finance & Commercial and IT | STORES | FIT |
| 12 Month | SUPPLY | 567 | BPS00055 | BAIJ NATH YADAV | ASTT FITTER | M/S B P SINGH & BROTHERS | Finance & Commercial and IT | STORES | FIT |
| 12 Month | SUPPLY | 568 | BPS00059 | NIKOLASH TOPO | FITTER | M/S B P SINGH & BROTHERS | Finance & Commercial and IT | STORES | FIT |
| 12 Month | SUPPLY | 569 | BPS00061 | SUNIL KR. YADAV | FITTER | M/S B P SINGH & BROTHERS | Finance & Commercial and IT | STORES | FIT |
| 12 Month | SUPPLY | 570 | BPS00066 | SINGAR CHAND | FITTER | M/S B P SINGH & BROTHERS | VAP | OLD CP Maint. | FIT |
| 12 Month | SUPPLY | 571 | BPS00078 | AWADHESH KUMAR KESHRI | FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE (M) DEPTT. | FIT |
| 12 Month | SUPPLY | 572 | BPS00068 | NARAD KHARWAR | FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE (M) DEPTT. | FIT |
| 12 Month | SUPPLY | 573 | BPS00071 | RAM DEV | HIGH SKILLED | M/S B P SINGH & BROTHERS | CAP | MEMBRANE (M) DEPTT. | FIT |
| 12 Month | SUPPLY | 574 | BPS00072 | ANIL VERMA | FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE (M) DEPTT. | FIT |
| 12 Month | SUPPLY | 575 | BPS00074 | SANTAN PD. GUPTA | FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE (M) DEPTT. | FIT |
| 12 Month | SUPPLY | 576 | BPS00045 | TUFANI SINGH | FITTER | M/S B P SINGH & BROTHERS | VAP | MEMBRANE (M) DEPTT. | FIT |
| 12 Month | SUPPLY | 577 | BPS00082 | VINOD KUMAR SINGH | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE DEPTT. | FIT |
| 12 Month | SUPPLY | 578 | BPS00104 | SUBODH KUMAR SINGH | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 579 | BPS00076 | RAKESH KUMAR PAL | HIGH SKILLED | M/S B P SINGH & BROTHERS | VAP | SBP Maint. | FIT |
| 12 Month | SUPPLY | 580 | BPS00122 | KAPIL DEV YADAV | HELPER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 581 | BPS00126 | VIMELASH KUMAR | HELPER | M/S B P SINGH & BROTHERS | VAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 582 | BPS00127 | AMIT KUMAR SINGH | HELPER | M/S B P SINGH & BROTHERS | VAP | OLD CP | FIT |
| 12 Month | SUPPLY | 583 | BPS00125 | AMARANATH SINGH | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 584 | BPS00128 | FIROJ KHAN | FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 585 | BPS00132 | RADHEY SHYAM YADAV | FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 586 | BPS00153 | RAMU SHARMA | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | CL FILLING | FIT |
| 12 Month | SUPPLY | 587 | BPS00148 | RAJESHWAR RAM | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | CL HYP | FIT |
| 12 Month | SUPPLY | 588 | BPS00151 | RADHESHYAM RAWANI | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | CL HYP | FIT |
| 12 Month | SUPPLY | 589 | BPS00145 | NANDU CHAUDHRI | ASTT FITTER | M/S B P SINGH & BROTHERS | Finance & Commercial and IT | RAILWAY SIDING | FIT |
| 12 Month | SUPPLY | 590 | BPS00149 | RAM JI RAM | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | CL FILLING | FIT |
| 12 Month | SUPPLY | 591 | BPS00143 | RAJU KUMAR RAJAK | ASTT FITTER | M/S B P SINGH & BROTHERS | Finance & Commercial and IT | RAILWAY SIDING | FIT |
| 12 Month | SUPPLY | 592 | BPS00156 | AJAY KUMAR | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | CL FILLING | FIT |
| 12 Month | SUPPLY | 593 | BPS00144 | UMESH KUMAR | ASTT FITTER | M/S B P SINGH & BROTHERS | Finance & Commercial and IT | RM | FIT |
| 12 Month | SUPPLY | 594 | BPS00155 | RAGHU NATH YADAV | FITTER | M/S B P SINGH & BROTHERS | CAP | CL HYP | FIT |
| 12 Month | SUPPLY | 595 | BPS00146 | RAMESH RAM | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | CL FILLING | FIT |
| 12 Month | SUPPLY | 596 | BPS00160 | AMIT KUMAR SO NI | FITTER | M/S B P SINGH & BROTHERS | CAP | CL FILLING | FIT |
| 12 Month | SUPPLY | 597 | BPS00150 | SHIYA RAM SINGH | FITTER | M/S B P SINGH & BROTHERS | CAP | CL FILLING | FIT |
| 12 Month | SUPPLY | 598 | BPS00147 | SURENDRA RAM I | FITTER | M/S B P SINGH & BROTHERS | CAP | CL HYP | FIT |
| 12 Month | SUPPLY | 599 | BPS00162 | ANAND KUMAR YADAV | HELPER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 600 | BPS00165 | SHATRUDHAN SHARMA | HELPER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 601 | BPS00164 | DINESH BAITHA | FITTER | M/S B P SINGH & BROTHERS | CAP | CSF | FIT |
| 12 Month | SUPPLY | 602 | BPS00166 | AMAN KUMAR | HELPER | M/S B P SINGH & BROTHERS | CAP | M I II | FIT |
| 12 Month | SUPPLY | 603 | BPS00168 | BHIM RAM | HELPER | M/S B P SINGH & BROTHERS | CAP | CL FILLING | FIT |
| 12 Month | SUPPLY | 604 | BPS00170 | RAJESH KUMAR PATEL | HELPER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 605 | BPS00200 | DHEERAJ SINGH | HELPER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | SUPPLY | 606 | BPS00203 | RAKESH VISHWAKARMA | HELPER | M/S B P SINGH & BROTHERS | VAP | PAYLODER | FIT |
| 12 Month | SUPPLY | 607 | BPS00204 | KANHAIYA RAJBHAR | HELPER | M/S B P SINGH & BROTHERS | CAP | M MECH | FIT |
| 12 Month | SUPPLY | 608 | BPS00209 | PRAJJVAL KUMAR VERMA | HELPER | M/S B P SINGH & BROTHERS | CAP | mechanical | FIT |
| 12 Month | SUPPLY | 609 | BPS00211 | AJIT KUMAR | HELPER | M/S B P SINGH & BROTHERS | VAP | mechanical | FIT |
| 12 Month | SUPPLY | 610 | BPS00206 | SANTOSH KUMAR | FITTER | M/S B P SINGH & BROTHERS | Finance & Commercial and IT | R M | FIT |
| 12 Month | SUPPLY | 611 | BPS00213 | MONU KUMAR | FITTER | M/S B P SINGH & BROTHERS | CAP | OLD CP | FIT |
| 12 Month | SUPPLY | 612 | BPS00214 | VIKLESH KUMAR YADAV | HELPER | M/S B P SINGH & BROTHERS | VAP | OLD CP | FIT |
| 12 Month | SUPPLY | 613 | BPS00218 | SUJEET | HELPER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE-3 | FIT |
| 12 Month | SUPPLY | 614 | BPS00113 | MUNNA RAM | HELPER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 615 | BPS00220 | PRADEEP KUMAR | ASTT FITTER | M/S B P SINGH & BROTHERS | Finance & Commercial and IT | RAILWAY SIDING | FIT |
| 12 Month | SUPPLY | 616 | BPS00221 | ANAND SINGH | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE 1 | FIT |
| 12 Month | SUPPLY | 617 | BPS00222 | RITESH KUMAR GIRI | HELPER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE 3 | FIT |
| 12 Month | SUPPLY | 618 | BPS00223 | UPENDRA PASAWAN | HELPER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 619 | BPS00224 | PRAMOD KUMAR YADAV | HELPER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 620 | BPS00226 | MANOJ YADAV | HELPER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 621 | BPS00172 | VINOD THAKUR | ASTT FITTER | M/S B P SINGH & BROTHERS | CAP | PAYLODER | FIT |
| 12 Month | SUPPLY | 622 | BPS00182 | RAMAKANT YADAV | HELPER | M/S B P SINGH & BROTHERS | CAP | PAYLODER | FIT |
| 12 Month | SUPPLY | 623 | BPS00181 | AKLESH KUMAR | HELPER | M/S B P SINGH & BROTHERS | CAP | PAYLODER | FIT |
| 12 Month | SUPPLY | 624 | BPS00178 | UMESH KUMAR | FITTER | M/S B P SINGH & BROTHERS | CAP | PAYLODER | FIT |
| 12 Month | SUPPLY | 625 | BPS00175 | GANESH DUTT PANDEY | FITTER | M/S B P SINGH & BROTHERS | VAP | SBP Maint. | FIT |
| 12 Month | SUPPLY | 626 | BPS00174 | VISHWAMITRA | FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP M | FIT |
| 12 Month | SUPPLY | 627 | BPS00180 | SUNIL KUMAR SHARMA | FITTER | M/S B P SINGH & BROTHERS | VAP | PAC | FIT |
| 12 Month | SUPPLY | 628 | BPS00176 | RAMESHWAR SINGH | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | PAC | FIT |
| 12 Month | SUPPLY | 629 | BPS00190 | SURESH GUPTA 1 | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 630 | BPS00187 | TRIBHUWAN NATH | FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 631 | BPS00196 | SURESH GUPTA 2 | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 632 | BPS00185 | RAJESH CHAND | FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 633 | BPS00186 | DASHRATH LAL VISHWAKARMA | FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 634 | BPS00195 | VINOD KUMAR KHARVAR | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 635 | BPS00184 | YOGESH TRIPATHI | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 636 | BPS00177 | UMESH SRIVASTAVA | FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP M | FIT |
| 12 Month | SUPPLY | 637 | BPS00198 | RAJAN KUMAR SINGH | HELPER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 638 | BPS00189 | RAJESH MOURYA | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 639 | BPS00188 | SUSHIL KUMAR RAI | FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 640 | BPS00194 | PRABHU | FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 641 | BPS00192 | BASANT BAITHA | ASTT FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 642 | BPS00228 | BAIJNATH | FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP M | FIT |
| 12 Month | SUPPLY | 643 | BPS00229 | SATYENDRA KUMAR | HELPER | M/S B P SINGH & BROTHERS | VAP | MECHNICAL | FIT |
| 12 Month | SUPPLY | 644 | BPS00231 | RITESH PATEL | HELPER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 645 | BPS00247 | BECHOO PRASAD | HELPER | M/S B P SINGH & BROTHERS | CAP | MEMBRANE | FIT |
| 12 Month | SUPPLY | 646 | BPS00248 | ASHOK KUMAR | HELPER | M/S B P SINGH & BROTHERS | CAP | ALCP | FIT |
| 12 Month | SUPPLY | 647 | BPS00249 | SIKANDRA | HELPER | M/S B P SINGH & BROTHERS | CAP | ALCP | FIT |
| 12 Month | SUPPLY | 648 | BPS00241 | BALBIR KUMAR | HELPER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 649 | BPS00240 | KAWALJEET SINGH | HELPER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 650 | BPS00250 | MITHILESH KUMAR YADAV | HELPER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |
| 12 Month | SUPPLY | 651 | BPS00251 | LALMAN SINGH | FITTER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |
| 12 Month | SUPPLY | 652 | BPS00238 | RAHUL KUMAR GIRI | HELPER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | SUPPLY | 653 | BPS00254 | ARUN KUMAR | HELPER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |
| 12 Month | SUPPLY | 654 | BPS00253 | SHAKIR AHMAD | HELPER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |
| 12 Month | SUPPLY | 655 | BPS00256 | NAGENDRA KUMAR VISHWAKARMA | HELPER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |
| 12 Month | SUPPLY | 656 | BPS00246 | PREM KUMAR | HELPER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |
| 12 Month | SUPPLY | 657 | BPS00244 | PRADEEP KUMAR RAWANI | HELPER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |
| 12 Month | SUPPLY | 658 | BPS00257 | AJAY KUMAR | HELPER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |
| 12 Month | SUPPLY | 659 | BPS00259 | ASHOK KUMAR YADAV | HELPER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |
| 12 Month | SUPPLY | 660 | BPS00260 | RAKESH PATEL | FITTER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |
| 12 Month | SUPPLY | 661 | BPS00263 | SHASHI BHUSHAN VISHWAKARMA | FITTER | M/S B P SINGH & BROTHERS | VAP | ALCP | FIT |
| 12 Month | SUPPLY | 662 | BPS00264 | SATYAM CHAUHAN | HELPER | M/S B P SINGH & BROTHERS | VAP | NEW CP | FIT |
| 12 Month | SUPPLY | 663 | BPS00266 | SURAJ KUMAR SHARMA | HELPER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |
| 12 Month | SUPPLY | 664 | 50138 | UPENDRA PRAJAPATI | HELPER | M/S B P SINGH & BROTHERS | VAP | M MECH | FIT |
| 12 Month | SUPPLY | 665 | | SONU KUMAR | HELPER | M/S B P SINGH & BROTHERS | VAP | SBP Maint. | FIT |
| 12 Month | SUPPLY | 666 | | AMIT KUMAR RAWAT | HELPER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |
| 12 Month | SUPPLY | 667 | YBD00301 | RAVINDRA BHARITI | HELPER | M/S YASH BUILDERS | CAP | cl2 filling | FIT |
| 12 Month | SUPPLY | 668 | YBD00320 | AJIT BAITHA | HELPER | M/S YASH BUILDERS | CAP | MACH MAINT (RELEVER) | FIT |
| 12 Month | SUPPLY | 669 | YBD00324 | ROHIT KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | CANTEEN | FIT |
| 12 Month | SUPPLY | 670 | YBD00318 | DINESH SINGH | HELPER | M/S YASH BUILDERS | CAP | CSF | FIT |
| 12 Month | SUPPLY | 671 | YBD00317 | MUNAWAR ALI | HELPAR | M/S YASH BUILDERS | CAP | CL2 MACH MAINT | FIT |
| 12 Month | SUPPLY | 672 | YBD00319 | SANTOSH KUMAR SONI | HELPER | M/S YASH BUILDERS | Human Resources | GUEST HOUSE | FIT |
| 12 Month | SUPPLY | 673 | YBD00311 | MUNNA | HELPER | M/S YASH BUILDERS | ENGINEERING | civil colony | FIT |
| 12 Month | SUPPLY | 674 | YBD00333 | MUNNA  ALI | HELPAR | M/S YASH BUILDERS | CAP | CL2 FILLING (RELEVER) | FIT |
| 12 Month | SUPPLY | 675 | YBD00035 | SATENDRA KR. SINGH | HELPER | M/S YASH BUILDERS | POWER | PG.D. DM PLANT | FIT |
| 12 Month | SUPPLY | 676 | YBD00296 | AMAN KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | GUEST HOUSE | FIT |
| 12 Month | SUPPLY | 677 | YBD00031 | JITENDRA KR. RAI | HELPER | M/S YASH BUILDERS | VAP | PAC MAINT | FIT |
| 12 Month | SUPPLY | 678 | YBD00274 | ABHISHEK KUMAR | HELPER | M/S YASH BUILDERS | ENGINEERING | PUMP HOUSE | FIT |
| 12 Month | SUPPLY | 679 | YBD00180 | SANJU DEVI | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 680 | YBD00189 | SANTOSH KUMAR | HELPER | M/S YASH BUILDERS | POWER | PGD OPRETIONS | FIT |
| 12 Month | SUPPLY | 681 | YBD00040 | BHOLA SINGH AGRAHARI | HELPER | M/S YASH BUILDERS | POWER | PGD MAINT. | FIT |
| 12 Month | SUPPLY | 682 | YBD00153 | BIGOO BAITHA | HELPER | M/S YASH BUILDERS | Human Resources | CANTEEN | FIT |
| 12 Month | SUPPLY | 683 | YBD00030 | KAMLESH VERMA | HELPER | M/S YASH BUILDERS | CAP | CL2FILL. | FIT |
| 12 Month | SUPPLY | 684 | YBD00176 | PAWAN KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 685 | YBD00266 | MADAN VISH. | HELPER | M/S YASH BUILDERS | TECHNICAL SERVICES | Central Lab | FIT |
| 12 Month | SUPPLY | 686 | YBD00202 | PAPPU PRASAD | HELPER | M/S YASH BUILDERS | Human Resources | Safety fire | FIT |
| 12 Month | SUPPLY | 687 | YBD00244 | MRITYUNJAY KUMAR SINGH | HELPER | M/S YASH BUILDERS | Sales and Marketing | SALES DESPATCH | FIT |
| 12 Month | SUPPLY | 688 | YBD00290 | GOPAL RAI | DRIVER | M/S YASH BUILDERS | Human Resources | HOUSE KEEPING (DRIVER ) | FIT |
| 12 Month | SUPPLY | 689 | YBD00043 | RANJIT RAI | HELPER | M/S YASH BUILDERS | POWER | PGD MAINT. | FIT |
| 12 Month | SUPPLY | 690 | YBD00253 | VIVEK VERMA | HELPER | M/S YASH BUILDERS | Human Resources | STAFF MESS | FIT |
| 12 Month | SUPPLY | 691 | YBD00156 | SATENDRA SHARMA | CARPERTER | M/S YASH BUILDERS | ENGINEERING | CIVIL COLONY | FIT |
| 12 Month | SUPPLY | 692 | YBD00110 | BINDU SHARMA | MASON | M/S YASH BUILDERS | ENGINEERING | CIVIL COLONY | FIT |
| 12 Month | SUPPLY | 693 | YBD00245 | ANUJ KUMAR VISHWAKARMA | HELPER | M/S YASH BUILDERS | LOGISTIC | sales logistics | FIT |
| 12 Month | SUPPLY | 694 | YBD00277 | VIKESH VISHWAKARMA | HELPER | M/S YASH BUILDERS | Human Resources | WEL FAIR. | FIT |
| 12 Month | SUPPLY | 695 | YBD00107 | IFTAKHAR ALAM ANSARI | HELPER | M/S YASH BUILDERS | Human Resources | TRANSPORT | FIT |
| 12 Month | SUPPLY | 696 | YBD00143 | ANIL KUMAR | HELPER | M/S YASH BUILDERS | POWER | PGD OPRETIONS | FIT |
| 12 Month | SUPPLY | 697 | YBD00207 | CHANDRIKA YADAV | HELPER | M/S YASH BUILDERS | Human Resources | Safety fire | FIT |
| 12 Month | SUPPLY | 698 | YBD00004 | MUNNA PRASAD | HELPER | M/S YASH BUILDERS | CAP | CL2FILL. | FIT |
| 12 Month | SUPPLY | 699 | YBD00268 | RAJESH YADAV | HELPER | M/S YASH BUILDERS | Sales and Marketing | Logistic | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | SUPPLY | 700 | YBD00270 | NANDU PD. YADAV | HELPER | M/S YASH BUILDERS | Human Resources | A.D.B | FIT |
| 12 Month | SUPPLY | 701 | YBD00098 | MAHESH CHANDRA DUBEY | HELPER | M/S YASH BUILDERS | Human Resources | TRANSPORT | FIT |
| 12 Month | SUPPLY | 702 | YBD00162 | GIRIJA PD. | HELPER | M/S YASH BUILDERS | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 703 | YBD00178 | RAMU KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 704 | YBD00032 | GORAKH RAM | HELPER | M/S YASH BUILDERS | ENGINEERING | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 705 | YBD00081 | DEVENDRA KUMAR RAM | HELPER | M/S YASH BUILDERS | Human Resources | A.D.B | FIT |
| 12 Month | SUPPLY | 706 | YBD00114 | SANTOSH KUMAR SAHANI | HELPER | M/S YASH BUILDERS | Human Resources | SATAFF MESS | FIT |
| 12 Month | SUPPLY | 707 | YBD00305 | SANJAY | HELPER | M/S YASH BUILDERS | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 708 | YBD00051 | BHUWANESHWER MISHRA | HELPER | M/S YASH BUILDERS | TECHNICAL SERVICES | Technical Office | FIT |
| 12 Month | SUPPLY | 709 | YBD00056 | KESHAV PD. YADAV | HELPER | M/S YASH BUILDERS | VAP | ALCP PLANT | FIT |
| 12 Month | SUPPLY | 710 | YBD00077 | BABU RAM | HELPER | M/S YASH BUILDERS | Human Resources | CANTEEN | FIT |
| 12 Month | SUPPLY | 711 | YBD00209 | MANOJ KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 712 | YBD00257 | MITHALESH KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | TRANSPORT | FIT |
| 12 Month | SUPPLY | 713 | YBD00278 | LAL BABU TIWARI | HELPER | M/S YASH BUILDERS | Human Resources | HOSPITAL | FIT |
| 12 Month | SUPPLY | 714 | YBD00160 | SHIV KUMAR | HELPER | M/S YASH BUILDERS | ENGINEERING | CIVIL COLONY | FIT |
| 12 Month | SUPPLY | 715 | YBD00285 | SONUKUMAR | HELPER | M/S YASH BUILDERS | ENGINEERING | CIVIL COLONY | FIT |
| 12 Month | SUPPLY | 716 | YBD00036 | DILIP KUMAR | HELPER | M/S YASH BUILDERS | POWER | PG.D. DM PLANT | FIT |
| 12 Month | SUPPLY | 717 | YBD00076 | RAM PRAVESH | HELPER | M/S YASH BUILDERS | Human Resources | GUEST HOUSE | FIT |
| 12 Month | SUPPLY | 718 | YBD00053 | OM PRAKASH RAM | HELPER | M/S YASH BUILDERS | Human Resources | Safety fire | FIT |
| 12 Month | SUPPLY | 719 | YBD00204 | BASANT LAL | HELPER | M/S YASH BUILDERS | Human Resources | Safety fire | FIT |
| 12 Month | SUPPLY | 720 | YBD00287 | UMESH SHARMA | HELPER | M/S YASH BUILDERS | Human Resources | GUEST HOUSE | FIT |
| 12 Month | SUPPLY | 721 | YBD00017 | JAGDISH SHARMA | HELPER | M/S YASH BUILDERS | VAP | OLD CP Maint. | FIT |
| 12 Month | SUPPLY | 722 | YBD00198 | RAJENDRA PRASAD | HELPER | M/S YASH BUILDERS | Human Resources | CANTEEN | FIT |
| 12 Month | SUPPLY | 723 | YBD00275 | HIRALAL RAWANI | HELPER | M/S YASH BUILDERS | Human Resources | STAFF CLUB | FIT |
| 12 Month | SUPPLY | 724 | YBD00262 | MATOOK DHARI | HELPER | M/S YASH BUILDERS | Human Resources | SATAFF MESS | FIT |
| 12 Month | SUPPLY | 725 | YBD00205 | BAL RAM YADAV | HELPER | M/S YASH BUILDERS | Human Resources | Safety fire | FIT |
| 12 Month | SUPPLY | 726 | YBD00174 | GULAB CHAND RAWAT | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 727 | YBD00127 | DHAN SAH | HELPER | M/S YASH BUILDERS | ENGINEERING | CIVIL COLONY | FIT |
| 12 Month | SUPPLY | 728 | YBD00154 | PRAMOD KUMAR | HELPER | M/S YASH BUILDERS | ENGINEERING | CIVIL COLONY | FIT |
| 12 Month | SUPPLY | 729 | YBD00144 | DHIRESH KUMAR | HELPER | M/S YASH BUILDERS | CAP | CL2FILL. | FIT |
| 12 Month | SUPPLY | 730 | YBD00169 | GOPI CHAND | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 731 | YBD00117 | VISHAL KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 732 | YBD00131 | ARVIND KUMAR RAWAT | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 733 | YBD00149 | DASRATH YADAV | HELPER | M/S YASH BUILDERS | POWER | PGD OPRETIONS | FIT |
| 12 Month | SUPPLY | 734 | YBD00007 | SALIK RAM | HELPER | M/S YASH BUILDERS | CAP | CL2FILL. | FIT |
| 12 Month | SUPPLY | 735 | YBD00041 | RAMA KANT PATEL | HELPER | M/S YASH BUILDERS | POWER | PGD MAINT. | FIT |
| 12 Month | SUPPLY | 736 | YBD00106 | RAM BAHADUR SINGH | HELPER | M/S YASH BUILDERS | Human Resources | TRANSPORT | FIT |
| 12 Month | SUPPLY | 737 | YBD00109 | ASHOK KUMAR VISHWAKARMA | HELPER | M/S YASH BUILDERS | Human Resources | E.R DEPTT | FIT |
| 12 Month | SUPPLY | 738 | YBD00234 | UTTAM KUMAR CHAUHAN | HELPER | M/S YASH BUILDERS | ENGINEERING | PUMP HOUSE | FIT |
| 12 Month | SUPPLY | 739 | YBD00248 | SANDEEP KUMAR TIWARI | HELPER | M/S YASH BUILDERS | LOGISTIC | sales logistics | FIT |
| 12 Month | SUPPLY | 740 | YBD00265 | BIR BAHADUR SINGH | HELPER | M/S YASH BUILDERS | POWER | PGD OPRETIONS | FIT |
| 12 Month | SUPPLY | 741 | YBD00289 | AKASH KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | GUEST HOUSE | FIT |
| 12 Month | SUPPLY | 742 | YBD00096 | OM KAR NATH PANDEY | HELPER | M/S YASH BUILDERS | Human Resources | TEAMPLE | FIT |
| 12 Month | SUPPLY | 743 | YBD00211 | VINOD KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 744 | YBD00258 | SANTOSH KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | TRANSPORT | FIT |
| 12 Month | SUPPLY | 745 | YBD00261 | SUNIL SETH | HELPER | M/S YASH BUILDERS | Human Resources | SATAFF MESS | FIT |
| 12 Month | SUPPLY | 746 | YBD00038 | SRAWAN KUMAR | HELPER | M/S YASH BUILDERS | CAP | CL2FILL. | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | SUPPLY | 747 | YBD00161 | ABHIMANYU SINGH | HELPER | M/S YASH BUILDERS | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 748 | YBD00212 | SATISH KUMAR | CARPERTER | M/S YASH BUILDERS | ENGINEERING | CIVIL COLONY | FIT |
| 12 Month | SUPPLY | 749 | YBD00158 | SAT NARAYAN | PLUMBER | M/S YASH BUILDERS | ENGINEERING | CIVIL COLONY | FIT |
| 12 Month | SUPPLY | 750 | YBD00206 | VINOD KR. YADAV | HELPER | M/S YASH BUILDERS | Human Resources | Safety fire | FIT |
| 12 Month | SUPPLY | 751 | YBD00103 | SALIM KHAN | HELPER | M/S YASH BUILDERS | Human Resources | TRANSPORT | FIT |
| 12 Month | SUPPLY | 752 | YBD00213 | PAPPU | HELPER | M/S YASH BUILDERS | ENGINEERING | CIVIL COLONY | FIT |
| 12 Month | SUPPLY | 753 | YBD00215 | SUNIL KUMAR GOND | HELPER | M/S YASH BUILDERS | Human Resources | GUEST HOUSE | FIT |
| 12 Month | SUPPLY | 754 | YBD00235 | RAM CHANDRA | HELPER | M/S YASH BUILDERS | ENGINEERING | PUMP HOUSE | FIT |
| 12 Month | SUPPLY | 755 | YBD00271 | VINOD KUMAR YADAV | HELPER | M/S YASH BUILDERS | Human Resources | GUEST HOUSE | FIT |
| 12 Month | SUPPLY | 756 | YBD00006 | UPENDRA SINGH | HELPER | M/S YASH BUILDERS | CAP | CL2FILL. | FIT |
| 12 Month | SUPPLY | 757 | YBD00008 | RAMA KANT YADAV | HELPER | M/S YASH BUILDERS | CAP | CL2FILL. | FIT |
| 12 Month | SUPPLY | 758 | YBD00028 | LAXMAN SINGH | HELPER | M/S YASH BUILDERS | CAP | CL2FILL. | FIT |
| 12 Month | SUPPLY | 759 | YBD00039 | LALIT KR. THAKUR | HELPER | M/S YASH BUILDERS | POWER | T.G.BOILER | FIT |
| 12 Month | SUPPLY | 760 | YBD00042 | GOPAL YADAV | HELPER | M/S YASH BUILDERS | POWER | PGD MAINT. | FIT |
| 12 Month | SUPPLY | 761 | YBD00196 | DURGA NAND TIWARI | HELPER | M/S YASH BUILDERS | ENGINEERING | PUMP HOUSE | FIT |
| 12 Month | SUPPLY | 762 | YBD00272 | BRAHMDEV YADAV | HELPER | M/S YASH BUILDERS | Human Resources | GUEST HOUSE | FIT |
| 12 Month | SUPPLY | 763 | YBD00276 | RAM NARAYAN | HELPER | M/S YASH BUILDERS | Human Resources | GUEST HOUSE | FIT |
| 12 Month | SUPPLY | 764 | YBD00005 | KESHAV PD. | HELPER | M/S YASH BUILDERS | CAP | CL2FILL. | FIT |
| 12 Month | SUPPLY | 765 | YBD00055 | SURENDRA RAI | HELPER | M/S YASH BUILDERS | Human Resources | Safety fire | FIT |
| 12 Month | SUPPLY | 766 | YBD00057 | AKLOO CHOUDHARY | HELPER | M/S YASH BUILDERS | VAP | SBP Maint. | FIT |
| 12 Month | SUPPLY | 767 | YBD00087 | RAMESH RAWAT | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 768 | YBD00166 | BABU LAL | HELPER | M/S YASH BUILDERS | CAP | CL2 FILLING | FIT |
| 12 Month | SUPPLY | 769 | YBD00171 | CHHATU RAWAT | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 770 | YBD00175 | MANOJ KR. RAWAT | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 771 | YBD00177 | JAGPAT | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 772 | YBD00179 | JATAN KUMAR RAWAT | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 773 | YBD00203 | MAST RAJ YADAV | HELPER | M/S YASH BUILDERS | Human Resources | Safety fire | FIT |
| 12 Month | SUPPLY | 774 | YBD00208 | JITENDRA SINGH | HELPER | M/S YASH BUILDERS | Human Resources | Safety fire | FIT |
| 12 Month | SUPPLY | 775 | YBD00291 | VIJAY KUMAR GUPATA | HELPER | M/S YASH BUILDERS | Human Resources | STAFF MESS /CANTEEN | FIT |
| 12 Month | SUPPLY | 776 | YBD00309 | ADITYA RAM | HELPER | M/S YASH BUILDERS | POWER | ASH PLANT P.G.D | FIT |
| 12 Month | SUPPLY | 777 | YBD00310 | BABBAL | HELPER | M/S YASH BUILDERS | Human Resources | canteen | FIT |
| 12 Month | SUPPLY | 778 | YBD00046 | SHRI NARAYAN YADAV | HELPER | M/S YASH BUILDERS | ENGINEERING | REPORT (PUMP HOUSE) | FIT |
| 12 Month | SUPPLY | 779 | YBD00112 | RAJU PASWAN | HELPER | M/S YASH BUILDERS | Human Resources | CANTEEN | FIT |
| 12 Month | SUPPLY | 780 | YBD00054 | JITENDRA PASWAN | HELPER | M/S YASH BUILDERS | Human Resources | Safety fire | FIT |
| 12 Month | SUPPLY | 781 | YBD00328 | NITISH KUMAR | HELPER | M/S YASH BUILDERS | Finance & Commercial and IT | ACCOUNTS | FIT |
| 12 Month | SUPPLY | 782 | YBD00273 | SURENDRA BAITHA | HELPER | M/S YASH BUILDERS | POWER | PGD OPRETIONS | FIT |
| 12 Month | SUPPLY | 783 | YBD00102 | SHIV KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | CANTEEN | FIT |
| 12 Month | SUPPLY | 784 | YBD00231 | VINOD KUMAR MALI | HELPER | M/S YASH BUILDERS | Human Resources | CANTEEN (RELEVER) | FIT |
| 12 Month | SUPPLY | 785 | YBD00255 | SHREENIVAS GAUTAM | PLUMBER | M/S YASH BUILDERS | ENGINEERING | CIVIL COLONY | FIT |
| 12 Month | SUPPLY | 786 | YBD00151 | RAM PARIKHA | HELPER | M/S YASH BUILDERS | VAP | CL2 FILLING | FIT |
| 12 Month | SUPPLY | 787 | YBD00047 | PARMA NAND GUPTA | HELPER | M/S YASH BUILDERS | CAP | CL2 FILLING | FIT |
| 12 Month | SUPPLY | 788 | YBD00218 | RAJENDRA | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 789 | YBD00281 | NIRAJ KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | FIRE (RELEVER) | FIT |
| 12 Month | SUPPLY | 790 | YBD00075 | AVINASH KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | CANTEEN | FIT |
| 12 Month | SUPPLY | 791 | YBD00223 | RAMESH KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 792 | YBD00123 | DEEPAK | HELPER | M/S YASH BUILDERS | Human Resources | CANTEEN | FIT |
| 12 Month | SUPPLY | 793 | YBD00283 | SANJAY KASHYAP | HELPER | M/S YASH BUILDERS | Human Resources | HORTICULTURE | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | SUPPLY | 794 | YBD00155 | BISHUN DEV BAITHA | HELPER | M/S YASH BUILDERS | ENGINEERING | CIVIL COLONY | FIT |
| 12 Month | SUPPLY | 795 | YBD00216 | LALLAN PASWAN | HELPER | M/S YASH BUILDERS | Human Resources | SATAFF MESS | FIT |
| 12 Month | SUPPLY | 796 | YBD00259 | RAJENDRA PRASAD | HELPER | M/S YASH BUILDERS | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 797 | YBD00321 | ASHOK KUMAR RAWAT | HELPER | M/S YASH BUILDERS | Human Resources | HOUSE KEEPING | FIT |
| 12 Month | SUPPLY | 798 | YBD00159 | ABHAY KANT JHA | HELPER | M/S YASH BUILDERS | ENGINEERING | CIVIL COLONY | FIT |
| 12 Month | SUPPLY | 799 | YBD00300 | PAPPU RAWAT | HELPER | M/S YASH BUILDERS | Human Resources | HOUSE KEEPING | FIT |
| 12 Month | SUPPLY | 800 | YBD00100 | ANOJ KUMAR SINGH | HELPER | M/S YASH BUILDERS | Human Resources | TRANSPORT | FIT |
| 12 Month | SUPPLY | 801 | YBD00080 | DEV CHAND | HELPER | M/S YASH BUILDERS | Human Resources | CANTEEN | FIT |
| 12 Month | SUPPLY | 802 | YBD00078 | RAJENDRA PD. | COOK | M/S YASH BUILDERS | Human Resources | CANTEEN | FIT |
| 12 Month | SUPPLY | 803 | YBD00058 | UDAY NARAYAN YADAV | HELPER | M/S YASH BUILDERS | VAP | SBP Maint. | FIT |
| 12 Month | SUPPLY | 804 | YBD00104 | SITA RAM | HELPER | M/S YASH BUILDERS | Human Resources | CANTEEN | FIT |
| 12 Month | SUPPLY | 805 | YBD00282 | AMIT KUMAR SINGH | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 806 | YBD00313 | SHIV SHANKAR | HELPER | M/S YASH BUILDERS | POWER | C&I (PGD) | FIT |
| 12 Month | SUPPLY | 807 | YBD00173 | RANDHA RAWAT | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 808 | YBD00029 | SURESH RAM | HELPER | M/S YASH BUILDERS | CAP | CL2FILL. | FIT |
| 12 Month | SUPPLY | 809 | YBD00314 | AKHILESH KUMAR CHANDRAWANSHI | HELPER | M/S YASH BUILDERS | CAP | CL2 FILLING | FIT |
| 12 Month | SUPPLY | 810 | YBD00052 | CHATTU PRAJAPATI | HELPER | M/S YASH BUILDERS | TECHNICAL SERVICES | Central Lab | FIT |
| 12 Month | SUPPLY | 811 | YBD00279 | CHANDAN RAWAT | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 812 | YBD00044 | JAI PRAKSH SINGH | HELPER | M/S YASH BUILDERS | POWER | PGD MAINT. | FIT |
| 12 Month | SUPPLY | 813 | YBD00329 | SATENDRA JHA | HELPAR | M/S YASH BUILDERS | POWER | C&I (PGD) | FIT |
| 12 Month | SUPPLY | 814 | YBD00331 | RAJNISH SINGH | FITTER | M/S YASH BUILDERS | CAP | CL2 MACH MAINT | FIT |
| 12 Month | SUPPLY | 815 | YBD00332 | USHA DEVI | HELPAR | M/S YASH BUILDERS | Human Resources | HOUSE KEEPING | FIT |
| 12 Month | SUPPLY | 816 | YBD00334 | ARJUN RAM | HELPAR | M/S YASH BUILDERS | VAP | CP.NEW MAINT | FIT |
| 12 Month | SUPPLY | 817 | YBD00335 | VIKASH KUMAR | HELPAR | M/S YASH BUILDERS | Human Resources | CANTEEN | FIT |
| 12 Month | SUPPLY | 818 | YBD00337 | RAHUL KUMAR | HELPAR | M/S YASH BUILDERS | Human Resources | A.D.BILDING(RELEVER) | FIT |
| 12 Month | SUPPLY | 819 | YBD00336 | SURYA PRAKASH SINGH | HELPAR | M/S YASH BUILDERS | CAP | CL2 FILLING | FIT |
| 12 Month | SUPPLY | 820 | YBD00340 | BASANT KUMAR | HELPER | M/S YASH BUILDERS | VAP | FIRE | FIT |
| 12 Month | SUPPLY | 821 | YBD00341 | PRAVESH KUMAR | HELPER | M/S YASH BUILDERS | ENGINEERING | D.M .PLANT | FIT |
| 12 Month | SUPPLY | 822 | YBD00350 | ARUN KUMAR | HELPER | M/S YASH BUILDERS | ENGINEERING | civil colony | FIT |
| 12 Month | SUPPLY | 823 | YBD00348 | RAMJANM | HELPER | M/S YASH BUILDERS | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 824 | YBD00351 | RAVI SHANKAR THAKUR | HELPER | M/S YASH BUILDERS | CAP | PUMP HOUSE | FIT |
| 12 Month | SUPPLY | 825 | YBD00347 | HIRAN KUMAR SINGH | HELPER | M/S YASH BUILDERS | POWER | D.M.PLANT | FIT |
| 12 Month | SUPPLY | 826 | YBD00352 | VIKASH KUMAR | HELPAR | M/S YASH BUILDERS | Human Resources | HOUSE KEEPING | FIT |
| 12 Month | SUPPLY | 827 | YBD00357 | ANIL KUMAR SHAH | HELPER | M/S YASH BUILDERS | Human Resources | CL2FILLING | FIT |
| 12 Month | SUPPLY | 828 | YBD00354 | RAMVINAY | HELPER | M/S YASH BUILDERS | Human Resources | HORTICULURE | FIT |
| 12 Month | SUPPLY | 829 | YBD00353 | ASHOK KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | CANTEEN | FIT |
| 12 Month | SUPPLY | 830 | YBD00358 | NITISH KUMAR MEHTA | ELECTRICAL TRACNICION | M/S YASH BUILDERS | POWER | P.G.D. C&I | FIT |
| 12 Month | SUPPLY | 831 | YBD00360 | VIPIN KUMAR SHUKLA | ELECTRICAL TRACNICION | M/S YASH BUILDERS | POWER | C&I (PGD) | FIT |
| 12 Month | SUPPLY | 832 | YBD00361 | DEEPAK GURJER | C.LAB OPRETER | M/S YASH BUILDERS | TECHNICAL SERVICES | C.LAB | FIT |
| 12 Month | SUPPLY | 833 | 50095 | SUMANT KUMAR YADAV | LOGISTICK | M/S YASH BUILDERS | LOGISTIC | Logistic | FIT |
| 12 Month | SUPPLY | 834 | 200343 | PRAMOD KUMAR RAM | CI2 FILLING | M/S YASH BUILDERS | CAP | CHLORINE FILLING | FIT |
| 12 Month | SUPPLY | 835 | 50127 | RAJESH KUMAR CHANDRAVANSHI | CI2 FILLING | M/S YASH BUILDERS | CAP | CHLORINE FILLING | FIT |
| 12 Month | SUPPLY | 836 | 50128 | SUNEEL KUMAR | LOGISTICK | M/S YASH BUILDERS | LOGISTIC | Logistic | FIT |
| 12 Month | SUPPLY | 837 | OMI00102 | KANAHIYA LAL RAM | HELPER | M/S YASH BUILDERS | CAP | CSF PROSSES | FIT |
| 12 Month | SUPPLY | 838 | OMI00103 | KHURRAM | HELPER | M/S YASH BUILDERS | CAP | CSF PROSSES | FIT |
| 12 Month | SUPPLY | 839 | 190045 | SUJAY KUMAR CHOUBEY | HELPER | M/S YASH BUILDERS | CAP | CSF PROSSES | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | SUPPLY | 840 | OMI00101 | SHIV DARASH | HELPER | M/S YASH BUILDERS | CAP | CSF PROSSES | FIT |
| 12 Month | SUPPLY | 841 | OMI00104 | RAJU RAM | HELPER | M/S YASH BUILDERS | CAP | CSF PROSSES | FIT |
| 12 Month | SUPPLY | 842 | OMI00105 | SUNIL KUMAR | HELPER | M/S YASH BUILDERS | CAP | CSF PROSSES | FIT |
| 12 Month | SUPPLY | 843 | OMI00106 | UMESH KUMAR PANIKA | HELPER | M/S YASH BUILDERS | CAP | CSF PROSSES | FIT |
| 12 Month | SUPPLY | 844 | OMI00083 | RAM JI SAH | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 845 | OMI00002 | BALINDER SINGH | FITTER | M/S YASH BUILDERS | VAP | PAC MAINT | FIT |
| 12 Month | SUPPLY | 846 | OMI00004 | SANTOSH KUMAR PASWAN | FITTER | M/S YASH BUILDERS | VAP | PAC MAINT | FIT |
| 12 Month | SUPPLY | 847 | OMI00100 | BIRENDRA  RAM | HELPER | M/S YASH BUILDERS | VAP | PAC MAINT | FIT |
| 12 Month | SUPPLY | 848 | 70008 | SANJAY KR. TRIPATHI | LAB ASST. | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 849 | OMI00114 | NIRANJAN KUMAR SAH | DRIVER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 850 | OMI00115 | SATEESH KUMAR | DRIVER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 851 | OMI00006 | SOBH NATH THAKUR | LAB | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 852 | OMI00009 | PREM NATH | LAB | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 853 | 70011 | GUDDU | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 854 | OMI00028 | AMIT KUMAR | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 855 | OMI00033 | RAM JEE KANUJAYA | LAB | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 856 | OMI00049 | DHIRENDRA KUMAR | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 857 | OMI00078 | SUNIL GUPTA | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 858 | OMI00116 | SACHIN TOPPO | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 859 | OMI00021 | PRAMOD KUMAR KHAIRWAR | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 860 | OMI00025 | SURENDRA KUMAR SINGH | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 861 | OMI00032 | RAM JEE  YADAV | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 862 | OMI00037 | AMBRESH KUMAR | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 863 | OMI00045 | BIHARI LAL | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 864 | OMI00052 | AMIT KUMAR GUPTA | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 865 | OMI00069 | PREM CHANDRA SINGH | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 866 | 70084 | BIRENDRA KUMAR | HELPER | M/S YASH BUILDERS | VAP | PAC PROSSES | FIT |
| 12 Month | SUPPLY | 867 | YSC00013 | PARMJEET SINGH | GUARD | M/S YASH SECURITY | Human Resources | SECURITY | FIT |
| 12 Month | SUPPLY | 868 | YSC00014 | JAKIR HUSAIN | GUARD | M/S YASH SECURITY | Human Resources | SECURITY | FIT |
| 12 Month | SUPPLY | 869 | YSC00015 | PRABHAT KUMAR DWIVEDI | GUARD | M/S YASH SECURITY | Human Resources | SECURITY | FIT |
| 12 Month | SUPPLY | 870 | YSC00009 | OM PRAKASH RAI | GUARD | M/S YASH SECURITY | Human Resources | SECURITY | FIT |
| 12 Month | SUPPLY | 871 | YSC00001 | RAMESH RAI | GUARD | M/S YASH SECURITY | Human Resources | SECURITY | FIT |
| 12 Month | SUPPLY | 872 | YSC00002 | SAMBHU NATH YADAV | GUARD | M/S YASH SECURITY | Human Resources | SECURITY | FIT |
| 12 Month | SUPPLY | 873 | YSC00003 | RAM EKBAL YADAV | GUARD | M/S YASH SECURITY | Human Resources | SECURITY | FIT |
| 12 Month | SUPPLY | 874 | YSC00004 | RAJU MOURYA | GUARD | M/S YASH SECURITY | Human Resources | SECURITY | FIT |
| 12 Month | SUPPLY | 875 | YSC00005 | RAMESHWER PRASAD YADAV | GUARD | M/S YASH SECURITY | Human Resources | SECURITY | FIT |
| 12 Month | SUPPLY | 876 | YSC00006 | RAVINDRA KR. SINGH | GUARD | M/S YASH SECURITY | Human Resources | SECURITY | FIT |
| 12 Month | SUPPLY | 877 | YSC00010 | PAWAN KUMAR | GUARD | M/S YASH SECURITY | Human Resources | SECURITY | FIT |
| 12 Month | SUPPLY | 878 | YSC00011 | SURYA NATH YADAV | GUARD | M/S YASH SECURITY | Human Resources | SECURITY | FIT |
| 12 Month | SUPPLY | 879 | YSC00012 | MANOJ KR. SINGH | GUARD | M/S YASH SECURITY | Human Resources | SECURITY | FIT |
| 12 Month | SUPPLY | 880 | DAY00151 | SONU KUMAR | OPERATOR | M/S ANIL KUMAR | POWER | PGD CHP OPERATION | FIT |
| 12 Month | SUPPLY | 881 | DAY00138 | NILESH TIWARI | HELPER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 882 | DAY00017 | BIRBAL SINGH | WELDER | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 883 | DAY00018 | SURENDRA YADAV | WELDER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 884 | DAY00019 | NIRJAY SINGH | OPERATOR | M/S ANIL KUMAR | POWER | PGD CHP OPERATION | FIT |
| 12 Month | SUPPLY | 885 | DAY00104 | MUKESH KUMAR YADAV II | HELPER | M/S ANIL KUMAR | POWER | PGD CHP OPERATION | FIT |
| 12 Month | SUPPLY | 886 | DAY00068 | GAUTAM SINGH | OPERATOR | M/S ANIL KUMAR | POWER | PGD CHP OPERATION | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | SUPPLY | 887 | DAY00082 | RAKESH KUMAR SINGH | WELDER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 888 | DAY00142 | SATYAM KUMAR KHARWAR | HELPER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 889 | DAY00147 | JITENDRA KUMAR | HELPER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 890 | DAY00110 | GANGA PRASAD | HELPER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 891 | DAY00111 | SURESH KUMAR I | HELPER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 892 | DAY00122 | SHIVAM KUMAR KHARWAR | HELPER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 893 | DAY00123 | DEEPAK KUMAR GOND | HELPER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 894 | DAY00121 | AMBIKA PRASAD | WELDER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 895 | DAY00058 | CHANDRA KANT YADAV | WELDER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 896 | DAY00073 | RAHUL KUMAR KHARVAR | HELPER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 897 | DAY00076 | SHEKH ALI HUSSAIN | HELPER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 898 | DAY00063 | SHIV BACHAN | FITTER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 899 | DAY00064 | RADHESHYAM JAUHARI | FITTER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 900 | DAY00061 | SHYAM BIHARI SINGH | OPERATOR | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 901 | DAY00066 | RAJ KUMAR | FITTER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 902 | DAY00081 | CHITRANJAN SINGH | FITTER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 903 | DAY00062 | UMESH KUMAR SINGH | ASS. FITER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 904 | DAY00118 | ABHISHEK | HELPER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 905 | DAY00135 | DESHRAJ SINGH | WELDER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 906 | DAY00065 | MUNNI LAL | FITER | M/S ANIL KUMAR | POWER | PGD MACHENICAL | FIT |
| 12 Month | SUPPLY | 907 | DAY00109 | KULDIP | MESHION | M/S ANIL KUMAR | ENGINEERING | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 908 | DAY00042 | BIRENDRA SHARMA | HELPER | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 909 | DAY00022 | SURESH CHAND | HELPER | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 910 | DAY00041 | RAJENDRA SHARMA | CARPENTER | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 911 | DAY00046 | JAGAR NATH SAHA | HELPER | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 912 | DAY00032 | RAM EKBAL | HELPER | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 913 | DAY00050 | RAGHUBIR | HELPER | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 914 | DAY00051 | MANBODH (I) | HELPER | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 915 | DAY00048 | MANGAL BAITHA | HELPER | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 916 | DAY00098 | VIDYA NATH | SUPERVISIOR | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 917 | DAY00099 | MANOJ KR. SINGH | SUPERVISIOR | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 918 | DAY00149 | JAI SINGH II | SUPERVISIOR | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 919 | DAY00150 | SURESH KUMAR II | HELPER | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 920 | DAY00102 | NAGENDRA MEHTO | SUPERVISIOR | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 921 | DAY00145 | JANAK SINGH | HELPER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 922 | DAY00130 | BINAY RAM | HELPER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 923 | DAY00077 | AYODHYA KUMAR | HELPER | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 924 | DAY00132 | SUJIT KUMAR | HELPER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 925 | DAY00133 | DEVI DYAL | HELPER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 926 | DAY00129 | SANTOSH KUMAR II | CARPENTER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 927 | DAY00124 | SAURABH SRIVASTAV | HELPER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 928 | DAY00137 | OM PRAKASH KUMAR | HELPER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 929 | DAY00037 | SHYAM BIHARI | HELPER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 930 | DAY00004 | RAM BRIKSH | MESHION | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 931 | DAY00005 | PATI RAJ | MESHION | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 932 | DAY00006 | SOORAJ VISH. | SUPERVISIOR | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 933 | DAY00036 | NIT NARAYAN | OFFICE BOY | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | SUPPLY | 934 | DAY00009 | DHAN SINGH | WELDER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 935 | DAY00010 | SOORAJ DEV SAH | OPERATOR | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 936 | DAY00148 | ANOOP KUMAR | SUPERVISIOR | M/S ANIL KUMAR | ENGINEERING | COLONY CIVIL | FIT |
| 12 Month | SUPPLY | 937 | DAY00011 | PRAYAG THAKUR | HELPER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 938 | DAY00014 | BHARAT BIND | HELPER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 939 | DAY00015 | HIRA LAL | MESHION | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 940 | DAY00033 | BAS DEV | MESHION | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 941 | DAY00016 | AKSHAY LAL BAITHA | PLUMBER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 942 | DAY00034 | RAMA SHANKER | HELPER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 943 | DAY00141 | ASHISH MISHRA | SUPERVISIOR | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 944 | DAY00139 | UDAY KUMAR CHAUDHARY | SUPERVISIOR | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 945 | DAY00140 | PRIYAM SINGH | SUPERVISIOR | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 946 | DAY00049 | SURYA DEO SAH | HELPER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 947 | DAY00136 | AJAY KUMAR | HELPER | M/S ANIL KUMAR | POWER | PGD CIVIL | FIT |
| 12 Month | SUPPLY | 948 | DAY00039 | SHRAWAN KUMAR | HELPER | M/S ANIL KUMAR | TECHNICAL SERVICES | ENV | FIT |
| 12 Month | SUPPLY | 949 | DAY00027 | RAJ NATH YADAV | OPERATOR | M/S ANIL KUMAR | TECHNICAL SERVICES | ENV | FIT |
| 12 Month | SUPPLY | 950 | DAY00084 | JADDU PRAJAPATI | HELPER | M/S ANIL KUMAR | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 951 | DAY00096 | SULENDRA KUMAR | HELPER | M/S ANIL KUMAR | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 952 | DAY00087 | KABINDER YADAV | MAALI | M/S ANIL KUMAR | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 953 | DAY00088 | KASHI PODDAR | MAALI | M/S ANIL KUMAR | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 954 | DAY00089 | HRIDAY NARAYAN | MAALI | M/S ANIL KUMAR | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 955 | DAY00090 | RAM PYARE RAM | MAALI | M/S ANIL KUMAR | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 956 | DAY00091 | RAM ADHAR SINGH | HELPER | M/S ANIL KUMAR | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 957 | DAY00092 | ASHOK KUMAR THAKUR | HELPER | M/S ANIL KUMAR | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 958 | DAY00103 | VINOD KUMAR | MAALI | M/S ANIL KUMAR | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 959 | DAY00093 | RAM SINGH I | HELPER | M/S ANIL KUMAR | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 960 | DAY00094 | BRIJESH KUMAR RAI | MAALI | M/S ANIL KUMAR | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 961 | DAY00119 | RAVI KUMAR | HELPER | M/S ANIL KUMAR | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 962 | DAY00095 | RAJ KUMAR PANIKA | MAALI | M/S ANIL KUMAR | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 963 | DAY00115 | JEET RAM | TECHINCAL | M/S ANIL KUMAR | ENGINEERING | AC MAINT.DEPTT. | FIT |
| 12 Month | SUPPLY | 964 | DAY00116 | AKASH KUMAR | TECHINCAL | M/S ANIL KUMAR | ENGINEERING | AC MAINT.DEPTT. | FIT |
| 12 Month | SUPPLY | 965 | DAY00114 | RAMNARAYAN | TECHINCAL | M/S ANIL KUMAR | ENGINEERING | AC MAINT.DEPTT. | FIT |
| 12 Month | SUPPLY | 966 | DAY00152 | DEEPAK YADAV | TECHINCAL | M/S ANIL KUMAR | ENGINEERING | INSTRUMENT | FIT |
| 12 Month | SUPPLY | 967 | 50093 | ABHISHEK | WELDER | M/S ANIL KUMAR | ENGINEERING | CHEMICAL CIVIL | FIT |
| 12 Month | SUPPLY | 968 | OMI00014 | SURAJ DEV YADAV | DRIVER | M/S ANIL KUMAR | ENGINEERING | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 969 | OMI00015 | RAGHVENDRA KR CHAUBEY | DRIVER | M/S ANIL KUMAR | ENGINEERING | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 970 | OMI00016 | RAJEEV KR. SAHNI | DRIVER | M/S ANIL KUMAR | ENGINEERING | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 971 | OMI00017 | VIJAY KUMAR | DRIVER | M/S ANIL KUMAR | ENGINEERING | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 972 | OMI00018 | UMESH YADAV | DRIVER | M/S ANIL KUMAR | ENGINEERING | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 973 | OMI00019 | KAMALA PRASAD BHARTI | FITTER MACHENIC | M/S ANIL KUMAR | ENGINEERING | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 974 | OMI00056 | MANOJ KUMAR | DRIVER | M/S ANIL KUMAR | ENGINEERING | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 975 | OMI00060 | DHRMENDER PAL | DRIVER | M/S ANIL KUMAR | ENGINEERING | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 976 | OMI00061 | ANISH KUMAR CHAUBEY | DRIVER | M/S ANIL KUMAR | ENGINEERING | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 977 | OMI00062 | PANCHAM SINGH | FITTER MACHENIC | M/S ANIL KUMAR | ENGINEERING | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 978 | OMI00110 | JAG SAH | DRIVER | M/S ANIL KUMAR | ENGINEERING | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 979 | OMI00111 | NAND LAL | DRIVER | M/S ANIL KUMAR | ENGINEERING | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 980 | OMI00123 | KAMAL PRASAD GUPTA | HELPER | M/S ANIL KUMAR | CAP | PAC PROSSES | FIT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 Month | SUPPLY | 981 | OMI00126 | SANTOSH | DRIVER | M/S ANIL KUMAR | CAP | PAYLODER MANT. | FIT |
| 12 Month | SUPPLY | 982 | OMI00128 | SOHIT SAHANI | DRIVER | M/S ANIL KUMAR | ENGINEERING | PAYLODER | FIT |
| 12 Month | SUPPLY | 983 | OMI00129 | DURGA NAND PRASAD | DRIVER | M/S ANIL KUMAR | ENGINEERING | PAYLODER | FIT |
| 12 Month | SUPPLY | 984 | SEC00003 | ASHOK YADAV | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | CAP | MEMBRANE ,ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 985 | SEC00042 | ARVIND SINGH | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | CAP | MEMBRANE ,ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 986 | SEC00040 | KAUSTUBHMANI DUBEY | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | CAP | MEMBRANE ,ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 987 | SEC00034 | NIRAJ KUMAR | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | CAP | MEMBRANE ,ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 988 | SEC00006 | RAKESH  YADAV | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | ENGINEERING | OLD RECTIFIARE , ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 989 | SEC00009 | DILIP KUMAR | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | ENGINEERING | OLD RECTIFIARE , ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 990 | SEC00024 | RAM JI JAYSWAL | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | VAP | ALCP ,ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 991 | SEC00022 | PREM CHAND VISHWAKARMA | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | VAP | NEW SBP , ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 992 | SEC00027 | DHARMESH GIRI | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | VAP | NEW SBP , ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 993 | SEC00028 | TARKESHWER MISHRA | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | VAP | NEW SBP , ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 994 | SEC00026 | BALESHWAER SINGH | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | VAP | BOILER , ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 995 | SEC00011 | SANJAY THAKUR | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | VAP | BOILER , ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 996 | SEC00029 | SHASHI KANT GUPTA | HELPER | M/S SINGH ELECTERCIAL WORKS | VAP | BOILER , ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 997 | SEC00010 | BALCHAND THAKUR | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | ENGINEERING | ELECTERCIAL WORK SHOP COLONY | FIT |
| 12 Month | SUPPLY | 998 | SEC00025 | LUTTUR YADAV | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | ENGINEERING | ELECTERCIAL WORK SHOP COLONY | FIT |
| 12 Month | SUPPLY | 999 | SEC00008 | RAM KUMAR YADAV | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | ENGINEERING | ELECTERCIAL WORK SHOP | FIT |
| 12 Month | SUPPLY | 1000 | SEC00033 | RAJESH KUMAR YADAV | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | ENGINEERING | ELECTERCIAL WORK SHOP | FIT |
| 12 Month | SUPPLY | 1001 | SEC00031 | SUNIL CHAUDHARY | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | ENGINEERING | ELECTERCIAL WORK SHOP | FIT |
| 12 Month | SUPPLY | 1002 | SEC00032 | ARUN PRATAP SINGH | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | ENGINEERING | ELECTERCIAL WORK SHOP | FIT |
| 12 Month | SUPPLY | 1003 | SEC00014 | CHANDESHWAR VISHWAKARMA | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | POWER | PGD ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 1004 | SEC00016 | SANJAY KUMAR SHARMA | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | POWER | PGD ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 1005 | SEC00038 | AKHILESH DUBEY | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | POWER | PGD ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 1006 | SEC00041 | SUNIL KUMAR | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | POWER | PGD ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 1007 | SEC00043 | VINAY KUMAR | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | POWER | PGD ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 1008 | SEC00044 | VINAY KUMAR YADAV | ELECTERCIAN | M/S SINGH ELECTERCIAL WORKS | POWER | PGD ELECTERCIAL | FIT |
| 12 Month | SUPPLY | 1009 | YBD01NEW | SURAJ RAWAT | HELPER | M/S YASH BUILDERS | Human Resources | HOUSEKEEPING COLONY | FIT |
| 12 Month | SUPPLY | 1010 | YBD02NEW | ASHOK KORBA | HELPER | M/S YASH BUILDERS | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 1011 | YBD03NEW | SATENDRA KUMAR | HELPER | M/S YASH BUILDERS | Human Resources | HORTICULTURE | FIT |
| 12 Month | SUPPLY | 1012 | OMI00127 | DEEPAK SRIVASTAVA | HELPER | M/S YASH BUILDERS | VAP | PAYLOADER | FIT |
| 12 Month | SUPPLY | 1013 | BPS00239 | RAJESH KUMAR | HELPER | M/S B P SINGH & BROTHERS | VAP | SRS | FIT |

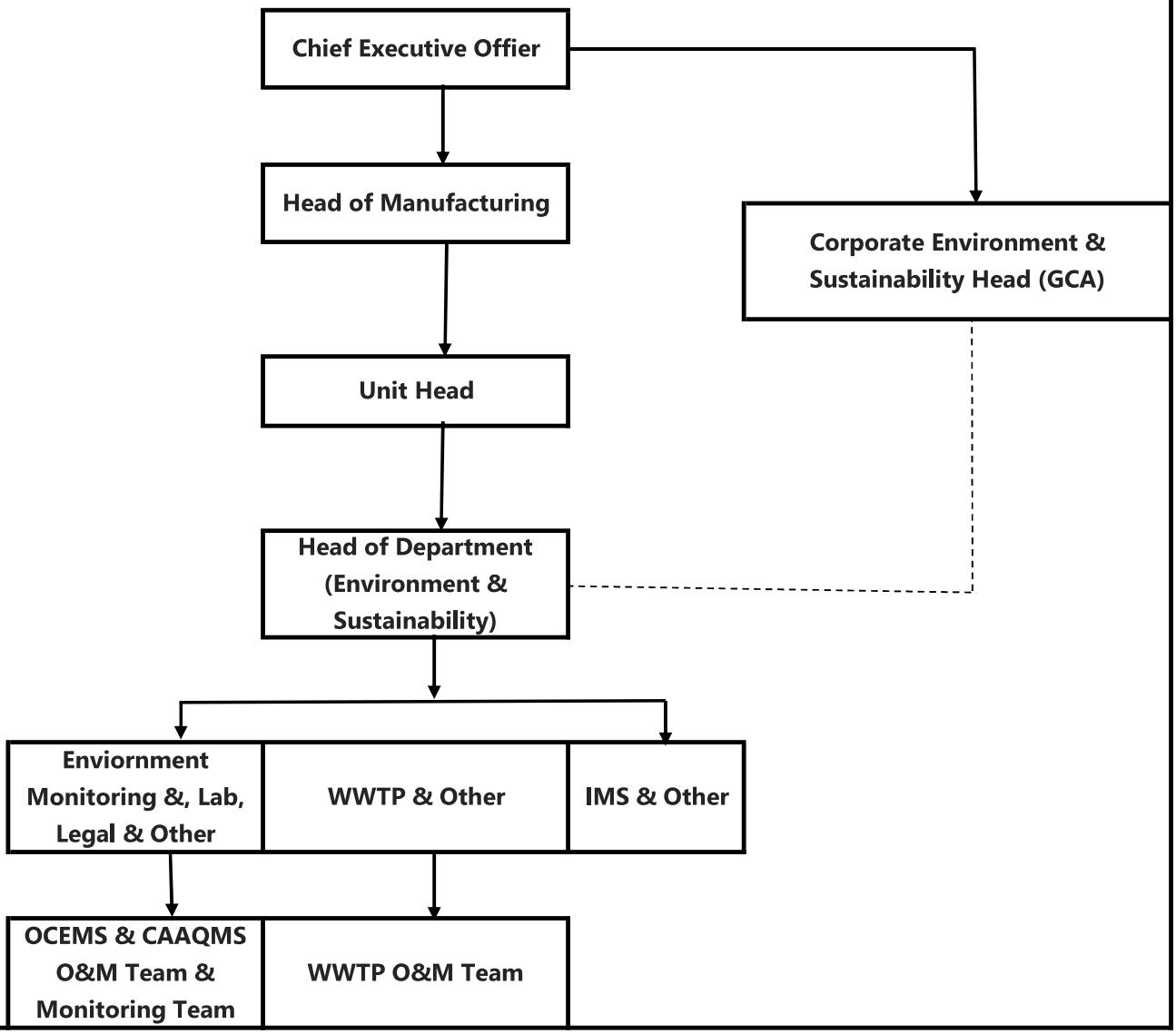
## GRCD Renukoot CSR Activities FY 2024-25 (Till April 2024 to March2025) Annexure- -11

| Focus Area | Targeted Beneficiary | Achieved Beneficiary | Balance Beneficiary | Targeted Unit Fund | Incurred Expenditure | Balance Amount (Rs. in Lakhs) |
|---|---|---|---|---|---|---|
| 1. Education | 3500 | 5187 | 0 | 12.60 | 13,93,468 | 0 |
| 2. Health Care | 12400 | 20759 | 0 | 23.25 | 20,58,245 | 0 |
| 3. Sustainable Livelihoods | 1700 | 4409 | 0 | 8.25 | 6,55,282 | 0 |
| 4. Infrastructure Development | 0 | 0 | 0 | 0.00 | 0 | 0 |
| 5. Social Empowerment & Overheads | 7500 | 9279 | 0 | 5.90 | 8,93004.44 | 0 |
| Total - | 25100 | 39634 | 0 | 50.00 | 49,99,999 | 0 |

**Annexure-12**

# GRASIM INDUSTRIES LIMITED
# CHEMICAL DIVISION, RENUKOOT

## STRUCTURE OF ENVIRONMENT & SUSTAINABILITY MANAGEMENT CELL



# Tata AIG General Insurance Company Limited

2nd Floor, Citi Tower, Next to Mahatma Gandhi Hospital, Dr. S. S. Rao Road, Parel – East, Mumbai

**Held Cover Letter**

To ,

The Manager,

Grasim Industries Limited

A-2, Aditya Birla Centre, S.K Ahire Marg, Worli, Mumbai –400030

Date - 28/03/2025

| Reference No | Dated | Amount In INR |
|---|---|---|
| 102001102583190 | 26-03-2025 | 15,26,000 |

We hereby confirm the cover as per agreed terms for the policy period mentioned below, Subject to realization of funds. This letter is valid only for 30 days from date of issuance or until issuance of policy whichever is earlier

| | | | |
|---|---|---|---|
| 1 | **Insured** | : | **Grasim Industries Limited** |
| 2 | **Busines Description** | : | It is a textiles manufacturer a global player in VSF, the largest chemicals (Chlor-Alkali-s), largest cement producer and Diversified Financial Services (NBFC, Asset Management and Life Insurance) player in India and in paint business |
| 3 | **Communication Address** | : | A-2, Aditya Birla Centre, S.K Ahire Marg, Worli, Mumbai –400030 |
| 4 | **GST Address (Incase differ from communication address)** | | |
| 4 | **Risk Address** | : | Anywhere in India |
| 5 | **Policy Period** | : | 01/04/2025 to 31/03/2026 |
| 6 | **Indemnity Limit** | : | INR **1,40,00,00,000** Any One Accident and<br>INR **1,40,00,00,000** in the Aggregate during the Policy Period |
| 7 | **Form** | : | As per TATA AIG's Public Liability Insurance Indian Wording |
| 8 | **Paid Up Capital** | : | INR **1,35,00,00,000** |
| 9 | **ESTIMATED ANNUAL TURNOVER AS DECLARED:** | : | INR **4,41,73,00,00,000** |
| 10 | **Territory & Jurisdiction** | : | India Only |
| 11 | **Annual Premium** | : | |

| | |
|---|---|
| Premium without Tax | 7,00,000 |
| *Taxes as applicable on above Premium @18% | 1,26,000 |
| ERF Contribution | 7,00,000 |
| **Total Premium** | **15,26,000** |

| | | | |
|---|---|---|---|
| 12 | **Loss Record** | : | Nil Loss History |
| 13 | **Subjectivity** | : | - Proposal form duly filled, signed, dated and stamped<br>- "No Known or Reported Losses or Circumstances Leading to Losses," declaration prior to binding<br>- **Duly Stamped & Signed Form-III** |
| 14 | **Date** | : | 28-03-2025 |

**FOR TATA AIG GENERAL INSURANCE COMPANY LIMITED**

**IRDA Registration No 108**

**CIN No # U85110MH2000PLC 128425**