ADITYA BIRLA

GRASIM

May 23, 2020

No. 1519/Env-SFD/MOEF/RO(W)/BPL/EC

Director
Ministry of Environment, Forest and Climate Change,
Regional Office (WZ),
E-5, Kendriya Paryavaran Bhawan,
E-5 Arera Colony, Link Road-3,
Ravishankar Nagar,
Bhopal – 462016

Sub: Submission Environment Clearance Compliance Report for the period from October 2019 to March 2020 for Expansion of Solvent Spun Cellulosic Fibre (3650 TPA to 10950 TPA) at Village Mehatwas, Birlagram, Tehsil Nagda, District Ujjain, M.P. M/s Grasim Industries Limited, (Excel Fibre Division).

Ref: Environment Clearance Issued vide File No. J-11011/255/2011-IA II (I), General Condition (xix)

Dear Sir,

This has reference to above cited environment clearance & condition prescribed therein and provisions of Section 10 of EIA Notification, dated 2006.

We are enclosing with this letter Six Monthly point wise Environment Clearance Compliance Report along with data sheet, monitoring reports and relevant documents for the period from October – 2019 to March -2020 of Grasim Industries Limited, Excel Fibre Division.

We are also sending the compliance report to MoEF&CC Regional Office, Bhopal through e-mail address on rowz.bpl-mef@nic.in.

Hope you will find the information provided in order, we shall be happy to furnish further details / clarifications, if required.

Thanking you,
Yours faithfully,

K Suresh
Sr. President & Unit Head

क्षेत्रीय निदेशालय (मध्य)
प्राप्त किया गया
दिनांक 5/6/2020

CC:

1. **Ministry of Environment Forest & Climate Change, New Delhi**
2. **Central Pollution Control Board, Zonal Office, Bhopal**
3. **Madhya Pradesh Pollution Control Board - Bhopal**

M.P. Pollution Control Board BHOPAL
No.
Dt.
Encl.

Enclosed: As Above

Grasim Industries Limited
Staple Fibre Division
Birlagram - 456 331, Nagda (M.P.) INDIA Tele: +91 7366 246760-64 Fax : +91 7366 246024, 244114
CIN : L17124MP1947PLC000410 Website : www.adityabirla.com E-mail : grasim-sfd.nagda@adityabirla.com
Regd. Office : P.O. Birlagram, Nagda - 456 331 (M.P.)

5-6-20

कार्यालय/OFFICE
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forests & Climate Change,
क्षेत्रीय कार्यालय(पश्चिम क्षेत्र)/Regional Office(Western Zone)
भोपाल (म.प्र.)/BHOPAL-462016

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May 23, 2020

No. 1519/Env-SFD/MOEF/RO(W)/BPL/EC

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CIN : L17124MP1947PLC000410 Website : www.adityabirla.com E-mail : grasim-sfd.nagda@adityabirla.com
Regd. Office : P.O. Birlagram, Nagda - 456 331 (M.P.)

SIX MONTHLY COMPLIANCE REPORT
OF
ENVIRONMENT CLEARNACE
FOR

GRASIM INDUSTIRES LIMITED, EXCEL FIBRE DIVISION
BIRLAGRAM, NAGDA – 456 331
DIST. UJJAIN (M.P.)

Submitted to:

Ministry of Environment Forest & Climate Change, (WR Office) Bhopal

Ministry of Environment Forest & Climate Change, New Delhi

Central Pollution Control Board, Zonal Office, Bhopal

Madhya Pradesh Pollution Control Board - Bhopal

Submitted by:

Grasim Industries Limited, Excel Fibre Division

Birlagram, Nagda – 456 331

District: Ujjain (M.P.)

Period: OCTOBER 2019 – MARCH 2020

Submitted on: 1 JUNE 2020

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Exhibit -2	Image of the shutters on Spinning Machine
Exhibit -3	Images of Dykes constructed for chemical storage tanks
Exhibit -4	Details of Fire Fighting Arrangement and List of the Fire Fighting Equipment
Exhibit -5	Glimpse of plantation in the complex
Exhibit -6	Image of the display board at Factory Gate showing environmental parameters for general public
Exhibit -7	Implemented measures taken for environmental protection
Exhibit -8	Details of Environment Cell
Exhibit -9	Advertisement in local newspaper for environment clearance

Introduction

1. Grasim Industries Limited (GIL), incorporated on 25th Aug., 1947; is a flagship company of the Aditya Birla Group and India's pioneer in manufacturing of Viscose Staple Fibre (VSF) a man-made, biodegradable fibre with characteristics akin to cotton.

2. M/s. Grasim Industries Ltd. has four VSF Plants in India which are located at Nagda (Madhya Pradesh), Harihar (Karnataka), Kharach & Vilayat (Gujarat).

3. Excel Fibre Division is based on third generation solvent spun cellulosic technology developed by Birla Research Institute Birlagram, Nagda.

4. Solvent Spun Cellulosic Technology does not required hazardous chemicals like Carbon Disulphide (CS2), Sulphuric Acid (H2SO4) and Sodium Hydroxide (NaoH) in Manufacturing Process.

5. Solvent used for dissolving pulp and regeneration of fibre is environment friendly and more than 99.68% solvent recovered and reuse in the process.

6. No source of gaseous emission in the Solvent Spun Cellulose manufacturing process and specific water consumption is very low as compare to conventional Viscose Staple Fibre Manufacturing Process.

7. All the operation related permits, including Environmental Clearance from MOEF & CC and Consents to Establish (CTE) & Consent to Operate (CTO) has obtained from M.P. Pollution Control Board, Bhopal are in place.

8. Environmental quality monitoring in & around the Plant site is being carried out by M.P. Pollution Control Board & in-house Laboratory on a regular basis.

9. 03 No. of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) along with other Environmental Parameter from Grasim Complex displayed on LED Board at main gate of the Plant Premises.

10. Online Continuous Effluent Quality Monitoring System (CEQMS) is installed and connected with M.P. Pollution Control Board and CPCB, New Delhi.

11. A vast green belt is developed to curb the emission and also to improve environmental conditions in & around Grasim complex.

12. Point wise compliance status of Environmental Clearance for Grasim Industries Limited, Excel Fibre Division, Birlagram, Nagda is furnished herewith;

Environment Clearance
(Grasim Industries Limited, Excel Fibre Division)

MOEF Ref. F. No. J11011/255/2011-IA (II) (I) dated 16.08.2012

Period: OCTOBER 2019 – MARCH 2020

General Profile

<table>
<tr><th>Sr. No.</th><th>Stipulation</th><th>Compliance Status</th></tr>
<tr><td>1.0</td><td>Kindly refer your letter dated 18th April 2011 and 3rd November 2011, along with project documents including Form-1, Terms of Reference, Pre-feasibility report and additional information submitted vide letter dated 4th July 2011 and 13th July 2011 regarding above mentioned project.</td><td>Acknowledged</td></tr>
<tr><td rowspan="3">2.0</td><td colspan="2">The Ministry of Environment and Forest has examined the application. It is noted that proposal is for expansion of Solvent Spun Cellulosic Fibre (3650 TPA to 10950 TPA) at Plot No. 295, 317-319, 326, 340-342, village Mehatwas, Birlagram, Tehsil Nagda, District Ujjain, M.P. Total plot area for existing Staple Fibre Unit is 188.12 ha. Total plot area for of the existing Solvent Spun Cellulosic Fibre Unit (10 TPD) is 0.86 ha. Additional land requirement for proposed expansion is 0.92 ha within existing Viscose Staple Fibre (VSF) unit. No wild life sanctuary / reserve forest is located within 10 km. Total cost of the project is Rs. 78.00 Crores. Following product will be manufactured.</td><td rowspan="3">No wild life sanctuary / reserve is located within 10 km of the Plant Site.

Total Cost of the Project is: 83.30 Crores</td></tr>
<tr><td>
<table>
<tr><th rowspan="2">Sr.</th><th rowspan="2">Product</th><th colspan="3">Production Capacity (TPA)</th></tr>
<tr><th>Existing</th><th>Proposed Expansion</th><th>Total</th></tr>
</table>
</td><td></td></tr>
<tr><td>
<table>
<tr><td>1</td><td>Solvent Spun Cellulosic Fibre</td><td>3650</td><td>7300</td><td>10950</td></tr>
</table>
</td><td>Total Production During Reporting Period (October - 2019 – March- 2020) is 4466 Metric Tons. Plant stopped since 25.03.2020 for COVID-19 precaution.</td></tr>
</table>

Sr. No.	Stipulation	Compliance Status
3.0	Utility requirement (i.e. water, power and stream) will be met from existing unit. Hazardous Chemical i.e. CS2 and H2SO4 will not be used in the process. Solvent recovery will be 99.8%. Total water requirement from the dam of the Chambal River is 680 m3/day and no additional fresh water will be required for the expansion. Effluent generation will be 530 m3/day and treated in Effluent Treatment Plant (ETP) and reused in SFD auxiliary cooling towers in place of fresh water being used currently. The ETP sludge will be incinerated in the existing coal fired Boiler. Waste / spent oil will be sold to authorized recyclers.	Water and Power & Steam requirement is being met from existing facilities of Staple Fibre Division and Captive Power Plants and no additional utility is setup for the expansion Total Effluent generated is 285 m2/day and effluent generated form expansion is being utilized in Auxiliary Cooling Towers as makeup in place of fresh water. Hazardous Chemical i.e. CS2, H2SO4 is not being used in manufacturing process. Maximum Solvent Recovery is achieved during the reporting period is 99.73% ETP Sludge is being utilized in existing coal fired boilers.
4.0	EIA / EMP report preparation and public hearing were exempted as per para 7 (ii) of EIA Notification, 2006.	Acknowledged
5.0	All the Man-made fibre manufacturing "Rayon" are listed as S.N. 5(d) under category 'A' and apprised at the Central level.	Acknowledged
6.0	The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 25th, 28th and 29th meetings held during 28th -30th July 2011, 20th – 21st October 2011 and 17th – 18th November 2011 respectively. The committee recommended the proposal for environment clearance.	Acknowledged
7.0	Based on the information submitted by the project proponent, the Ministry of Environment and Forest hereby accords environment clearance to above project under the provisions of EIA Notification dated 14th September 2006, subject to compliance of the following Specific and General Conditions.	Acknowledged

A. SPECIFIC CONDITIONS

Sr. No.	Stipulation	Compliance Status
i)	The grant of environmental clearance is only for pilot plant project based on clean technology. Whenever unit goes for commercial establishment / full scale plant, the unit shall obtain prior environmental clearance as applicable.	We have successfully established the clean technology for 20 TPD capacity single Spinning Machine and receiving positive acceptance of the new product from the market. We have submitted Proposal No : IA/MP/IND2/58856/2016 on 07.09.2016 to MoEF & CC for prior environmental clearance for expansion of existing Staple Fibre Division along with setup of 36500 TPA Solvent Spun Cellulosic Fibre Spinning Machine. Proposal has been accepted by MoEF & CC on 16.10.2016 and TOR Granted on 14.02.2017, Public Hearing for the same is conducted on 05.09.2019. Final Technical Presentation for EC has been done on 22.01.2020. EAC has recommended project for EC and final EC is awaited.
ii)	Utilities requirement (i.e Water, Power and Steam) shall be met from the existing unit, no additional utilities shall be installed.	Water and Power & Steam requirement is being met from existing facilities of Staple Fibre Division and Captive Power Plants and no additional utility is setup for the expansion
iii)	The company shall not use CS2 as a raw material in the proposed process activity.	Solvent Spun Cellulosic Fibre Manufacturing does not require CS2 in the process and we are not using the same.
iv)	Ambient Air quality data shall be collected as per NAAQES standards notified by the Ministry vide GSR No. 826(E) dated 16.09.2009. The levels of PM10, SO2, NOx, CS2, VOC and CO shall be monitored in the ambient air and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the results of	We have installed 03 (Three) Continuous Ambient Air Quality Monitoring System in consultation with M.P. Pollution Control Board and display of the same is being provided on LED

<table>
<tr><th>Sr. No.</th><th>Stipulation</th><th>Compliance Status</th></tr>
<tr><td></td><td>monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF. The respective Zonal office of CPCB and M.P. Pollution Control Board.</td><td>Display Board installed at Factory Gate for general public.

We have also installed four Ambient Air Quality Monitoring Station in all four directions in consultation with CPCB & MPPCB. We are regularly monitoring the ambient air quality and report is being sent regularly to CPCB, MPPCB and Regional Office of MOEF. Monitoring results are well below the prescribed standards. Report of the last six months is enclosed as Exibit-1.</td></tr>
<tr><td>v)</td><td>In plant control measures for checking fugitive emission from all the vulnerable sources shall be provided. Fugitive emission shall be controlled by providing closed storage, closed handling and conveyance of chemical / materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emission. Fugitive emission in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emission shall conform to the limits stipulated by the MPPCB.</td><td>There is no source of gaseous fugitive emission from manufacturing process. During handling of chemicals, we have provided all the necessary arrangements to avoid fugitive emission. For your kind information there is no chemical being used to create fugitive emission. However, all precautionary measures have been taken for storage of chemicals i.e. Dyke, Pit and pump for recycling.

For Fugitive Emission of dust, PM10 is monitored in our lab on monthly basis and all results are within stipulated norms. Average result of reporting period are as under;
<table>
<tr><th>Area</th><th>Std. µg/m3 (24hrs)</th><th>PM-10 µg/m3</th></tr>
<tr><td>Pulp Storage</td><td>100</td><td>31</td></tr>
<tr><td>Chemical Storage Area</td><td>100</td><td>30</td></tr>
</table></td></tr>
</table>

Sr. No.	Stipulation	Compliance Status
		Spinning Hall-1 | 100 | 31 Spinning Hall-2 | 100 | 32 Fibre Storage Area | 100 | 32
vi)	The spinning bath shall be covered and vapor shall be channelized and exhausted properly.	Closed Shutter and proper exhaust system has been provided for water vapour, image of the shutters on Spinning Machine is enclosed as **Exibit-2.**
vii)	Unit shall carry out the study to identify the composition of the vapor generated from spinning bath of the Solvent Spun Cellulosic Fibre.	Study has been carried out by the NEERI and confirms that there is no solvent in the vapour.
viii)	For further control of fugitive emissions, following steps shall be followed: a) Closed handling system shall be provided for chemicals. b) System of leak detection and repair of pump/pipeline based on preventive maintenance. c) The acids shall be taken from storage tanks to reactors through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water. d) Cathodic protection shall be provided to the underground solvent storage tanks.	a) All the chemicals are being handled through closed system and no manual handling of chemicals is involved in the process. b) Dykes have been constructed for chemical storage tanks as shown in **Exibit-3.** Preventive Maintenance is being carried out as per the schedules. c) Acid is not required in the main process; however small quantity of Hydrochloric Acid is required for regeneration of resin for solvent purification. Storage tank of Hydrochloric Acid has been provided with a vent having trap receiver. d. There are no underground solvent storage tanks in the plant.

Sr. No.	Stipulation	Compliance Status
ix)	As proposed, solvent recovery shall be not less than 99.8%	Maximum Solvent Recovery achieved during the reporting period is 99.73% (including of 10 TPD Machine and Expansion of 20 TPD Machine), trials are underway to increase the solvent recovery to maximum level.
x)	The gaseous emission from DG Set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG set to mitigate the noise pollution.	Industry does not have any DG Set.
xi)	Total fresh water requirement from Chambal River shall not exceed 680 m3/day and prior permission shall be obtained from concerned authorities and a copy submitted to the Ministry's Regional Office at Bhopal. No ground water shall be used.	Total fresh water consumption for reporting period is 357 m3/day from Chambal River. No Ground water is being utilized in the plant.
xii)	Industrial effluent generated shall not exceed 530 m3/day. Effluent generated from solvent Spun Cellulosic Fibre shall be treated in separate dedicated ETP and used in SFD auxiliary cooling tower in place of fresh raw water being used currently. As proposed, SFD auxiliary cooling tower blow down shall be sent to existing ETP for further treatment. No process effluent shall be discharged in and around the project site. Water quality of treated effluent shall be monitored regularly and monitoring report shall be submitted to the MPPCB.	Total Effluent generated from Solvent Spun Cellulosic Fibre plant for the reporting period is 285 m3/day Additional effluent generated from expanded facility is being utilized in SFD Cooling Tower. For Treated effluent quality continuous effluent quality monitoring system (CEQMS) is installed at ETP and connected to MPPCB and CPCB. We are also monitoring the treated effluent quality in laboratory and report is being sent regularly to MPPCB. Effluent generated from the plant and blow down of SFD cooling towers is routed through ETP and no process effluent is being discharged in and around project site.

Sr. No.	Stipulation	Compliance Status
xiii)	No effluent shall be discharged outside the factory premises and 'Zero' discharge concept shall be maintained.	Effluent generated for expansion is routed through SFD Cooling tower and no effluent is being discharged from the Excel Fibre Division premises.
xiv)	The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Wastes (Management, Handling and Trans boundary) Rules, 2008 and amended as on date for management of Hazardous Waste and prior permission from MPPCB shall be obtained for disposal of Solid / Hazardous waste in the TSDF.	Hazardous Waste Authorization obtained from M.P. Pollution Control Board and has validity up to 22.01.2024. M.P. Pollution Board has issued Hazardous Waste Authorization vide consent No. AWH-49579, Outward No:88150, dated 18/02/2019
xv)	Proper dust control arrangement shall be provided in the existing Sodium Sulphate bagging area of the existing VSF Plant.	Improved Dust control system consisting of sieve cover, conveyor belt cover, fresh air fan and proper exhaust has been provided in bagging area of existing VSF Plant.
xvi	The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All the Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.	We are using Hydrochloric Acid and Sodium Hydroxide, storage for which dyke, Pit, Pump for Recycling has been provided in case spillages take place. All the relevant provision of Motor Vehicle Act (MVA), 1989 is being strictly complied during the transportation of hazardous chemicals.
xvii)	The company shall undertake following waste minimization measures : - a. Metering and control of quantities of active ingredients to minimize waste. b. Reuse of by-product from the process as raw materials or as raw material substitutes in other process.	a) Measurement of quantities is being done through controlled Programmable Logic Controller (PLC). b) Solvent Spun Cellulosic Process is having no by-products.

Sr. No.	Stipulation	Compliance Status
	c. Use of automated filling to minimize spillage. d. Use of Close Feed system into batch reactor e. Venting equipment through vapor recovery system f. Use of high pressure hoses for equipment clearing to reduce wastewater generation	c) Plant is being operated through Programmable Logic Controller (PLC). d) We are having continuous process of manufacturing with closed feed system. e) There is no process vents in the plant. f) We are using of high pressure hoses for equipment cleaning.
xviii	The unit shall make the arrangement for protection of possible fire hazard during manufacturing process in material handling. Fire Fighting system shall be as per the norms.	Fire Fighting system has been installed as per the norms. List of the Fire Fighting Equipment is enclosed as **Exibit-4.**
xix)	All the workers shall be regularly monitored for occupational health for relevant parameters and records maintained.	Regular health check-up of workers and management staff is being done and records are being maintained.
xx)	Green belt shall be developed in 33% of the total land. Green belt design shall be as per CPCB guidelines.	Regular plantation activities have been done, About 60% of the Grasim Complex is having Green Belt and Green Cover. Glimpse of plantation in the complex and details of land use is enclosed in **Exibit-5**
xxi)	Provision shall be made for the housing for the construction labor within the site with all the necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housekeeping may be in form of temporary structure to be removed after completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.	Construction work has been completed. Construction activity was done in the existing premises and all the required facilities are in place.

B. GENERAL CONDITIONS

Sr. No.	Stipulation	Compliance Status
i)	The project authority shall strictly adhere to the stipulations made by the M.P. Pollution Control Board.	Industry has obtained Consent to Establishment and Consent to Operate from M.P. Pollution Control Board and complying all stipulation made. MPPCB has issued consent to establish vide their letter No. 6229/TS/MPPCB/2012 dated 24.08.2012, and Consent to Operate under Air Act vide their letter No. 9106/TS/MPPCB/2012 dated 26.12.2012 and under the Water Act vide their letter No. 9104/TS/MPPCB/2012 dated 26.12.2012.
cii)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and forest. 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 assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	No further expansion is planned during the reporting period in existing Excel Fibre Division. However, we have submitted Proposal No : IA/MP/IND2/58856/2016 on 07.09.2016 to MoEF & CC for prior environmental clearance for expansion of existing Staple Fibre Division along with setup of 36500 TPA Solvent Spun Cellulosic Fibre Spinning Machine. Proposal has been accepted by MoEF & CC on 16.10.2016 and TOR Granted on 14.02.2017, Public Hearing for the same is conducted on 05.09.2019. Final Technical Presentation for EC has been done on 22.01.2020. EAC has recommended project for EC and final EC is awaited.
iii)	The locations of ambient air quality monitoring station shall be decided in consultation with State Pollution Control Board (SPCB) and it shall be ensured that at least one station is installed in the upwind and	We have installed 03 (Three) Continuous Ambient Air Quality Monitoring System in consultation with M.P. Pollution

<table>
<tr><th>Sr. No.</th><th>Stipulation</th><th>Compliance Status</th></tr>
<tr><td></td><td>downwind direction as well as where maximum ground level concentrations are anticipated.</td><td>Control Board and display of the same is being provided on LED Display Board installed at Factory Gate for general public. Image of the display board is enclosed as Exbit-6

We have also installed Ambient Air Quality Monitoring Station in all four directions in consultation with CPCB & MPPCB. We are regularly monitoring the ambient air quality and report is being sent regularly to CPCB, MPPCB and Regional Office of MOEF. Monitoring results are well below the prescribed standards; report of the last six months is enclosed as Exibit-1.</td></tr>
<tr><td>iv)</td><td>The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall conform the standards prescribed under Environment (Protection) Act, 1986 Rules 1986 viz. 75dBA (day time) and 70dBA (night time).</td><td>All the necessary noise control measures such as Acoustic Enclosure, Silencer, Vibration Pad, and Variable Frequency Drive have been adopted wherever required. Ambient Noise Level shall confirm the prescribed standards.

Ambient Noise Level (dBA) is measured by our Laboratory and last six month average results are tabulated as under;
<table>
<tr><td>Area</td><td>Day</td><td>Night</td></tr>
<tr><td>Norms</td><td>75</td><td>70</td></tr>
<tr><td>School</td><td>60</td><td>45</td></tr>
<tr><td>CD Colony</td><td>61</td><td>51</td></tr>
<tr><td>Durgapura</td><td>60</td><td>47</td></tr>
<tr><td>E&DD</td><td>58</td><td>47</td></tr>
</table></td></tr>
<tr><td>v.</td><td>The company shall harvest rain water from roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.</td><td>Rain Water Harvesting system has been installed.</td></tr>
</table>

Sr. No.	Stipulation	Compliance Status
vi.	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodic medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Training is being imparted to all employees for Safety and health aspect for chemical handling. Pre-employment and routine medical examination is carried out for all workman and management staff and records are being maintain.
vii.	Usages of Personal Protective Equipment (PPEs) by all employee / workers shall be ensured.	PPE are provided to all employee and regular training being conducted for proper use of PPE. Helmet, Safety Goggles, Safety Boots provided to all employees and Earplug, face shield, Hand Gloves, Protective Clothing is provided to the all concerned employees.
viii.	The company shall also comply with all the environmental protection measures and safeguard proposed in the documents submitted to Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing related to the project shall be implemented.	All the measures proposed for environmental protection has been implemented. Details of the measures are enclosed as **Exhibit-7.**
ix.	The company shall undertake all relevant measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers and administration.	CSR activities are our regular practice for improvement in socio-economic conditions of the surrounding area. Other than operating two hospitals and three senior secondary schools, various activities are being held in adjoining villages. Total beneficiaries of these activities in last year (FY 2018-19) are 3.97 Lacs with annual expense of Rs. 6.20 Crores.
x.	The company shall undertake eco-developmental measures including community welfare measure in the project area for the overall improvement of the environment.	All the necessary development measure is being under taken for overall improvement of environment shall be taken. Details are enclosed in **Exhibit-7**

Sr. No.	Stipulation	Compliance Status
xi.	A separate Environment Management Cell equipped with full fledged laboratory facilities shall be setup to carry out the Environmental Management and Monitoring functions.	A separate Environment Cell already exists with technically qualified personnel, who are under the control of Senior Executive. Organogram of Environment Cell is enclosed as **Exhibit-8**
xii	As proposed, company shall earmark sufficient funds towards capital cost and recurring cost respectively to implement the conditions stipulated by the Ministry of Environment and Forest as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management / pollution control measures shall not be diverted for any other purpose.	Capital cost of Rs 4.5 crore had been earmarked for procuring Shutters on the spinning machine, variable frequency drives, PLC control system etc and same has been implemented. A provision of Rs 20 lacs per year has been made to maintain the above mentioned systems. This fund will is being used only for this purpose.
xiii	A copy of the clearance letter shall be sent to the project proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban local body and the local NGO, if any from whom suggestion / representations, if any were received while processing the proposal.	Copy of the clearance letter has been given to concern authority and also placed on company website for general public.
xiv	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environment Clearance conditions including results of monitored data (both hard copies as well as by e-mail) to respective Regional Officer of MoEF, the respective Zonal Office of CPCB and M.P. Pollution Control Board. A copy of Environment Clearance and six monthly compliance status reports shall be posted on the website of the company.	Last Six Monthly compliance report is submitted for period June-2019 – November 2019. A copy of the same is also posted on the company website.
xv	The environment statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environment clearance conditions and shall also be sent to the respective Regional Office of MoEF by e-mail.	We are regularly submitting Environment Statement before 30th September every year to the board.

Sr. No.	Stipulation	Compliance Status
xvi	The project proponent shall inform the public that the project has been accorded environment clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of Ministry at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least 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 shall be forwarded to the concerned Regional Office of the Ministry.	Advertisement of Environment Clearance has been published in Hindi & English New Papers for information to general public and copy of the same is enclosed as **Exhibit-9.**
xvii.	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 start of the project.	Financial Closure of the project is May 2013 same is informed to concerned authorities.
8.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory	Acknowledged & will abide
9.0	The Ministry reserves the rights to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.	Acknowledged
10.0	The above conditions will be enforced, inter-alia under the provision of the Water (Prevention & control of pollution) Act-1977, the Air (Prevention & control of pollution) Act-1981, the Environment (Protection) Act- 1986, Hazardous waste (Management & Handling) Rules-2003 and the Public Liability Insurance Act-1991 along with their amendments and rules.	We are following terms & conditions MPPCB Consent under Air Act & Water Act and authorization under Hazardous Waste Rules. Industry has obtained renewed CCA consent to operate from MPPCB under Water Act & Air Act vide consent No. AWH-49579, Outward No: 88150, dated 18/02/2019 valid up to 30.11.2020 and Hazardous Waste Authorization valid up to 22.02.2024.

FORMAT - II A

Ambient air quality data at Nagda for the month of : October 2019

All results expressed as Microgram/M3

Dire-	Hrs.		6 - 10			10 - 14				14 - 18				18 - 22				22 - 02				02 - 06				4Hrs Max.				24Hrs Avg				8 Hrs Avg SPM		
ction	Date	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	6-14	14-22	22-06
EAST	07.10.2019	24	12	28	14	20	6	32	9	16	10	22	12	22	16	22	14	20	8	28	10	18	14	24	16	24	16	32	16	20.0	11.0	26.0	12.5	266	272	258
	18.10.2019	18	15	21	14	20	14	19	11	22	12	18	18	19	15	22	15	21	14	21	13	23	16	17	16	23	16	22	18	20.5	14.3	19.7	14.5	271	275	276
WEST	07.10.2019	14	12	10	10	8	8	12	11	12	9	14	10	16	10	12	9	10	8	10	8	14	10	12	12	16	12	14	12	12.3	9.5	11.7	10.0	252	254	248
	18.10.2019	14	12	10	11	12	14	9	10	10	10	11	12	15	9	12	9	13	11	10	11	11	12	8	10	15	14	12	12	12.5	11.3	10.0	10.5	260	258	262
NORTH	09.10.2019	16	14	10	12	16	12	12	15	10	16	18	9	20	8	8	10	18	16	14	8	8	10	10	9	20	16	18	15	14.7	12.7	12.0	10.5	264	254	258
	21.10.2019	16	8	24	8	18	10	16	14	20	12	20	8	16	8	18	10	18	10	28	6	20	10	20	8	20	12	28	14	18.0	9.7	21.0	9.0	242	256	244
	28.10.2019	12	8	12	10	15	10	14	8	14	12	11	9	16	11	13	11	11	13	10	7	13	9	9	10	16	13	14	11	13.5	10.5	11.5	9.2	252	250	254
SOUTH	09.10.2019	30	16	22	24	26	26	20	22	24	18	16	18	32	20	14	22	32	22	18	14	36	24	20	18	36	26	22	24	30.0	21.0	18.3	19.7	281	264	274
	21.10.2019	30	16	16	14	28	12	18	18	30	10	18	20	38	12	22	18	24	10	24	18	32	8	16	16	38	16	24	20	30.3	11.3	19.0	17.3	268	269	274
	28.10.2019	24	16	24	16	30	22	22	14	20	20	19	15	22	19	20	17	21	18	18	19	26	21	21	20	30	22	24	20	23.8	19.3	20.7	16.8	272	276	268

FORMAT - II B

Ambient air quality data at Nagda for the month of : October 2019

Sampling location	Month	SO2 microgram/M3				NO2 microgram/M3				CS2 microgram/M3				H2S microgram/M3				SPM microgram/M3				
	& Year	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	G.M.
EAST Fabrication Shop	Oct. 2019	12	20.3	2.2	24	12	12.7	3.1	16	12	22.8	4.3	32	12	13.5	2.5	18	6	270	6.1	276	270
WEST Vishnu Bhawan	Oct. 2019	12	12.4	2.3	16	12	10.4	1.8	14	12	10.8	1.6	14	12	10.3	1.2	12	6	256	4.8	262	256
NORTH Labour-Club	Oct. 2019	18	15.4	3.4	20	18	10.9	2.5	16	18	14.8	5.4	28	18	9.6	2.2	15	9	253	6.4	264	253
SOUTH Dairy	Oct. 2019	18	28.1	4.9	38	18	17.2	5.0	26	18	19.3	2.8	24	18	17.9	2.8	24	9	272	4.8	281	272

A.M.=Arithmetic mean, S.D.=Standard Deviation, G.M.=Geometric mean,n=number of observation,

ND = Not Detected

FORMAT - II A

Ambient air quality data at Nagda for the month of : November-2019
All results expressed as Microgram/M3

Dire-ction	Hrs.	6 - 10				10 - 14				14 - 18				18 - 22				22 - 02				02 - 06				4Hrs Max				24Hrs Avg				8 Hrs Avg SPM		
	Date	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	6-14	14-22	22-06
EAST	04.11.2019	20	19	18	15	24	16	16	17	22	14	24	16	17	18	22	18	18	15	22	13	20	17	16	17	24	19	24	18	20.2	16.5	19.7	16.0	265	271	267
	21.11.2019	22	9	26	15	28	10	20	18	26	14	32	14	24	13	28	16	30	10	24	14	20	10	22	20	30	14	32	20	25.0	11.0	25.3	16.2	263	271	268
WEST	04.11.2019	12	12	12	11	8	11	14	10	14	14	15	9	10	10	13	10	9	18	12	8	7	9	11	10	14	18	15	11	10.0	12.3	12.8	9.7	240	258	252
	21.11.2019	10	10	18	10	14	8	14	8	16	11	12	14	16	14	16	10	10	12	16	12	12	8	14	6	16	14	18	14	13.0	10.5	15.0	10.0	252	258	262
NORTH	06.11.2019	18	21	11	14	14	12	10	12	16	14	10	10	18	10	10	12	20	22	9	14	14	10	12	12	20	22	12	14	16.7	14.8	10.3	12.3	270	272	274
	23.11.2019	15	13	11	11	13	14	10	11	11	11	14	13	14	10	12	9	10	10	12	14	16	15	12	14	16	15	14	14	13.2	12.2	11.8	12.0	254	260	252
SOUTH	06.11.2019	34	18	18	16	23	18	16	18	24	21	18	12	30	16	12	14	36	22	22	10	28	14	16	12	36	22	22	18	30.0	18.2	17.0	13.7	272	278	275
	23.11.2019	18	13	19	13	16	12	14	13	20	18	18	11	17	16	20	17	19	14	16	16	20	15	18	16	20	18	20	17	18.3	14.7	17.5	14.3	264	270	268

BDL : Below detectable Limit Tr. : Tracess **ND:** Not Detectedble

FORMAT - II B

Ambient air quality data at Nagda for the month of : November-2019

Sampling location	Month & Year	SO2 microgram/M3				NO2 microgram/M3				CS2 microgram/M3				H2S microgram/M3				SPM microgram/M3				
		n	A.M	S.D	Peak	n	A.M	S.D	Peak	n	A.M	S.D	Peak	n	A.M	S.D	Peak	n	A.M	S.D	Peak	G.M
EAST Fabrication Shop	November 2019	12	22.5	3.8	30	12	13.8	3.3	19	12	22.5	4.6	32	12	16.1	1.9	20	6	268	2.9	271	267
WEST Vishnu Bhawan	November 2019	12	11.5	2.9	16	12	11.4	2.8	18	12	13.9	2.0	18	12	9.8	2.0	14	6	254	7.1	262	254
NORTH Labour-Club	November 2019	12	14.9	2.8	20	12	13.5	4.0	22	12	11.7	1	14	12	12.2	1.6	14	6	264	8.7	274	264
SOUTH Dairy	November 2019	12	24.2	6.6	36	12	16.4	3.0	22	12	17.3	2.6	22	12	14.0	2.4	18	6	271	4.6	278	271

A.M.=Arithmetic mean, S.D.=Standard Deviation, G.M.=Geometric mean,n=number of observation

FORMAT - II A

Ambient air quality data at Nagda for the month of : December 2019

All results expressed as Microgram/M3

Direction	Hrs. / Date	6 - 10 SO2	6 - 10 NO2	6 - 10 CS2	6 - 10 H2S	10 - 14 SO2	10 - 14 NO2	10 - 14 CS2	10 - 14 H2S	14 - 18 SO2	14 - 18 NO2	14 - 18 CS2	14 - 18 H2S	18 - 22 SO2	18 - 22 NO2	18 - 22 CS2	18 - 22 H2S	22 - 02 SO2	22 - 02 NO2	22 - 02 CS2	22 - 02 H2S	02 - 06 SO2	02 - 06 NO2	02 - 06 CS2	02 - 06 H2S	4Hrs Max. SO2	4Hrs Max. NO2	4Hrs Max. CS2	4Hrs Max. H2S	24Hrs Avg SO2	24Hrs Avg NO2	24Hrs Avg CS2	24Hrs Avg H2S	8 Hrs.Avg.SPM 6-14	8 Hrs.Avg.SPM 14-22	8 Hrs.Avg.SPM 22-06
EAST	04.12.2019	16	18	14	22	20	21	19	24	18	16	18	12	18	23	22	20	22	19	24	11	16	18	16	16	22	23	24	24	18.3	19.2	18.8	17.5	270	252	264
	17.12.2019	19	16	12	8	20	24	20	14	18	18	16	8	26	28	20	16	18	18	22	14	19	26	16	10	26	28	22	16	20.0	21.7	17.7	11.7	276	261	254
WEST	04.12.2019	12	9	10	20	8	8	16	10	9	12	8	8	14	10	12	18	8	12	14	12	6	14	12	8	14	14	16	20	9.5	10.8	12.0	12.7	242	236	258
	17.12.2019	10	11	14	12	16	16	8	12	20	14	16	8	12	8	12	14	14	10	15	10	12	6	14	6	20	16	16	14	14.0	10.8	13.2	10.3	246	261	250
NORTH	06.12.2019	20	14	16	8	18	10	10	6	21	8	12	14	19	12	22	9	18	10	20	12	15	18	18	10	21	18	22	14	18.5	12.0	16.3	9.8	254	260	248
	19.12.2019	14	12	8	12	18	ND	10	14	16	10	10	14	17	12	12	6	19	10	10	12	18	14	8	10	19	14	12	14	17.0	11.6	9.7	11.3	248	254	236
	28.12.2019	14	12	18	12	16	14	16	10	18	10	16	10	16	16	20	12	14	12	18	8	18	10	14	10	18	14	20	12	16.0	11.3	17.0	10.3	262	264	268
SOUTH	06.12.2019	34	18	34	22	30	26	24	16	20	22	26	18	26	16	32	24	28	20	36	24	32	24	30	15	34	26	36	24	28.3	21.0	30.3	19.8	272	268	278
	19.12.2019	26	18	20	10	32	16	24	26	28	12	30	18	32	14	16	24	28	18	36	22	34	20	14	18	34	20	36	26	30.0	16.3	23.3	19.7	268	260	264
	28.12.2019	22	16	26	14	26	18	32	22	30	14	26	14	26	16	28	16	20	24	30	24	24	16	26	16	30	24	32	24	24.7	17.3	28.0	17.7	274	281	268

FORMAT - II B

Ambient air quality data at Nagda for the month of : December 2019

Sampling location	Month & Year	SO2 microgram/M3 n	SO2 A.M.	SO2 S.D.	SO2 Peak	NO2 microgram/M3 n	NO2 A.M.	NO2 S.D.	NO2 Peak	CS2 microgram/M3 n	CS2 A.M.	CS2 S.D.	CS2 Peak	H2S microgram/M3 n	H2S A.M.	H2S S.D.	H2S Peak	SPM microgram/M3 n	SPM A.M.	SPM S.D.	SPM Peak	SPM G.M.
EAST Fabrication Shop	Dec. 2019	12	19.2	2.6	26	12	20.4	3.8	28	12	18.3	3.4	24	12	14.6	5.0	24	6	263	8.4	276	263
WEST Vishnu Bhawan	Dec. 2019	12	11.8	3.7	20	12	10.8	2.8	16	12	12.6	2.7	16	12	11.5	4.0	20	6	249	8.7	261	249
NORTH Labour-Club	Dec. 2019	18	17.2	2.0	21	18	11.0	2.3	18	18	14.3	4.3	22	18	10.5	2.4	14	9	255	9.3	268	255
SOUTH Dairy	Dec. 2019	18	27.7	4.2	34	18	18.2	3.7	26	18	27.2	6.0	36	18	19.1	4.4	26	9	270	6.3	281	270

A.M.=Arithmetic mean, S.D.=Standard Deviation, G.M.=Geometric mean,n=number of observation,

ND = Not Detected

FORMAT - II A

Ambient air quality data at Nagda for the month of : January-2020
All results expressed as Microgram/M3

Dire-	Hrs.	6 - 10				10 - 14				14 - 18				18 - 22				22 - 02				02 - 06				4Hrs Max				24Hrs Avg				8 Hrs.Avg.SPM		
ction	Date	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	6-14	14-22	22-06
EAST	04.01.2020	20	18	20	14	24	20	18	16	22	16	22	12	20	21	20	18	22	19	21	11	18	20	19	19	24	21	22	19	21.0	19.0	20.0	15.0	272	266	268
	16.01.2020	26	16	22	20	28	22	20	18	22	18	18	16	24	16	28	19	20	24	24	17	18	20	20	16	28	24	28	20	23.0	19.3	22.0	17.7	274	270	272
WEST	04.01.2020	11	12	13	10	10	11	14	11	13	10	10	12	11	9	12	11	12	11	11	10	9	12	10	8	13	12	14	12	11.0	10.8	11.7	10.3	252	248	254
	16.01.2020	12	10	20	12	16	12	18	10	14	9	14	12	10	11	16	10	12	13	12	9	11	8	18	14	16	13	20	14	12.5	10.5	16.3	11.2	238	250	246
NORTH	06.01.2020	10	14	12	11	16	16	14	15	14	12	10	12	12	10	12	10	10	14	9	13	12	12	11	14	16	16	14	15	12.3	13.0	11.3	12.5	250	260	246
	18.01.2020	16	12	20	16	18	10	16	12	14	16	22	10	20	12	14	8	18	10	18	8	14	12	15	14	20	16	22	16	16.7	12.0	17.5	11.3	242	256	248
SOUTH	06.01.2020	26	22	18	16	24	24	22	18	28	26	28	22	22	20	26	20	30	20	24	22	24	18	22	21	30	26	28	22	25.7	21.7	23.3	19.8	268	272	270
	18.01.2020	28	18	22	20	30	14	18	20	24	16	22	18	32	10	24	16	26	16	18	20	22	14	22	24	32	18	24	24	27.0	14.7	21.0	19.7	275	271	269

BDL : Below detectable Limit Tr. : Tracess **ND**: Not Detectedble

FORMAT - II B

Ambient air quality data at Nagda for the month of : January-2020

Sampling location	Month	SO2 microgram/M3				NO2 microgram/M3				CS2 microgram/M3				H2S microgram/M3				SPM microgram/M3				
	& Year	n	A.M.	S.D	Peak	n	A.M	S.D	Peak	n	A.M	S.D	Peak	n	A.M	S.D	Peak	n	A.M	S.D	Peak	G.M
EAST Fabrication Shop	January-2020	12	22.0	2.9	28	12	19.2	2.4	24	12	21.0	2.7	28	12	16.3	2.7	20	6	270	2.7	274	270
WEST Vishnu Bhawan	January-2020	12	11.8	1.8	16	12	10.7	1.4	13	12	14.0	3.2	20	12	10.8	1.5	14	6	248	5.2	254	248
NORTH Labour-Club	January-2020	12	14.5	3.1	20	12	12.5	2.0	16	12	14.7	4	22	12	11.9	2.5	16	6	250	6.0	260	250
SOUTH Dairy	January-2020	12	26.3	3.1	32	12	18.2	4.4	26	12	22.2	3.0	28	12	19.8	2.3	24	6	271	2.3	275	271

A.M.=Arithmetic mean, S.D =Standard Deviation, G.M.=Geometric mean,n=number of observation

* Norms for SO2 ,NO2 & SPM as per NAAQM Standard and Premissible limit for CS2 = 100 µg/m3 and H2S = 150 µg/m3

FORMAT - II A

Ambient air quality data at Nagda for the month of : February 2020

All results expressed as $\mu g/m^3$

Dire-	Hrs.	6 - 10				10 - 14				14 - 18				18 - 22				22 - 02				02 - 06				4Hrs. Max.				24Hrs Avg				8 Hrs.Avg.SPM		
ction	Date	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	6-14	14-22	22-06
EAST	03.02.2020	22	16	16	8	24	14	14	14	16	13	20	14	18	15	31	8	22	12	18	14	20	10	14	8	24	16	31	14	20.3	13.3	18.8	11.0	272	269	264
	14.02.2020	19	19	22	14	17	15	18	10	21	18	24	12	20	24	18	12	19	15	22	14	22	17	20	15	22	24	24	15	19.7	18.0	20.7	12.8	265	271	267
	26.02.2020	24	18	18	14	20	12	16	14	18	14	18	12	26	24	22	18	20	20	16	12	16	14	20	16	26	24	22	18	20.7	17.0	18.3	14.3	268	262	274
WEST	03.02.2020	10	11	20	10	14	8	15	10	14	9	12	14	18	15	18	12	10	16	14	12	12	8	12	6	18	16	20	14	13.0	11.2	15.2	10.7	244	256	251
	14.02.2020	10	14	12	8	12	8	16	8	12	9	8	12	16	14	12	14	8	8	9	10	16	10	10	6	16	14	16	14	12.3	10.5	11.2	9.7	240	258	252
	26.02.2020	12	8	11	8	8	10	14	12	10	14	12	8	14	10	18	10	12	12	10	12	16	10	16	12	16	14	18	12	12.0	10.7	13.5	10.3	258	264	248
NORTH	05.02.2020	13	13	13	11	15	11	11	9	14	12	12	10	11	10	10	8	17	12	9	11	16	9	11	12	17	13	13	12	14.3	11.2	11.0	10.2	261	255	258
	17.02.2020	23	10	8	9	20	10	ND	ND	19	12	8	12	22	10	16	14	20	14	22	12	18	12	14	10	23	14	22	14	20.3	11.3	11.3	9.5	270	272	274
SOUTH	05.02.2020	28	21	22	14	24	19	20	18	22	20	23	16	25	17	21	15	26	18	19	17	30	16	24	19	30	21	24	19	25.8	18.5	21.5	16.5	269	272	268
	17.02.2020	32	18	16	10	28	12	18	12	32	16	19	8	30	10	14	13	28	15	19	10	26	14	22	12	32	18	22	13	29.3	14.2	18.0	10.8	272	278	275

ND: Not Detectedble Tr. : Tracess

FORMAT - II B

Ambient air quality data at Nagda for the month of : February 2020

Sampling location	Month & Year	SO_2 $\mu g/m^3$				NO_2 $\mu g/m^3$				CS_2 $\mu g/m^3$				H_2S $\mu g/m^3$				SPM $\mu g/m^3$				
		n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	G.M.
EAST Fabrication Shop	Apr. 2020	18	20.2	2.7	26	18	16.1	3.8	24	18	19.3	3.9	31	18	12.7	2.7	18	9	268	3.7	274	268
WEST Vishnu Bhawan	Apr. 2020	18	12.4	2.8	18	18	10.8	2.6	16	18	13.3	3.2	20	18	10.2	2.4	14	9	252	7.1	264	252
NORTH Labour-Club	Apr. 2020	12	17.3	3.5	23	12	11.3	1.4	14	12	12.2	3.9	22	12	10.7	1.7	14	6	265	7.3	274	265
SOUTH Dairy	Apr. 2020	12	27.6	3.0	32	12	16.3	3.1	21	12	19.8	2.8	24	12	13.7	3.3	19	6	272	3.4	278	272

A.M.=Arithmetic mean, S.D.=Standard Deviation, G.M.=Geometric mean,n=number of observation

* Norms for SO2 ,NO2 & SPM as per NAAQM Standard and Premissible limit for CS2 = 100 µg/m3 and H2S = 150 µg/m3

FORMAT - II A

Ambient air quality data at Nagda for the month of : March-2020
All results expressed as Microgram/M3

Dire-	Hrs	6 - 10				10 - 14				14 - 18				18 - 22				22 - 02				02 - 06				4Hrs Max				24Hrs Avg				8 Hrs.Avg.SPM		
ction	Date	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	6-14	14-22	22-06
EAST	03.03.2020	14	16	18	12	18	14	20	10	22	18	18	12	24	21	22	12	18	17	20	10	18	18	22	10	24	21	22	12	19.0	17.3	20.0	11.0	258	261	260
	17.03.2020	19	18	19	10	21	20	21	13	20	22	20	9	22	21	22	12	24	19	18	14	18	23	21	11	24	23	22	14	20.7	20.5	20.2	11.5	266	268	262
WEST	03.03.2020	10	18	20	12	12	14	22	10	12	14	18	8	14	10	18	10	14	16	14	8	10	18	22	12	14	18	22	12	12.0	15.0	19.0	10.0	256	252	254
	17.03.2020	14	12	14	10	10	9	10	11	12	11	11	9	16	10	13	12	13	13	12	10	11	8	9	8	16	13	14	12	12.7	10.5	11.5	10.0	254	258	252
NORTH	05.03.2020	11	14	12	13	13	12	14	11	12	13	11	10	14	11	10	9	10	12	13	12	9	10	9	14	14	14	14	14	11.5	12.0	11.5	11.5	253	257	251
	19.03.2020	20	11	16	11	18	10	14	13	14	9	12	12	13	10	14	10	10	12	15	11	12	13	13	14	20	13	16	14	14.5	10.8	14.0	11.8	258	254	256
SOUTH	05.03.2020	17	22	16	16	20	19	18	18	22	21	14	20	21	18	19	15	19	20	21	17	18	23	17	19	22	23	21	20	19.5	20.5	17.5	17.5	269	265	267
	19.03.2020	32	21	21	16	28	20	20	19	30	18	19	20	29	17	22	17	31	19	24	18	32	16	23	19	32	21	24	20	30.3	18.5	21.5	18.2	268	264	270

BDL : Below detectable Limit **Tr. :** Tracess **ND:** Not Detectedble

FORMAT - II B

Ambient air quality data at Nagda for the month of : March-2020

Sampling location	Month	SO2 microgram/M3				NO2 microgram/M3				CS2 microgram/M3				H2S microgram/M3				SPM microgram/M3				
	& Year	n	A.M	S.D	Peak	n	A.M	S.D	Peak	n	A.M	S.D	Peak	n	A.M	S.D.	Peak	n	A.M	S.D	Peak	G.M
EAST Fabrication Shop	March-2020	12	19.8	2.8	24	12	18.9	2.5	23	12	20.1	1.5	22	12	11.3	1.4	14	6	263	3.5	268	262
WEST Vishnu Bhawan	March-2020	12	12.3	1.8	16	12	12.8	3.2	18	12	15.3	4.4	22	12	10.0	1.5	12	6	254	2.1	258	254
NORTH Labour-Club	March-2020	12	13.0	3.1	20	12	11.4	1.4	14	12	13.0	2	16	12	11.7	1.5	14	6	255	2.4	258	255
SOUTH Dairy	March-2020	12	24.9	5.6	32	12	19.5	2.0	23	12	19.5	2.8	24	12	17.8	1.6	20	6	267	2.1	270	267

A.M =Arithmetic mean, S.D =Standard Deviation, G.M =Geometric mean,n=number of observation

* Norms for SO2 ,NO2 & SPM as per NAAQM Standard and Premissible limit for CS2 = 100 µg/m3 and H2S = 150 µg/m3

Exhibit#2

Shutters on Spinning Machine

Exhibit # 3

Safe Storage of Chemicals

FIRE FIGHTING SYSTEM

The factory has a full-fledged fire-fighting department. The employees are also given basic fire fighting training regarding use of Fire Extinguishers and Safety Appliances. The entire manufacturing unit, godown, ware houses where combustible are stored is covered with adequate number of hydrant points and automatic sprinkler system. . The hydrant and Sprinkler system is installed as per TAC norms The hazardous spots have been provided with portable fire extinguishers, gas masks and breathing apparatus. Trained personnel are available in fire control room round the clock in three shift 05 person in each shift. Two separate telephones 101 & 5140 are provided and additional Hotline telephones are also provided at high hazardous identified areas.

The factory has fire hydrant pump with independent water reservoirs. The ring main dry hydrant system has been laid down, which covers the entire manufacturing sections, godowns, ware houses, carbon disulphide storage area , sulphur storage area etc. All the hydrant lines are inter-connected. The main hydrant line is of 8-inch diameter and 6-inch diameter with 203 hydrant outlets and 20 Water Monitors. All the water reservoirs receive water from Water Treatment Plant. Both hydrant and sprinkler systems are approved by Tariff Advisory Committee.

Hydrant system is provided with stand-by diesel pump for use, in case of emergency at the time of electric power failure.

The factory has Four Fire Tenders / Foam Tenders, A large number of Fire Extinguishers and Safety Equipment are provided for fire fighting in the plant.

The details of the Sprinkler / Hydrant sprinkler system are given in the table-

a) Sprinkler System

The sprinkler system covers all the manufacturing sections, godwons, warehouse of PC-1, PC-2 and charcoal godown in PC-3 area. Medium velocity water spray system is provided on CS2 Storage Tanks in PC-1 and PC-2 area.

b) Details of Hydrant and Sprinkler System -

S. No.	Hydrant System				Sprinkler System		
	Location/ plant	Water Reservoir capacity	Hydrant Pump		No. of hydrant points (Equivalent)	Sprinkler Pump	
		(M3)	HP	Capacity		HP	Capacity
1	PC-1	809	125	273 M3/hr Head-70 M	76	125 20 Jockey pump	273 M3/hr 10.8 "- Jockey pump
2	PC-2	847	125	273 M3/hr Head-70 M	54		273 M3/hr
3	PC-3	600	125	273 M3/hr Head - 70 M	30	-	-
4	Excel Fibre Division	550	100	273 M3/hr Head - 70 M	26		-
5	New Ware House	540	125	273 M3/hr Head - 70 M	17	-	-
6	Water Treatment Plant (Over head water storage tank)	300	-		-	-	-
7	Diesel pump (Stand by)	PC-2	130	273 M3/hr Head - 70 M			

c) Fire Fighting Equipment

The factory has four Fire Tenders / Foam Tenders. A large numbers of Fire Extinguishers and Safety Equipment are provided for fire fighting in the plant. The list of Fire Fighting Equipment, Safety Equipment and other Emergency Equipment are given below:

Type of Equipment	Capacity	Quantity
DCP Cylinder	5 Kg+ 4kg +2kg	244 Nos.
CO2 Cylinder	9 Kg	850 Nos.
CO2 Cylinder	3 Kg	22 Nos.
Halon & clean agent Cylinder		-40 Nos.
Foam AFFF	-	2000 Liters
Fire Buckets	-	275 Nos.
Foam Making Branch Pipes	-	10 Nos.
Fire Hoses	-	112 Nos.
Nozzles / Branches	-	56 Nos.
Self contained breathing apparatus	-	22 Nos.
Spare Cylinders(air filled for SCBA)	-	40 Nos.
Fire Suits	-	4 Nos.
Ambulance	-	2 Nos.
Portable Public Address System	-	1 Sets

Exhibit # 5

Greenery Around Factory

Grasim SFD, Trimurti Gate for Staff

Grasim, Excel Fibre Division

EXHIBIT-6

Location of Continuous Ambient Air Monitoring System

EXHIBIT-6

LED Display Board for CAAQMS
(at Factory Gate for General Public)

Exhibit-7

Environmental Protection Measures and Safeguard

1. Waste Generation

1.1 Water Environment

Each section has a collection pit for maximizing reuse within the section itself and use in Cooling Tower makeup. The small leftover will be collected and pumping to the main effluent treatment plant.

A full fledge Common Effluent Treatment Plant with Primary and Secondary treatment facility designed on the principle of extended aeration activated sludge process in operation. The treated effluent quality will maintained consistently as per standards prescribed by MPPCB for discharge.

1.2 After Expansion

Typical Quantity of the effluent generate after proposed expansion:

Particular	Existing Generation	Additional Generation	Total after proposed expansion
Excel Fibre Division	530	680*	530

*No Additional effluent will be discharged from this project as Effluent generated from this project is being used in SFD Auxiliary Cooling Towers, in place of fresh Raw Water being used earlier.

2. Air Environment

There is no source of air emission.

3. Solid & Hazardous Waste Management

We are committed to comply storage, handling and disposal management of hazardous and other solid waste arising due to manufacturing activity as per the rules laid down by MoEF. Source of Generation and disposal practice is mentioned in following table.

3.1 Hazardous Wastes

S. No	Waste	Source	Disposal method
1	Used Oil	Rotating mechanical equipments	Sold to CPCB authorized recycler
2	Used Resin	Purification process	Give back to Supplier / Common TSDF site, Pithampur

*We are conducting in-house experiments at Birla Research Institute for improving Resin life. We are also in contact with Resin suppliers for the same.

3.2 Solid Waste

S. No	Waste	Source	Quantity (Existing)	Quantity (Expansion)	Quantity Total	Disposal method
1	Tow Waste (Cellulose)	Generated during regeneration process	36.5 MT / year	36.5 MT / year	73.0 MT / year	Sold for Waste Fibre application / Incineration in existing coal fired Boiler

During Storage and Handling of Hazardous Materials, Hazardous Waste and Solid Waste adequate measures are being provided to avoid contamination of land or water due to accidental spillage of materials during handling and storage.

Exhibit-8

Environment Cell - Personnel and details thereof

(As on31 st August , 2019)

S. No.	Name	Designation	Discipline	Date of Joining	Qualification
Sr. Executives (Environment Cell Reports to)					
1	Mr. K Suresh	President & Unit Hea	Executive	05.02.2018	B.E. (Chemical), MS (Industrial Eng.)
2	Mr Ashish Maheshwari	Vice President	Executive	16.08.2019	B.E. (Mechanical)
3	Mr. Biswadeep Maity	Vice President	Executive	01.11.2016	B.Tec. (Chemical), MS, MBA (Operation)
4	Mr. Abhishek Biswas	Gen. Manager	Executive	01.07.2016	B.E. (Mechanical), MBA (Marketing)
Environment Cell					
1	Mr. Ankit Mishra	Dy. Gen. Manager	Tech. Services	10.05.2019	B.E. (Chemical)
2	Mr. Abhay Nagar	Asst. Gen .Manager	Tech. Services	14.10.1993	M.Sc.(Chem)., M.Sc. (Ecology & Environment), PG Diploma in Environment Management, Diploma in Industrial Safety
3	Mr. Ashish Khare	Asst. Manager	Tech. Services	18.05.1998	M.Sc. (Maths), PG Diploma in Environment Management
4	Mr. Roopesh Goyal	Dy. Gen. Manager	Monitoring	17.07.2018	B.E. (Textile)
5	Dr. Preeti Jain	Manager	Monitoring	13.09.1993	M.Sc., Ph.D. (Chem)
6	Mr. Anil Maheshwari	Asst. Manager	Monitoring	01.07.1995	B.Sc. (PCM)
7	Mr. Ravi Jain	Sr. Chemist	Monitoring	01.01.1996	B.Sc. (PCM)
8	Mr Abhay Mahamune	Asst. Gen .Manager	Process	30.03.1989	B.Tec. (Chemical)
9	Mr. Waseem Naqvi	Asst.. Manager	Process	12.08.2010	Diploma in Production Engineering
10	Mr. Amit Pandit	Asst. Manager	Process	18.05.1998	M.Sc. Chemistry BS(Process Eng.)
11	Mr. R.K.Verma	Asst. Manager	Process	18.11.2015	M.Sc.(Chemistry)., B.S.,Dip.Env.Management
12	Mr. Dilip Gohil	Officer	Process	21.10.2016	M.Sc. (Chem)
13	Mr. J.K. Wadhawa	Engineer	Process	01.07.1993	B.Sc, MA (English),BS (Pr. Engg)
14	Mr. M.S.Kushwaha	Sr. Pr. Chemist	Process	09.08.1996	B.Sc. , M.Sc. MBA
15	Mr. Jitendra Gaur	Chemist	Process	16.10.2017	B.Sc.

Exhibit- 09

Information to Public

एक्सल फायबर डिवीजन

पर्यावरण सम्मति

पर्यावरण एवं वन मंत्रालय (भारत सरकार) द्वारा एक्सल फायबर डिवीजन नागदा को 7300 टन प्रति वर्ष एक्सल फायबर उत्पादन हेतु पर्यावरण सम्मति दिनांक 16.08.2012 को प्रदान की है जो पर्यावरणएवं वन मंत्रालय की वेबसाईट http://envfor.nic.in पर उपलब्ध है।

ग्रेसिम इण्डस्ट्रीज लिमिटेड (एक्सल फायबर डिवीजन)
रजीस्टर्ड ऑफिस - पो.ओ. बिरलाग्राम, नागदा
456 331 जिला -उज्जैन (म.प्र.)

Local Language News Paper (Dainik Jagran)

Excel Fibre Division

Environment Clearance

Ministry of Environment and Forest has accorded Environment Clearance to Excel Fibre Division, Nagda for Production of 7300 TPA Excel Fibre on 16.08.2012 and same is available on MOEF

website- http://envfor.nic.in

Grasim Industries Limited **(Excel Fibre Division)**
Registered Office - P.O. Birlagram, Nagda
Pin - 456 331 Dist.- Ujjain (M.P.)

English News Paper (Free Press)

Monitoring the Implementation of Environmental Safeguards
Ministry of Environment and Forest
Western Region, Regional Office, Bhopal
Monitoring Report
DATA SHEET

1	Project Type : River-valley / Mining / Industry / Thermal / Nuclear / Other (Specify)	:	Industry
2	Name of project	:	Expansion of Solvent Spun Cellulosic Fibre (3,650 TPA to 10,950 TPA Birlagram, Nagda, District Ujjain, M.P. by M/s Grasim Industries Ltd. (Excel Fibre Division)
3	Clearance letter (s) OM No. and date	:	F. No. J-11011/255/2011- IA II (I) dated 16.08.2012
4	Location:	:	Birlagram, Nagda
	a) District (s)	:	Ujjain
	b) State	:	Madhya Pradesh
	c)Location Latitude / Longitude	:	Latitude 23.4491° North and Longitude 75.4128 East
5	Address for Correspondence	:	
	a) Address of the Concerned Project Chief Engineer (with Pin Code & telephone / telex / fax numbers)	:	**K Suresh** Sr. President & Unit Head Grasim Industries Limited Excel Fibre Division Birlagram, Nagda – 456 331 (M.P.) Phone – 07366 – 246760-66 Fax – 07366 – 246024, 244114
	b) Address of the Executive Project Engineer / Manager ((with Pin Code & telephone / telex / fax numbers)	:	**Abhishek Biswas** Asst. Vice President Grasim Industries Limited Excel Fibre Division Birlagram, Nagda – 456 331 (M.P.) Phone – 07366 – 246760-66 Fax – 07366 – 246024, 244114
6	Salient features		
	a) of the Project	:	Solvent Spinning process for producing of fibre is a home grown technology developed by Birla Research Institute, Nagda and has no adverse impact on environment due to the following: • No use of hazardous chemicals in the process i.e. CS2, H2SO4. • Solvent used for dissolving pulp and regeneration of fibre is environment friendly and solvent is recovered and reused in the process. • No point sources of gaseous emission. • Product is easily bio-degradable

	b) of the Environment Management Plant	:	• There is no point source of gaseous emission • There is no increase of effluent discharge after expansion • Hazardous waste Used Oil and Used Resin will be sent to TSDF Pithampur for safe disposal.
7	Breakup of the Project area		Expansion is in existing premises
	a) Submergence area : forest & non forest	:	Nil
	b) Others	:	Total Area including expansion(Excel Fibre Division) Area Under Building , Tanks etc – 0.83 ha Area Under Green Belt & Garden – 0.95 ha Total Land – 1.78 ha
8	Breakup of the project affected population with enumeration of those losing houses / dwelling units only agricultural land only Both dwelling units & agricultural land & landless labors / artisans:	:	Expansion is in existing premises
	a) SC, ST/ Adivasi	:	Not Applicable
	b) Others	:	Not Applicable
9	Financial details Project cost planned and subsequent revised estimates and the year of price reference	:	88 Crores
	a) Allocation made for environmental management plans with item wise and year wise break-up	:	1. Exhaust System : 1.5 cr 2. Condensate recovery : 0.50 cr 3. Insulation (hot & cold) : 0.25 cr 4. VFD's for energy savings : 2.25 cr 5. Total : 4.50 cr
	b) Benefit cost ratio / Internal rate of return and the year of assessment	:	ROI – 14.0% Year : 2017-18
	c) Whether © includes the cost of environment management as shown in the above	:	Yes
	d) Actual expenses incurred on the project so far	:	88 Crores
	e) Actual expenditure incurred on the environmental management plan so far	:	6.45 Crores
10	Forest land requirement	:	Expansion is in the existing Premises
	a) The status of approval for diversion of forest land for non forestry use	:	Not Applicable
	b) The status of clearing felling	:	Not Applicable
	c) The status of compensatory afforestation, if any	:	Not Applicable
	d) comments on the viability & sustainability of compensatory afforestation program in the light of actual field experience so far	:	Not Applicable
11	The status of clear felling in non-forest areas	:	Not Applicable as

	(such as submergence area or reservoir, approach roads (, if any with quantitative information required.		Expansion is in the existing Premises
12	Status of construction (Actual &/or Planned)	:	
	a) Date of Commencement (Actual &/or planned)	:	Actual date of Commencement 26.08.2012
	b) Date of Completion (Actual &/or planned)	:	All activities related to erection of plant and machinery for expansion of Excel Fibre division has been successfully completed. The commissioning trials of extended capacity of the plant started from 28.12.2012 onwards
13	Reason for the delay if the project is yet to start	:	Not Applicable
14	Details of Site Visit a) The dates on which the Project was Monitored by the MoEF &CC, Regional Office on previous occasions (if Applicable)	:	NA

Signature of the Project Incharge