

F.No. IA-J-11011/371/2006- IA II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA-II Section)

Indira Paryavaran Bhawan
Jorbagh Road, New Delhi - 3

Dated: 13th August, 2019

To

M/s Grasim Industries Ltd
Village Kumarapatnam
District Haveri - 581123 (Karnataka)

Sub: Expansion of Fibre Plant, Pulp Plant, Captive Power Plant and setting up Excel Fibre Plant at Village Kumarapatnam, Taluka Ranebennuru, District Haveri (Karnataka) by M/s Grasim Industries Ltd - Environmental Clearance - reg.

Sir,

This has reference to your proposal No. IA/KA/IND2/82389/2006 dated 13th November 2018, on the subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for expansion of Fibre Plant from 87,600 to 1,75,200 TPA, Pulp Plant from 74,400 to 1,48,800 TPA, Captive Power Plant from 20 to 50 MW and setting up Excel Fibre Plant of capacity 36500 TPA by M/s Grasim Industries Ltd in an area of 431.36 ha at Village Kumarapatnam, Taluka Ranebennuru, District Haveri (Karnataka).

3. The details of products are as under:

S. No	Product / Unit	Capacity		
		Existing	Additional	Total
<i>Main Products</i>				
1	Viscose Staple Fibre	87,600 TPA	87,600TPA (Debottlenecking:7,300 TPA & new installations: 80,300 TPA)	1,75,200 TPA
2	Pulp	74,400 TPA	74,400 TPA	1,48,800 TPA
3	Captive Power Plant	20 MW	30 MW	50 MW
4	Excel Fibre (Solvent Spun Cellulosic Fibre)	---	36,500 TPA	36,500 TPA
<i>Associated Products (not requiring EC)</i>				
5	Sulphuric Acid	75,110 TPA	75,110 TPA	1,50,220 TPA
6	Carbon-Disulphide	14,365 TPA	14,365 TPA	28,730 TPA
7	Recovery Boiler	10 MW	10 MW	20 MW
<i>By-Product</i>				
8	Anhydrous Sodium Sulphate	69,205 TPA	69,205 TPA	1,38,410 TPA



4. Existing land area is 431.36 ha (4313600 sqm). No additional land will be required for the proposed expansion. Industry will develop greenbelt in an area 960000 sqm covering 33% of total project area. The estimated project cost is Rs. 2550 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 600 Crores and the recurring cost (O&M) will be about Rs. 6 crores per annum. The project will lead to employment for 1003 persons directly and 860 indirectly after expansion.

5. The Ranebennur Black Buck Sanctuary is located at a distance of 4.5 km(N-NW) from the project site. The eco-sensitive zone of the sanctuary has been notified vide Ministry's Notification No.SO 2147 (E) dated 6th July, 2017. The distance of the project site from the notified ESZ is 4 km. Tungabhadra flows at a distance of 200 m from the project site.

6. Total fresh water requirement is estimated to be 97,200 cum/day which will be reduced to 87,480 KLD cum/day, proposed to be met from Tungabhadra River.

Effluent of 72,468 cum/day generated from the Industrial operations shall be treated in the existing ETPs by enhancing their capacities, and the treated effluent will be discharged to Tungabhadra river.

Existing unit has three Coal/Petcoke fired boilers 260 TPH capacity. To cater to the proposed expansion, one more Coal/Petcoke fired boiler of 300 TPH capacity and recovery boiler will be installed, which would be equipped with ESP and adequate stack height to control particulate emissions within the statutory limits.

7. The project/activity is covered under category A of item 5(d) 'Manmade fibres manufacturing', 1(d) 'Thermal Power Plants' and 5(i) 'Pulp & paper industry' of the schedule to the EIA Notification, 2006 and requires appraisal/approval at central level in the Ministry.

8. Terms of reference (ToR) for the project was granted on 26th May, 2017. Public hearing was conducted by the State Pollution Control Board on 17th April, 2018.

9. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meetings held during 29-31 January, 2019 and 26-28 February, 2019 in the Ministry, wherein the project proponent and their accredited consultant presented the EIA/EMP report as per the ToR. The Committee found the EIA/EMP report complying with the ToR and recommended the project for grant of environmental clearance.

10. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate change hereby accords environmental clearance to the project for **Expansion of Fibre Plant from 87,600 to 1,75,200 TPA, Pulp Plant from 74,400 to 1,48,800 TPA, Captive Power Plant from 20 to 50 MW and setting up Excel Fibre Plant of capacity 36500 TPA by M/s Grasim Industries Ltd** at Village Kumarapatnam, Taluka Ranebennuru, District Haveri (Karnataka), under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-

- (i) Environmental clearance shall be subject to obtaining prior clearance from the wildlife angle including clearance from the Standing Committee of the National Board for Wildlife, as applicable.
- (ii) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.



- (iii) The treated effluent of 72468 cum/day shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, for discharge into the Tungbhadra river. Necessary permission for discharge shall be obtained from the concerned regulatory authority.
- (iv) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (v) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vi) Solvent management, if any, shall be carried out as follows:
 - (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 98% recovery.
 - (d) Solvents shall be stored in a separate space specified with all safety measures.
 - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
- (vii) Total fresh water requirement shall not exceed 87,480 cum/day proposed to be met from Tungabhadra river. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (viii) Rain water harvesting structures shall be provided to reduce dependency of fresh surface water for industrial purposes. In any case, no ground water shall be used for the plant.
- (ix) The storm water from the premises shall be collected and discharged through a separate conveyance system.
- (x) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (xi) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xii) 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 transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xiii) The company shall undertake waste minimization measures as below:-
 - (a) Metering and control of quantities of active ingredients to minimize waste.



- (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
- (c) Use of automated filling to minimize spillage.
- (d) Use of Close Feed system into batch reactors.
- (e) Venting equipment through vapour recovery system.
- (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiv) The green belt of at least 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xv) At least 1.5% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xvi) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xvii) The unit shall make all arrangements for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- (xviii) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xix) Storage of raw materials shall be either in silos or covered areas to prevent dust pollution and other fugitive emissions.
- (xx) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxi) The energy sources for lighting purposes shall preferably be LED based.
- (xxii) Transportation of raw materials/products should be carefully performed using GPS enabled vehicles.

10.1 The grant of environmental clearance is further subject to compliance of other generic conditions as under:-

- (i) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and/ or any other statutory authority.
- (ii) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. 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.




- (iii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- (iv) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.
- (v) 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 levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made thereunder.
- (vi) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- (vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- (viii) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing shall be implemented.
- (ix) The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for overall improvement of the environment.
- (x) A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change 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.
- (xii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (xiii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.



- (xiv) The environmental 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 environmental clearance conditions and shall also be sent to the respective Regional offices of MoEF&CC by e-mail.
- (xv) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <http://moef.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional office of the Ministry.

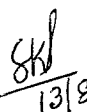
11. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

12. The above conditions will be enforced, *inter alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.


13/8/2019
(S. K. Srivastava)
Scientist E

Copy to: -

1. The Deputy DGF (C), MoEF&CC Regional Office (SZ), Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore - 34
2. The Secretary, Department of Forest, Environment & Ecology, Government of Karnataka, Room No. 708, Gate 2, Multi Storey Building, Dr. Ambedkar Veedhi, Bangalore - 1
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex East Arjun Nagar, Delhi - 32
4. The Member Secretary, Karnataka State Pollution Control Board, Parisara Bhavan, #49, 4th & 5th Floor, Church Street, Bangalore -1
5. Guard File/Monitoring File/Website/Record File


13/8/2019
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