



भारत सरकार

पर्यावरण एवं वन मंत्रालय

Government of India

Ministry of Environment & Forests  
(IA Division)

By speed post

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Dated : February 11, 2009

F. No. J-11011/1213/2007-IA-II(I)

To

M/s Bihar Caustic & Chemicals Ltd  
Rehla, Garwa Road,  
District Palamau,  
Jharkhand

[biharcaustic@adityabirla.com](mailto:biharcaustic@adityabirla.com)

**Sub: Expansion of Caustic Soda Lye Plant from 225 TPD to 550 TPD and CPP from 30 MW to 60 MW at Rehla, Garwa Road, District Palamau, Jharkhand by M/s Bihar Caustic & Chemicals Ltd – Environmental clearance reg.**

Sir,

Kindly refer to your letter No. nil dated November 17, 2008 alongwith EIA/EMP report and Public hearing Report seeking environmental clearance under the EIA Notification, 2006.

2.0 The Ministry of Environment and forests has examined your application and noted that the proposal for expansion of Caustic Soda Lye Plant from 225 TPD to 550 TPD and CPP from 30 MW to 60 MW at Rehla, Garwa Road, District Palamau, Jharkhand by M/s Bihar Caustic & Chemicals Ltd. Expansion will be in two phases for caustic soda plant. Existing land of 81.94 acres will be used for the project. 24.62 acres and open lawn will be covered by green belt. Cost of the project will be Rs. 320 Crores.

3.0 Total water requirement will be 455 m<sup>3</sup>/hr and sourced from Koel River. The permission for drawl of water from the river will be obtained from the Water Resources Department. Effluent discharge will be reduced as hypo sludge will reduced due to use of Chlorine in place of Sodium hypochlorite and RO unit for treatment & recycling of waste water. Waste Air Dechlorination (WAD) system will be used for neutralizing minor quantity of waste gases generated from cell house and brine recycle and saturation. Demister will be provided in Hydrochloric Acid Plant. ESP will be provided for control of emissions from CFBC boilers of power plant. Coal mill will be provided with bag filters.

4.0 All the Chlor-Alkali plants with  $\geq 300$  TPD are listed at S.N. 4(d) under Category 'A' of EIA Notification 2006 located outside the notified industrial area. The proposal was considered and appraised at central level by the Expert Appraisal Committee (Industry) in its 90<sup>th</sup> Meeting held during 6<sup>th</sup> – 8<sup>th</sup> January 2009. Public hearing meeting was held on 28<sup>th</sup> August 2008.

5.0 Based on the information submitted by you, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September 2006 subject to the compliance of the following Specific and General conditions:

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**A. SPECIFIC CONDITIONS:**

- (i) All the mercury cell operation shall be based on membrane cell and no mercury cell based operation shall be carried.
- (ii) The company shall install Waste Air Dechlorination (WAD) system with sodium bisulphite for neutralizing chlorine emissions as waste gases from cell house and brine recycle and saturation. Demister shall be provided in Hydrochloric Acid Plant vents. The vent gases from Sodium hydrochloride plant and HCl acid plant shall be controlled at source by effective absorption system so that Chlorine concentration in the vent gases shall not exceed 5 ppm.
- (iii) The Company shall install Chlorine gas detectors to detect leakage of Chlorine at liquid Chlorine storage tanks, Sodium hypo plant, HCl synthesis unit and Electrolysis area. The company shall install on-line analyzer in HCl plant and hypo stack with recording facility.
- (iv) Cyclone & ESP to the CFBC boiler of power plant with inter locking facility, Dust extractor & bag filter to coal handling plant and pneumatic & closed ash collection & conveying system shall be provided in power plant for control of particulate emission below 100mg/Nm<sup>3</sup>.
- (v) The company shall provide the monitoring arrangement with vents and regular monitoring shall be carried out and reports submitted to the Jharkhand SPCB, CPCB and Ministry's Regional Office at Bhubaneswar.
- (vi) Fugitive emissions in the work zone environment, product and raw materials storage area shall be regularly monitored. The emissions shall conform to the limits imposed by Jharkhand SPCB.
- (vii) The water requirement and waste water generation shall not exceed 9888 KLD and 840 KLD respectively.
- (viii) The company shall install full fledged effluent treatment plant to treat the wastewater generated from the plant including RO system to recycle or reuse all the treated wastewater.
- (ix) Green belt shall be developed in 24.62 ha out of total 81.94 ha to mitigate the effects of fugitive emissions all around the plant. The development of green belt shall be as per the Central Pollution Control Board guidelines.
- (x) The fly ash generated from the power plant shall be handled pneumatically and disposed of in accordance with the provisions of Fly Ash Notification, 2003.
- (xi) The hazardous wastes generated from the plant shall be disposed of in accordance with the Hazardous Waste (Management and Handling) Rules 1989 and as amended.
- (xii) During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.



- (xiii) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xiv) Training shall be imparted to all employees on safety and health aspects of chemicals handling. As informed to the Ministry, OHSAS 18001 shall be continued. 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.
- (xv) Usage of PPEs by all employees/ workers shall be ensured.
- (xvi) The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP) for caustic soda plant.
- (xvii) The company shall comply with all the commitments made during public hearing held on 28<sup>th</sup> August, 2008.
- (xviii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

**B. GENERAL CONDITIONS :**

- (i) The project authorities shall strictly adhere to the stipulations of the SPCB/state government or any statutory body.
- (ii) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (iii) At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.
- (iv) The gaseous emissions (SO<sub>2</sub>, NO<sub>x</sub>, HCl, CO) and particulate matter along with RSPM levels from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- (v) The locations of ambient air quality monitoring stations shall be reviewed in consultation with the State Pollution Control Board (SPCB) and additional stations shall be installed, if required, in the downwind direction as well as where maximum ground level concentrations are anticipated.
- (vi) Dedicated scrubbers and stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided to control the emissions from various vents. The scrubbed water shall be sent to ETP for further treatment.



- (vii) All the storage tanks will be under negative pressure to avoid any leakages. Breather valves, N<sub>2</sub> blanketing and secondary condensers with brine chilling system shall be provided for all the storage tanks to minimize vapour losses. All liquid raw material shall be stored in storage Tanks and Drums.
- (viii) The company shall undertake following Waste Minimization measures.
- Metering and control of quantities of active ingredients to minimize waste.
  - Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - Use of automated filling to minimize spillage.
  - Use of "Closed Feed" system into batch reactors.
  - Venting equipment through vapour recovery system.
  - Use of high pressure hoses for equipment cleaning to reduce wastewater generation.
- (ix) The project authorities shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000 and Hazardous Waste (Management and Handling) Rules, 1989, as amended from time to time. Authorization from the SPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.
- (x) 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 Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (xi) The company shall develop rain water harvesting structures to harvest the run off water for recharge of ground water and to reduce requirement of the fresh water.
- (xii) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment. The eco-development plan should be submitted to the SPCB within three months of receipt of this letter for approval.
- (xiii) The project proponent shall also comply with all the environmental protection measures and safeguards proposed in the EIA/EMP report.
- (xiv) A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xv) The project authorities shall earmark separate funds to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
- (xvi) The implementation of the project vis-à-vis environmental action plans shall be monitored by the concerned Regional Office of the Ministry/SPCB / CPCB. A six



monthly compliance status report shall be submitted to monitoring agencies and shall be posted on the website of the Company.

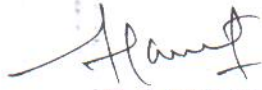
- (xvii) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <http://envfor.nic.in>. This shall be advertised 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.
- (xviii) 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.

6.0 The Ministry or any other competent authority may stipulate any further condition(s) on receiving reports from the project authorities. The above conditions shall be monitored by the Regional Office of this Ministry.

7.0 The Ministry may revoke or suspend the clearance if implementation of any of the above conditions is not satisfactory.

8.0 Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

9.0 The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act, 1981 the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

  
(H. S. Malviya)  
Joint Director

Copy to :-

1. The Secretary, Department of Environment, Govt. of Jharkhand, Jharkhand.
2. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi ? 110 032.
3. Chairman, Jharkhand Pollution Control Board, Jharkhand, Town Administrative Building, H.E.C., Dhruwa, Raanchi - 824004, Jharkhand.
4. The Chief Conservator of Forests (Eastern), Regional Office (EZ), A/3, Chandrasekharpur, Bhubaneswar - 751 023, Orissa.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell
7. Guard File.
8. Record File.

  
(H.S. Malviya)  
Joint Director

ADITYA BIRLA



GIL/ FM/POLLUTION/2016-17/2203

01 June, 2016

To,  
Ministry Of Environment & Forest  
Government of India,  
Eastern Regional Office ,  
A/3 Chandrasekherpur  
Bhubneswar -751023

Dear Sir,

Sub: **Compliance of condition for NOC- F.No-11011/1213/2007-1A-II(I) 11<sup>th</sup> Feb 2009.**

Please find attached six monthly compliance of conditions for "Expansion of Caustic Soda Plant from 225 to 550TPD and CPP from 30MW to 60MW at Rehla ,Garwa Road, District Palamau, Jharkhand by M/s Grasim Industries Ltd., formerly known as M/s Aditya Birla Chemicals (India) Ltd for Environmental clearance reg.

Conditions given by your good self on the above NOC have been complied with,

Thanking you,

Yours faithfully,  
For Grasim Industries Ltd.

(P.K.Bharadwaj)  
Factory Manager

✓ Cc : Regional Officer ,  
Central Pollution Control Board,  
Kolkatta

Cc : The Member Secretary,  
Jharkhand State Pollution Control Board,  
T.A. Division Building (Ground Floor),  
HEC Campus, Dhurwa,

**Grasim Industries Limited**  
Chemical Division, Rehla  
Garhwa Road, Rehla 822 124  
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