



November 29, 2021

No. 1727/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 April 2021 to September 2021 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 April – 2021 to September -2021 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,

*B. Suresh*

*[Signature]*  
**K Suresh**  
**Sr. President & Unit Head**

**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**

**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.)

# 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: APRIL 2021 – SEPTEMBER 2021**

**Submitted on: 1 DECEMBER 2021**

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Compliance Status Report for "Environment Clearance" accorded by MoEF & CC for Grasim Industries Limited, Excel Fibre Division, Birlagram, Nagda – 456 331 (M.P.)

## List of Annexures

- Exhibit -1 Ambient Air Monitoring Results of Grasim (SFD, EFD & CPP) for Last Six Months
- 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 (CS<sub>2</sub>), Sulphuric Acid (H<sub>2</sub>SO<sub>4</sub>) and Sodium Hydroxide (NaOH) in Manufacturing Process.
5. Solvent used for dissolving pulp and regeneration of fibre is environment friendly and more than 99.81% 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 (SFD, EFD & CPP) displayed on LED Board at main gate of the Plant Premises.
10. Industry has completed ZLD Project as per stipulation given by MPPCB, CPCB, & MoEFCC Bhopal on 30.09.2021.
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;

Compliance Status Report for "Environment Clearance" accorded by MoEF & CC for Grasim Industries Limited, Excel Fibre Division, Birlagram, Nagda – 456 331 (M.P.)

Environment Clearance  
(Grasim Industries Limited, Excel Fibre Division)

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

Period: APRIL 2021 – SEPTEMBER 2021

**General Profile**

Sr. No.	Stipulation	Compliance Status													
1.0	Kindly refer your letter dated 18 <sup>th</sup> April 2011 and 3 <sup>rd</sup> November 2011, along with project documents including Form-1, Terms of Reference, Pre-feasibility report and additional information submitted vide letter dated 4 <sup>th</sup> July 2011 and 13 <sup>th</sup> July 2011 regarding above mentioned project.	Acknowledged													
2.0	<p>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.</p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>1</td> <td>Solvent Spun Cellulosic Fibre</td> <td>3650</td> <td>7300</td> <td>10950</td> </tr> </tbody> </table>	Sr.	Product	Production Capacity (TPA)			Existing	Proposed Expansion	Total	1	Solvent Spun Cellulosic Fibre	3650	7300	10950	<p>No wild life sanctuary / reserve forest is located within 10 km of the Plant Site.</p> <p>Total Cost of the Project is: 83.30 Crores</p> <p>Total Production During Reporting Period (April -2021 – September- 2021) is 4564.0 (Metric Tons).</p>
Sr.	Product			Production Capacity (TPA)											
		Existing	Proposed Expansion	Total											
1	Solvent Spun Cellulosic Fibre	3650	7300	10950											
3.0	Utility requirement (i.e. water, power and steam) will be met from existing unit. Hazardous Chemical i.e. CS2 and H2SO4 will not be used in the process. Solvent	Water and Power & Steam requirement is being met from existing facilities of Staple Fibre													

Sr. No.	Stipulation	Compliance Status
	<p>recovery will be 99.8%. Total water requirement from the dam of the Chambal River is 680 m<sup>3</sup>/day and no additional fresh water will be required for the expansion. Effluent generation will be 530 m<sup>3</sup>/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.</p>	<p>Division and Captive Power Plants and no additional utility is setup for the expansion</p> <p>Total Effluent generated is 169 m<sup>3</sup>/day and effluent generated from expansion is being utilized in Auxiliary Cooling Towers as makeup in place of fresh water.</p> <p>Hazardous Chemical i.e. CS<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub> is not being used in manufacturing process.</p> <p>Maximum Solvent recovery is achieved during the reporting period is 99.81%</p> <p>ETP Sludge is utilized in existing coal fired boilers.</p>
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 25 <sup>th</sup> , 28 <sup>th</sup> and 29 <sup>th</sup> meetings held during 28 <sup>th</sup> -30 <sup>th</sup> July 2011, 20 <sup>th</sup> – 21 <sup>st</sup> October 2011 and 17 <sup>th</sup> – 18 <sup>th</sup> 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 14 <sup>th</sup> 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.	<p>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.</p> <p>We have submitted Proposal No : IA/MP/IND2/58856/2016 on 07.09.2016 to MoEF &amp; 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 &amp; 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 granted on 29.05.2020.</p>
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 CS <sub>2</sub> as a raw material in the proposed process activity.	Solvent Spun Cellulosic Fibre Manufacturing does not require CS <sub>2</sub> 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 PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , CS <sub>2</sub> , 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 for Grasim SFD, EFD & CPP in consultation with M.P. Pollution Control Board and display of the same is being provided on LED Display Board



Sr. No.	Stipulation	Compliance Status									
	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.	<p>installed at Factory Gate for general public.</p> <p>We have also installed four Ambient Air Quality Monitoring Station in all four directions (Grasim premises that includes SFD, EFD &amp; CPP) in consultation with CPCB &amp; 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 <b>Exhibit-1</b>.</p>									
v)	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.	<p>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.</p> <p>Industry is regularly conducting the work zone monitoring by NABL accredited laboratory and the results are well within the stipulated norms.</p> <table border="1" data-bbox="986 1727 1377 2018"> <thead> <tr> <th data-bbox="986 1727 1126 1839">Area</th> <th data-bbox="1126 1727 1259 1839">Std. mg/m3)</th> <th data-bbox="1259 1727 1377 1839">Total Dust mg/m3</th> </tr> </thead> <tbody> <tr> <td data-bbox="986 1839 1126 1910">Pulp Storage</td> <td data-bbox="1126 1839 1259 1910">10</td> <td data-bbox="1259 1839 1377 1910">1.40</td> </tr> <tr> <td data-bbox="986 1910 1126 2018">10 TPD Spinning area</td> <td data-bbox="1126 1910 1259 2018">10</td> <td data-bbox="1259 1910 1377 2018">1.23</td> </tr> </tbody> </table>	Area	Std. mg/m3)	Total Dust mg/m3	Pulp Storage	10	1.40	10 TPD Spinning area	10	1.23
Area	Std. mg/m3)	Total Dust mg/m3									
Pulp Storage	10	1.40									
10 TPD Spinning area	10	1.23									

Sr. No.	Stipulation	Compliance Status		
		20 TPD Spinning area	10	1.14
		Fibre Storage Area	10	1.50
(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 <b>Exhibit-2</b> .		
vii)	Unit shall carry out the study to identify the composition of the vapour 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)	<p>For further control of fugitive emissions, following steps shall be followed:</p> <p>a) Closed handling system shall be provided for chemicals.</p> <p>b) System of leak detection and repair of pump/pipeline based on preventive maintenance.</p> <p>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.</p> <p>d) Cathodic protection shall be provided to the underground solvent storage tanks.</p>	<p>a) All the chemicals are being handled through closed system and no manual handling of chemicals is involved in the process.</p> <p>b) Dykes have been constructed for chemical storage tanks as shown in <b>Exhibit-3</b>. Preventive Maintenance is being carried out as per the schedules.</p> <p>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.</p> <p>d. There are no underground solvent storage tanks in the plant.</p>		

Sr. No.	Stipulation	Compliance Status																
ix)	As proposed, solvent recovery shall be not less than 99.8%	<p>The solvent recovery for the last six months is at 99.81%. The details of recovery month wise as follows:</p> <table border="1" data-bbox="986 465 1385 763"> <thead> <tr> <th>Month</th> <th>Recovery %</th> </tr> </thead> <tbody> <tr> <td>Apr-21</td> <td>99.79</td> </tr> <tr> <td>May-21</td> <td>99.81</td> </tr> <tr> <td>Jun-21</td> <td>99.83</td> </tr> <tr> <td>Jul-21</td> <td>99.79</td> </tr> <tr> <td>Aug-21</td> <td>99.82</td> </tr> <tr> <td>Sep-21</td> <td>99.82</td> </tr> <tr> <td><b>Average</b></td> <td><b>99.81</b></td> </tr> </tbody> </table>	Month	Recovery %	Apr-21	99.79	May-21	99.81	Jun-21	99.83	Jul-21	99.79	Aug-21	99.82	Sep-21	99.82	<b>Average</b>	<b>99.81</b>
Month	Recovery %																	
Apr-21	99.79																	
May-21	99.81																	
Jun-21	99.83																	
Jul-21	99.79																	
Aug-21	99.82																	
Sep-21	99.82																	
<b>Average</b>	<b>99.81</b>																	
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 m <sup>3</sup> /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.	<p>Total fresh water consumption for reporting period is 355 m<sup>3</sup>/day from Chambal River .</p> <p>No Ground water is being utilized in the plant.</p>																
xii)	Industrial effluent generated shall not exceed 530 m <sup>3</sup> /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.	<p>Total Effluent generated from Solvent Spun Cellulosic Fibre plant for the reporting period is 169 m<sup>3</sup>/day</p> <p>Additional effluent generated from expanded facility is being utilized in SFD Cooling Tower.</p> <p>We are also monitoring the treated effluent quality in laboratory and report is being sent regularly to MPPCB.</p> <p>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.</p> <p>As of now, we have completed the ZLD project as per stipulation</p>																

Sr. No.	Stipulation	Compliance Status
		given by MPPCB. We have communicated to MPPCB, CPCB & MoEFCC IRO, Bhopal, regarding the ZLD commissioning.
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.  As of now, we have completed the ZLD project as per stipulation given by MPPCB. We have communicated to MPPCB, CPCB & MoEFCC IRO, Bhopal, regarding the ZLD commissioning
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 :-	

Sr. No.	Stipulation	Compliance Status
	<p>a. Metering and control of quantities of active ingredients to minimize waste.</p> <p>b. Reuse of by-product from the process as raw materials or as raw material substitutes in other process.</p> <p>c. Use of automated filling to minimize spillage.</p> <p>d. Use of Close Feed system into batch reactor</p> <p>e. Venting equipment through vapour recovery system</p> <p>f. Use of high pressure hoses for equipment clearing to reduce wastewater generation</p>	<p>a) Measurement of quantities is being done through controlled Programmable Logic Controller (PLC).</p> <p>b) Solvent Spun Cellulosic Process is having no by-products.</p> <p>c) Plant is being operated through Programmable Logic Controller (PLC).</p> <p>d) We are having continuous process of manufacturing with closed feed system.</p> <p>e) There is no process vents in the plant.</p> <p>f) We are using of high pressure hoses for equipment cleaning.</p>
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 <b>Exhibit-4</b> .
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 <b>Exhibit-5</b>
xxi)	Provision shall be made for the housing for the construction labour within the site with all the necessary infrastructure and facilities such as fuel for	Construction work has been completed. Construction activity was done in the existing premises

<b>Sr. No.</b>	<b>Stipulation</b>	<b>Compliance Status</b>
	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.	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.	<p>Industry has obtained Consent to Establishment and Consent to Operate from M.P. Pollution Control Board and complying all stipulation made.</p> <p>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. AW-54344 dated 27.09.2021 and under the Water Act vide their letter No. AW-54344 dated 27.09.2021 Validity up to 30.11.2022</p>
(ii)	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.	<p>No further expansion is planned during the reporting period in existing Excel Fibre Division. However, we have submitted Proposal No</p> <p>: IA/MP/IND2/58856/2016 on 07.09.2016 to MoEF &amp; 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 &amp; 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 has been granted on 29.05.2020.</p>
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	We have installed 03 (Three) Continuous Ambient Air Quality Monitoring System for Grasim

Sr. No.	Stipulation	Compliance Status																		
	that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	<p>SFD, EFD &amp; CPP in consultation with M.P. Pollution 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 <b>Exbit-6</b></p> <p>We have also installed Ambient Air Quality Monitoring Station in all four directions (Grasim premises that includes SFD, EFD &amp; CPP) in consultation with CPCB &amp; 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 <b>Exbit-1</b>.</p>																		
iv)	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).	<p>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 conform the prescribed standards.</p> <p>Ambient Noise Level (dBA) is measured by Third party and average results for the period July 21 to September 21 is tabulated as under;</p> <table border="1" data-bbox="995 1727 1375 2018"> <thead> <tr> <th>Area</th> <th>Day</th> <th>Night</th> </tr> </thead> <tbody> <tr> <td><b>Norms</b></td> <td><b>75</b></td> <td><b>70</b></td> </tr> <tr> <td>Occupational Health Centre</td> <td>67</td> <td>62</td> </tr> <tr> <td>Plant Colony</td> <td>51</td> <td>43</td> </tr> <tr> <td>Durgapura</td> <td>51</td> <td>46</td> </tr> <tr> <td>Plant Site (Mill-2)</td> <td>69</td> <td>67</td> </tr> </tbody> </table>	Area	Day	Night	<b>Norms</b>	<b>75</b>	<b>70</b>	Occupational Health Centre	67	62	Plant Colony	51	43	Durgapura	51	46	Plant Site (Mill-2)	69	67
Area	Day	Night																		
<b>Norms</b>	<b>75</b>	<b>70</b>																		
Occupational Health Centre	67	62																		
Plant Colony	51	43																		
Durgapura	51	46																		
Plant Site (Mill-2)	69	67																		



Sr. No.	Stipulation	Compliance Status		
		Nagda Town	57	49
		Plant Periphery Out side ( Factory Main Gate)	63	59
		Plant Periphery Out side ( Colony Main Gate)	65	55
v.	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.	Rain Water Harvesting system has been installed.		
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 <b>Exhibit-7</b> .		
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		

Sr. No.	Stipulation	Compliance Status
		senior secondary schools, various activities are being held in adjoining villages. Total beneficiaries of these activities in last year (FY 2019-20) are 4.51 Lacs with annual expense of Rs. 9.07 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 <b>Exhibit-7</b>
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 <b>Exhibit-8</b>
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	Last Six Monthly compliance report is submitted for period October-2020 – March 2021. A copy of the same is also posted on the company website.

Sr. No.	Stipulation	Compliance Status
	Board. A copy of Environment Clearance and six monthly compliance status reports shall be posted on the website of the company.	
xv	The environment statement for each financial year ending 31 <sup>st</sup> 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.  In addition, we have started submitting the copy of environment statement to IRO Bhopal.
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 <a href="http://envfor.nic.in">http://envfor.nic.in</a> . 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 <b>Exhibit-9</b> .  As advised, MOEFCC, IRO Bhopal was communicated through email with a copy of the newspaper advertisement enclosed
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.  Industry had submitted the details regarding final approval of the project by the concerned authorities and the date of start of the project to MoEFCC IRO, Bhopal vide letter No. 843 /Env-SFD / PCB / BPL / RO-MoEF/efd dt 06/02/2013.
8.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory	Acknowledged & will abide

Sr. No.	Stipulation	Compliance Status
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	<p>The above conditions will be enforced, inter-alia under the provision of the Water (Prevention &amp; control of pollution) Act-1977, the Air (Prevention &amp; control of pollution) Act-1981, the Environment (Protection) Act-1986, Hazardous waste (Management &amp; Handling) Rules-2003 and the Public Liability Insurance Act-1991 along with their amendments and rules.</p>	<p>We are following terms &amp; conditions of MPPCB Consent under Air Act &amp; Water Act and authorization under Hazardous Waste Rules.</p> <p>Industry has obtained renewed CCA consent to operate from MPPCB under Water Act &amp; Air Act vide consent No. AW-54344, dated 27.09.2021 valid up to 30.11.2022 and Hazardous Waste Authorization no. AWH-49579 valid up to 22.01.2024.</p>

FORMAT - II A

Ambient air quality data at Nagda for the month of : April-2021  
All results expressed as Microgram/M3

Direction	Date	6 - 10			10 - 14			14 - 18			18 - 22			22 - 02			02 - 06			4Hrs Max.			24Hrs Avg			8 Hrs Avg			8 Hrs Avg				
		SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	SO2	H2S	SO2	NO2	CS2	SO2	H2S	SO2	NO2	CS2	SO2	H2S	SO2
EAST	05.04.2021	18	17	17	16	19	20	15	18	18	19	16	17	17	15	20	22	20	18	22	19.0	17.7	15.8	18.7	44	46	42	24	29	28			
	19.04.2021	8	8	8	7	10	11	7	6	9	9	8	11	7	10	9	12	12	11	11	9.8	9.5	8.5	8.0	46	49	44	26	28	25			
WEST	05.04.2021	16	15	9	15	15	11	12	9	12	14	11	14	19	13	12	16	19	14	15	14.2	15.5	12.3	12.3	46	42	48	24	19	20			
	19.04.2021	6	7	6	5	4	5	4	3	8	4	5	6	5	7	3	8	7	7	6	6.0	5.0	4.8	4.3	42	40	39	21	23	20			
NORTH	07.04.2021	13	14	12	10	11	16	14	12	12	13	10	14	12	11	12	11	15	16	14	12.5	13.2	12.0	11.3	38	40	39	20	21	22			
	22.04.2021	13	10	13	11	10	13	11	9	11	12	10	14	13	13	14	14	13	14	13	11.5	11.7	12.0	11.0	38	41	43	23	21	20			
	28.04.2021	10	12	13	12	11	13	12	13	12	14	11	10	12	11	9	12	14	14	13	11.0	11.7	11.8	11.2	40	39	41	21	23	22			
SOUTH	07.04.2021	20	19	17	20	16	17	20	17	15	18	16	18	16	17	20	21	19	20	16.7	18.0	18.5	17.8	46	48	45	27	25	28				
	22.04.2021	16	17	15	13	18	15	13	10	15	20	11	13	19	14	16	14	18	16	14.7	17.5	13.5	13.2	47	49	46	27	29	26				
	28.04.2021	20	16	14	11	19	13	17	14	18	15	19	10	18	15	21	16	20	21	18.8	14.2	16.3	13.3	47	45	46	29	26	27				

FORMAT - II B

Ambient air quality data at Nagda for the month of : April-2021

Sampling Location	Month & Year	SO2 microgram/M3			NO2 microgram/M3			CS2 microgram/M3			H2S microgram/M3			PM10 microgram/M3			PM2.5 microgram/M3										
		n	A.M.	Peak	n	A.M.	Peak	n	A.M.	Peak	n	A.M.	Peak	n	A.M.	Peak	n	A.M.	Peak								
EAST Fabrication Shop	Apr. 2021	12	14.4	4.9	22	12	13.6	4.4	20	12	12.2	4.0	18	12	13.3	5.6	22	6	45	2.2	49	45	6	27	1.8	29	27
WEST Vishnu Bhawan	Apr. 2021	12	10.1	4.3	16	12	10.3	5.6	19	12	8.6	4.1	14	12	8.3	4.3	15	6	43	3.2	48	43	6	21	1.8	24	21
NORTH Labour-Club	Apr. 2021	18	11.7	1.6	15	18	12.2	1.7	16	18	11.9	1.4	14	18	11.2	1.4	14	9	40	1.5	43	40	9	21	1.1	23	21
SOUTH Dairy	Apr. 2021	18	16.7	2.5	21	18	16.6	2.2	20	18	16.1	2.8	21	18	14.8	2.9	20	9	47	1.3	49	47	9	27	1.3	29	27

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 Permissible limit for CS2 = 100 µgm3 and H2S = 150 µgm3

ND = Not Detected



**FORMAT - II A**

**Ambient air quality data at Nagda for the month of : May-2021**  
**All results expressed as Microgram/M3**

Dir- ction	Hrs. Date	6 - 10			10 - 14			14 - 18			18 - 22			22 - 02			02 - 06			4Hrs Max	24Hrs Avg			8 Hrs Avg, PM10		8 Hrs Avg, PM2.5							
		SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2		CS2	6-14	14-22	22-06	6-14	14-22	22-06						
EAST	03.05.2021	17	18	14	15	19	20	16	18	17	21	15	17	17	15	17	17	15	17	17	18	21	17.7	17.2	15.8	17.8	43	44	42	25	28	27	
	21.05.2021	19	15	17	18	18	14	15	20	15	19	14	16	17	19	16	19	13	16	13	15	19	19	16.3	15.7	14.7	17.5	45	48	46	25	27	26
WEST	03.05.2021	15	14	10	14	16	10	9	10	11	9	11	9	12	17	12	15	15	13	12	16	18	18	13.7	14.2	11.2	12.0	44	41	45	25	20	22
	21.05.2021	18	14	13	12	16	16	14	13	19	17	18	15	14	15	18	11	18	20	14	19	20	17.2	16.7	15.0	12.5	41	40	40	23	21	20	
NORTH	05.05.2021	14	13	14	9	12	11	10	12	11	11	12	11	15	11	13	11	11	10	9	15	13	14	12.8	11.3	11.7	10.7	41	38	39	19	21	20
	23.05.2021	13	11	14	10	10	14	11	9	12	10	13	11	10	11	10	12	10	12	13	14	14	11.3	11.8	11.5	10.5	40	41	41	20	22	21	
SOUTH	05.05.2021	17	20	16	19	15	17	17	15	16	16	18	15	18	15	18	15	17	17	18	18	20	16.5	17.3	17.5	17.0	45	46	47	28	25	27	
	23.05.2021	17	18	17	18	19	16	14	17	14	16	16	16	16	18	19	13	14	15	19	19	18	15.7	16.2	14.5	15.2	48	47	48	26	28	27	

BDL : Below detectable Limit Tr. : Traces ND: Not Detectable

**FORMAT - II B**

**Ambient air quality data at Nagda for the month of : May-2021**

Sampling location	Month & Year	SO2 microgram/M3			NO2 microgram/M3			CS2 microgram/M3			H2S microgram/M3			PM10 microgram/M3			PM2.5 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	n	A.M.	S.D. Peak	G.M.						
EAST Fabrication Shop	May-2021	12	17.0	2.2	12	16.4	2.1	20	12	15.3	1.5	18	12	17.7	1.9	21	6	45	2.0	48	45	6	26	1.1	28	26
	May-2021	12	15.4	2.4	12	15.4	2.8	20	12	13.1	2.4	18	12	12.3	1.6	15	6	42	2.0	45	42	6	22	1.8	25	22
	May-2021	12	12.1	1.6	12	11.6	1.2	14	12	12.2	1	14	12	10.6	1.3	13	6	40	1.2	41	40	6	21	1.0	22	20
	May-2021	12	16.1	1.7	12	16.8	1.8	20	12	16.0	2.1	20	12	16.1	2.0	19	6	47	1.1	48	47	6	27	1.1	28	27
WEST Vishnu Bhawan	May-2021	12	17.0	2.2	12	16.4	2.1	20	12	15.3	1.5	18	12	17.7	1.9	21	6	45	2.0	48	45	6	26	1.1	28	26
	May-2021	12	15.4	2.4	12	15.4	2.8	20	12	13.1	2.4	18	12	12.3	1.6	15	6	42	2.0	45	42	6	22	1.8	25	22
	May-2021	12	12.1	1.6	12	11.6	1.2	14	12	12.2	1	14	12	10.6	1.3	13	6	40	1.2	41	40	6	21	1.0	22	20
	May-2021	12	16.1	1.7	12	16.8	1.8	20	12	16.0	2.1	20	12	16.1	2.0	19	6	47	1.1	48	47	6	27	1.1	28	27
NORTH Labour-Club	May-2021	12	17.0	2.2	12	16.4	2.1	20	12	15.3	1.5	18	12	17.7	1.9	21	6	45	2.0	48	45	6	26	1.1	28	26
	May-2021	12	15.4	2.4	12	15.4	2.8	20	12	13.1	2.4	18	12	12.3	1.6	15	6	42	2.0	45	42	6	22	1.8	25	22
	May-2021	12	12.1	1.6	12	11.6	1.2	14	12	12.2	1	14	12	10.6	1.3	13	6	40	1.2	41	40	6	21	1.0	22	20
	May-2021	12	16.1	1.7	12	16.8	1.8	20	12	16.0	2.1	20	12	16.1	2.0	19	6	47	1.1	48	47	6	27	1.1	28	27
SOUTH Daily	May-2021	12	17.0	2.2	12	16.4	2.1	20	12	15.3	1.5	18	12	17.7	1.9	21	6	45	2.0	48	45	6	26	1.1	28	26
	May-2021	12	15.4	2.4	12	15.4	2.8	20	12	13.1	2.4	18	12	12.3	1.6	15	6	42	2.0	45	42	6	22	1.8	25	22
	May-2021	12	12.1	1.6	12	11.6	1.2	14	12	12.2	1	14	12	10.6	1.3	13	6	40	1.2	41	40	6	21	1.0	22	20
	May-2021	12	16.1	1.7	12	16.8	1.8	20	12	16.0	2.1	20	12	16.1	2.0	19	6	47	1.1	48	47	6	27	1.1	28	27

A.M.=Arithmetic mean, S.D.=Standard Deviation, G.M.=Geometric mean, n=number of observation.  
 Note: Norms for SO2, NO2, PM10 & PM2.5 as per National Ambient Air Quality Standards and Permissible limit for CS2 = 100 µg/m<sup>3</sup> and H2S = 150 µg/m<sup>3</sup>

**FORMAT - II A**

**Ambient air quality data at Nagda for the month of : June 2021**  
**All results expressed as µg/m<sup>3</sup>**

Direction	Hrs. Date	6 - 10			10 - 14			14 - 18			18 - 22			22 - 02			02 - 06			4Hrs Max.			24Hrs Avg			8 Hrs Avg			8 Hrs Avg									
		SO <sub>2</sub>	NO <sub>2</sub>	CS <sub>2</sub>	H <sub>2</sub> S	SO <sub>2</sub>	NO <sub>2</sub>	CS <sub>2</sub>	H <sub>2</sub> S	SO <sub>2</sub>	NO <sub>2</sub>	CS <sub>2</sub>	H <sub>2</sub> S	SO <sub>2</sub>	NO <sub>2</sub>	CS <sub>2</sub>	H <sub>2</sub> S	SO <sub>2</sub>	NO <sub>2</sub>	CS <sub>2</sub>	H <sub>2</sub> S	SO <sub>2</sub>	NO <sub>2</sub>	CS <sub>2</sub>	H <sub>2</sub> S	SO <sub>2</sub>	NO <sub>2</sub>	CS <sub>2</sub>	H <sub>2</sub> S	SO <sub>2</sub>	NO <sub>2</sub>	CS <sub>2</sub>	H <sub>2</sub> S	SO <sub>2</sub>	NO <sub>2</sub>	CS <sub>2</sub>		
EAST	07.06.2021	19	16	15	16	22	18	13	17	18	17	15	15	18	17	17	17	17	17	17	18	20	14	16	22	20	18	20	18.5	17.2	15.3	17.3	44	43	42	28	26	25
	21.06.2021	18	14	16	19	18	14	15	18	16	15	14	15	18	17	11	19	14	16	14	14	18	18	18	18	16	19	16.7	15.7	14.2	17.5	46	47	47	26	27	25	
	28.06.2021	14	15	11	14	12	18	17	17	14	13	18	11	19	14	15	14	15	17	19	17	20	18	18	20	18	20	13.0	17.3	15.0	17.2	45	47	47	25	26	26	
WEST	07.06.2021	14	13	9	14	11	11	10	9	10	15	11	11	16	10	14	11	11	13	12	15	16	12	15	16	12	15	13.2	13.7	10.5	11.7	41	43	42	24	22	25	
	21.06.2021	16	15	14	11	15	17	14	12	18	16	15	11	15	14	17	15	16	17	19	19	17	17	13	19	17	16.2	16.7	15.0	11.5	42	41	40	20	22	21		
	28.06.2021	12	9	9	11	10	11	11	12	11	10	12	11	10	10	12	13	12	11	12	14	14	13	14	14	12	14	11.8	10.7	10.7	11.8	40	41	40	22	20	21	
NORTH	08.06.2021	15	10	12	10	10	11	10	12	14	11	14	9	16	12	13	10	10	12	10	16	12	12	14	14	12	12	12.8	10.8	11.5	10.5	40	39	40	18	20	21	
	22.06.2021	10	10	12	9	11	13	11	11	13	10	12	10	10	10	11	10	10	11	11	13	13	13	13	13	12	12	11.3	11.3	11.3	10.5	41	40	42	22	20	22	
	08.06.2021	17	19	16	18	15	17	17	17	16	15	17	16	18	18	18	18	18	18	18	19	20	17	15	18	20	20	18.0	17.5	16.7	16.7	46	44	46	27	26	27	
SOUTH	22.06.2021	19	15	16	17	16	17	14	17	18	14	12	15	15	14	15	14	16	14	16	12	19	18	16	12	19	16.3	15.5	14.7	15.2	47	49	48	27	26	25		

ND: Not Detectable

Tr.: Traces

**FORMAT - II B**

**Ambient air quality data at Nagda for the month of : June 2021**

Sampling location	Month & Year	SO <sub>2</sub> µg/m <sup>3</sup>			NO <sub>2</sub> µg/m <sup>3</sup>			CS <sub>2</sub> µg/m <sup>3</sup>			H <sub>2</sub> S µg/m <sup>3</sup>			PM10 microgram/M3			PM2.5 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	n	A.M.	S.D. Peak	G.M.							
EAST Fabrication Shop	Jun. 2021	18	16.1	3.0	22	18	16.7	1.8	20	18	14.8	2.0	18	18	17.3	1.8	20	9	4.5	1.8	4.7	4.5	9	2.6	0.9	2.8	2.6
WEST Vishnu Bhawan	Jun. 2021	18	13.7	2.5	19	18	13.7	2.8	19	18	12.1	2.3	17	18	11.7	1.6	15	9	4.1	1.0	4.3	4.1	9	2.2	1.6	2.5	2.2
NORTH Labour-Club	Jun. 2021	12	12.0	2.0	16	12	11.1	1.1	13	12	11.4	1.0	14	12	10.5	1.0	12	6	4.0	0.9	4.2	4.0	6	2.1	1.4	2.2	2.0
SOUTH Dairy	Jun. 2021	12	16.4	1.5	19	12	16.8	2.0	20	12	16.1	1.9	20	12	15.9	1.7	18	6	4.7	1.6	4.9	4.7	6	2.6	0.7	2.7	2.6

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

Note: Norms for SO<sub>2</sub>, NO<sub>2</sub>, PM10 & PM2.5 as per National Ambient Air Quality Standards and Permissible limit for CS<sub>2</sub> = 100 µg/m<sup>3</sup> and H<sub>2</sub>S = 150 µg/m<sup>3</sup>



**FORMAT - II A**  
**Ambient air quality data at Nagda for the month of : July-2021**  
**All results expressed as Microgram/M3**

Direction	Date	Hrs	6 - 10			10 - 14			14 - 18			18 - 22			22 - 02			02 - 06			4Hrs Max			24Hrs Avg			8 Hrs Avg			8 Hrs Avg								
			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				
EAST	09.07.2021	21	19	14	20	20	17	12	16	19	20	13	15	21	15	17	18	18	15	16	17	17	11	17	21	20	17	20	19.3	17.7	13.7	17.2	46	48	47	27	25	26
	19.07.2021	19	16	14	17	18	13	12	19	14	12	13	15	16	17	14	15	12	18	16	18	14	17	19	18	14	19	16.3	15.2	13.2	17.0	47	45	46	27	25	26	
	06.07.2021	10	15	10	15	12	12	9	10	14	16	12	9	11	15	10	12	13	13	10	14	15	14	15	16	12	15	12.5	14.0	10.5	12.2	42	44	43	23	24	22	
	19.07.2021	15	19	17	10	15	16	15	11	17	15	14	13	17	12	12	18	14	14	17	17	14	13	18	19	18	15.8	17.0	15.0	12.2	40	41	41	21	20	22		
NORTH	06.07.2021	14	11	14	9	12	10	11	11	10	12	10	15	11	11	10	10	11	13	9	11	12	15	12	14	12	12.5	10.5	11.5	10.8	39	41	40	20	19	20		
	20.07.2021	9	13	11	10	11	12	11	9	12	10	10	10	11	9	12	10	11	12	10	9	12	15	12	13	13	12	10.3	11.3	10.7	10.0	42	41	40	21	22	21	
	06.07.2021	18	20	20	17	16	18	17	16	15	15	17	15	14	16	16	14	15	15	14	14	15	16	18	20	20	15.8	17.3	17.3	16.2	44	47	45	26	25	27		
	20.07.2021	20	14	14	18	17	13	12	16	15	16	16	15	16	15	13	14	15	14	14	17	13	20	18	16	16.3	14.7	14.3	14.2	48	47	47	26	25	26			

BDL : Below detectable Limit      Tr.: Traces      ND: Not Detectable

**FORMAT - II B**  
**Ambient air quality data at Nagda for the month of : July-2021**

Sampling location	Month & Year	SO2 microgram/M3			NO2 microgram/M3			CS2 microgram/M3			H2S microgram/M3			PM10 microgram/M3			PM2.5 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.	n	A.M.	S.D. Peak	G.M.					
EAST Fabrication Shop	July-2021	12	17.8	2.2	12	16.4	2.3	20	12	13.4	1.6	17	12	17.1	1.6	20	6	47	1.0	48	46	6	26	0.8	27	26
WEST Vishnu Bhawan	July-2021	12	14.2	2.4	12	15.5	2.1	19	12	12.8	2.8	18	12	12.2	1.8	15	6	42	1.3	44	42	6	22	1.3	24	22
NORTH Labour-Club	July-2021	12	11.4	1.8	12	10.9	1.1	13	12	11.6	1	14	12	10.4	1.1	12	6	41	1.0	42	40	6	21	1.0	22	20
SOUTH Daily	July-2021	12	16.1	1.8	12	16.0	2.2	20	12	15.8	2.1	20	12	15.2	2.0	19	6	46	1.4	48	46	6	26	0.7	27	26

A.M =Arithmetic mean, S.D =Standard Deviation, G.M =Geometric mean n=number of observation.  
 Note: Norms for SO2,NO2, PM10 & PM2.5 as per National Ambient Air Quality Standards and Permissible limit for CS2 = 100 µg/m3 and H2S = 150 µg/m3



FORMAT - II A

Ambient air quality data at Nagda for the month of : August-2021  
All results expressed as Microgram/M3

Direction	Date	6 - 10			10 - 14			14 - 18			18 - 22			22 - 02			02 - 06			4HS			24HS Avg			8 HS Avg PM10			8 HS Avg PM2.5					
		SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2
EAST	06.08.2021	20	15	14	17	21	16	13	20	19	17	16	14	17	18	15	17	19	21	19	17	20	18.8	16.8	14.8	17.0	43	44	46	27	26	26		
	15.08.2021	17	13	15	18	17	14	15	16	16	16	19	14	14	16	12	14	15	17	17	16	19	15.7	15.2	14.2	15.7	45	46	46	27	25	26		
WEST	06.08.2021	15	12	10	13	14	14	9	10	11	13	10	11	15	15	10	13	14	12	9	15	15	13.7	13.8	10.0	11.8	40	42	41	23	22	24		
	15.08.2021	16	14	13	10	14	16	12	11	15	17	15	17	12	18	13	10	15	17	18	17	13	15.8	15.3	14.3	11.2	41	40	42	21	22	20		
NORTH	07.08.2021	10	10	10	11	12	10	11	12	15	9	13	10	9	16	11	12	11	13	12	9	16	12.7	10.8	11.3	10.3	41	40	40	19	21	20		
	17.08.2021	9	11	11	10	10	10	10	11	11	9	12	12	11	11	14	14	12	12	12	12	14	10.8	11.3	11.7	11.0	40	40	41	21	20	22		
	27.08.2021	9	14	12	12	12	15	12	13	10	14	11	13	10	12	11	13	12	11	10	13	11.2	13.2	11.3	11.3	41	40	40	22	21	22			
SOUTH	07.08.2021	16	20	15	18	15	14	14	15	17	13	16	17	19	15	18	19	17	14	17	20	15.7	16.5	16.3	16.3	45	46	45	26	27	25			
	17.08.2021	18	19	17	17	20	21	19	20	18	17	23	19	20	18	20	19	21	17	21	20	18.8	18.7	17.7	19.7	48	48	47	26	25	26			
	27.08.2021	19	15	14	14	18	12	17	14	17	18	16	16	14	20	18	14	16	13	19	20	17.7	13.5	16.7	14.0	46	47	47	28	27	26			

FORMAT - II B

Ambient air quality data at Nagda for the month of : August-2021

Sampling location	Month & Year	SO2 microgram/M3			NO2 microgram/M3			CS2 microgram/M3			H2S microgram/M3			PM10 microgram/M3			PM2.5 microgram/M3				
		n	A.M.	S.D.	n	A.M.	S.D.	n	A.M.	S.D.	n	A.M.	S.D.	n	A.M.	S.D.	n	A.M.	S.D.	Peak	G.M.
EAST Fabrication Shop	Aug. 2021	12	17.3	2.2	12	16.0	1.6	12	14.5	1.4	12	16.3	2.3	6	45	1.2	6	26	0.7	27	26
WEST Vishnu Bhawan	Aug. 2021	12	14.8	1.7	12	14.6	1.8	12	12.2	2.6	12	11.5	1.7	6	41	0.8	6	22	1.3	24	22
NORTH Labour Club	Aug. 2021	18	11.6	1.8	18	11.8	1.8	18	11.4	1.1	18	10.9	1.2	9	40	0.5	9	21	1.0	22	21
SOUTH Dairy	Aug. 2021	18	17.4	1.9	18	16.2	2.9	18	16.9	1.8	18	16.7	2.8	9	47	1.1	9	26	0.9	28	26

A.M.=Arithmetic mean, S.D.=Standard Deviation, G.M.=Geometric mean, n=number of observation.  
ND = Not Detected  
\* Norms for SO2, NO2 & SEM as per NAAQM Standard and Permissible limit for CS2 = 100 µgm3 and H2S = 150 µgm3

**FORMAT - II A**

**Ambient air quality data at Nagda for the month of : September-2021**  
**All results expressed as Microgram/M3**

Derection	Hrs. Date	6 - 10			10 - 14			14 - 18			18 - 22			22 - 02			02 - 06			4Hrs Max.			24Hrs Avg			8 Hrs. Avg. PM10		8 Hrs. Avg. PM2.5						
		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	6-14	14-22	22-06			
EAST	06.09.2021	16	17	19	18	19	17	19	17	16	17	21	18	21	19	20	17	18	21	19	20	19	21	18.0	18.2	17.0	18.2	46	48	45	25	28	27	
	20.09.2021	15	12	14	17	15	17	13	15	18	14	16	15	17	16	13	15	15	14	14	11	18	17	15	17	15.5	14.8	14.0	14.7	45	44	26	27	25
WEST	06.09.2021	16	15	10	14	14	12	12	13	14	13	10	16	18	14	17	15	16	11	12	16	18	14	14	14.2	15.3	12.0	12.3	43	41	42	22	19	20
	20.09.2021	15	15	11	11	14	15	10	16	14	18	12	15	17	17	15	10	16	13	12	17	17	18	12	15.5	15.0	14.3	11.0	40	41	42	21	20	21
NORTH	08.09.2021	12	14	13	10	11	15	12	11	10	12	11	10	14	13	12	13	10	11	13	12	14	13	11.7	12.7	11.7	11.7	37	39	38	20	19	21	
	22.09.2021	10	10	12	12	11	9	10	11	10	10	10	10	14	10	12	11	11	13	12	13	12	14	11.0	10.7	12.0	11.8	41	40	41	22	21	20	
SOUTH	08.09.2021	20	18	17	19	19	21	22	18	18	17	20	18	19	17	21	20	15	18	20	21	20	22	17.8	18.7	19.3	18.8	47	44	46	28	26	28	
	22.09.2021	19	20	20	22	18	17	19	17	16	15	19	18	18	21	19	18	17	20	21	20	20	22	18.7	17.8	17.5	19.8	45	46	48	27	25	26	

BDL : Below detectable Limit

Tr : Tracess

ND: Not Detectable

**FORMAT - II B**

**Ambient air quality data at Nagda for the month of : September-2021**

Sampling location	Month & Year	SO2 microgram/M3			NO2 microgram/M3			CS2 microgram/M3			H2S microgram/M3			PM10 microgram/M3			PM2.5 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.	n	A.M.	S.D. Peak	G.M.						
EAST Fabrication Shop	September-2021	12	16.8	2.0	21	12	16.5	2.3	20	12	15.5	1.8	19	12	16.4	2.6	21	6	46	1.3	48	45	6	26	1.1	28	26
WEST Vishnu Bhawan	September-2021	12	14.8	1.6	17	12	15.2	1.7	18	12	13.2	2.1	18	12	11.7	1.2	14	6	42	1.0	43	41	6	21	1.0	22	20
NORTH Labour-Club	September-2021	12	11.3	1.2	14	12	11.7	1.7	15	12	12.3	1	14	12	11.8	1.3	14	6	39	1.5	41	39	6	21	1.0	22	20
SOUTH Dairy	September-2021	12	18.3	1.7	21	12	18.3	1.4	21	12	18.4	2.0	22	12	19.3	1.4	22	6	46	1.3	48	46	6	27	1.1	28	27

A.M.=Arithmetic mean, S.D.=Standard Deviation, G.M.=Geometric mean, n=number of observation  
 Note: Norms for SO2, NO2, PM10 & PM2.5 as per National Ambient Air Quality Standards and Permissible limit for CS2 = 100 µg/m3 and H2S = 150 µg/m3



# Shutters on Spinning Machine



# 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 (M3)	Hydrant Pump		No. of hydrant points (Equivalent)	Sprinkler Pump	
			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:

<u>Type of Equipment</u>	<u>Capacity</u>	<u>Quantity</u>
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



## Greenery Around Factory



**Grasim SFD, Trimurti Gate for Staff**



**Grasim, Excel Fibre Division**



## Location of Continuous Ambient Air Monitoring System



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



## **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:

<b>Particular</b>	<b>Existing Generation</b>	<b>Additional Generation</b>	<b>Total after proposed expansion</b>
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**

**Exhibit-7**

<b>S. No</b>	<b>Waste</b>	<b>Source</b>	<b>Disposal method</b>
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**

<b>S. No</b>	<b>Waste</b>	<b>Source</b>	<b>Quantity (Existing)</b>	<b>Quantity (Expansion)</b>	<b>Quantity Total</b>	<b>Disposal method</b>
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 on 30th September, 2021)**

S. No.	Name	Designation	Discipline	Date of Joining	Qualification
<b>Sr. Executives (Environment Cell Reports to)</b>					
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)
<b>Environment Cell</b>					
1	Mr. Rakesh Patnaik	Gen. Manager	Tech. Services	23.03.2012	M.Sc.(Environment ) M .Phil (Environment), PG Diploma in Environment Management
2	Mr. Ashish Khare	Deputy Manager	Tech. Services	18.05.1998	M.Sc. (Maths), PG Diploma in Environment Management
3	Mr. Roopesh Goyal	Dy. Gen. Manager	Monitoring	17.07.2018	B.E. (Textile)
4	Mr. Anil Maheshwari	Asst. Manager	Monitoring	01.07.1995	B.Sc. (PCM)
5	Mr. Ravi Jain	Asst. Manager	Monitoring	01.01.1996	B.Sc. (PCM)
6	Mr Mahesh Kabra	Asst. Gen .Manager	Process	21.11.1994	B.Tec. (Chemical),
7	Mr Anil Vijay	Asst. Gen .Manager	Process	26.08.1987	M.Sc. (Chem) , BS(Process Eng.)
8	Mr. Amit Pandit	Asst. Manager	Process	18.05.1998	M.Sc. Chemistry BS(Process Eng.)
9	Mr. R.K.Verma	Asst. Manager	Process	18.11.2015	M.Sc.(Chemistry),. B.S.,Dip.Env.Management
10	Mr. Dilip Gohil	Officer	Process	21.10.2016	M.Sc. (Chem)
11	Mr. J.K. Wadhawa	Asst. Manager	Process	01.07.1993	B.Sc, MA (English),BS ( Pr. Engg)
12	Mr. M.S.Kushwaha	Asst. Manager	Process	09.08.1996	B.Sc. , M.Sc. MBA
13	Mr. Jitendra Gaur	Chemist	Process	16.10.2017	B.Sc.

## 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 पर्यावरण एवं वन मंत्रालय की  
वेबसाईट <http://envfor.nic.in> पर उपलब्ध है।

ग्रेसिम इण्डस्ट्रीज लिमिटेड (एक्सल फायबर डिवीजन)

रजिस्टर्ड 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**  
General Manager  
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. CS<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>.
  - 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	:	<ul style="list-style-type: none"> <li>• There is no point source of gaseous emission</li> <li>• There is no increase of effluent discharge after expansion</li> <li>• Hazardous waste Used Oil and Used Resin will be sent to TSDF Pithampur for safe disposal.</li> </ul>
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	:	88 Crores
Project cost planned and subsequent revised estimates and the year of price reference	:	
a) Allocation made for environmental management plans with item wise and year wise break-up	:	<ol style="list-style-type: none"> <li>1. Exhaust System : 1.5 cr</li> <li>2. Condensate recovery : 0.50 cr</li> <li>3. Insulation (hot &amp; cold) : 0.25 cr</li> <li>4. VFD's for energy savings : 2.25 cr</li> <li>5. Total : 4.50 cr</li> </ol>
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	:	6.40 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.
- 12 Status of construction (Actual &/or Planned) : Expansion is in the existing Premises
- 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 : NA
- a) The dates on which the Project was Monitored by the MoEF &CC, Regional Office on previous occasions (if Applicable)



**Signature of the Project Incharge**