

ANNEXURE II

Annexure - VIII  
 Department of Environment  
 Government of West Bengal  
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 Kolkata : 700001

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 OKC.  
 For file  
 Date: 18/01/2012

No. EN/124 /T-II-1/053/2011

To  
 M/s. Birla Corporation Ltd.  
 Unit : Durgapur Cement Works  
 Village : Sujara, near DSP Slag Bank  
 Durgapur - 713 203

*Subject : Environmental Clearance for the proposed expansion of the existing Cement Grinding Unit and installation of CBM based Captive Power Plant by M/s. Birla Corporation Ltd., Unit : Durgapur Cement Works at Jl. No. - 62 & 63, Vill. - Sujara, Near DSP Slag Bank, Durgapur - 713203, Dist. - Burdwan, West Bengal.*

Sir,

This has a reference to your application dated 21/06/2011 and subsequent communications for Environmental Clearance for the proposed expansion of the existing Cement Grinding Unit and installation of CBM based Captive Power Plant by M/s. Birla Corporation Ltd., Unit : Durgapur Cement Works at Jl. No. - 62 & 63, Vill. - Sujara, Near DSP Slag Bank, Durgapur - 713203, Dist. - Burdwan, West Bengal.

The proposal has been examined and processed in accordance with EIA Notification, of 2006. It is noted that the proposed proposal is for expansion of the existing Cement Grinding unit for increasing the manufacturing capacity of Portland Slag Cement from 0.6 to 1.3 Million tonnes per annum and installation of CBM based Captive Power Plant (2x6.93 MW i.e. 13.86 MW). The existing plant also produces Portland Pozzolana Cement (1.0 Million tonnes per annum). It is noted that clinker will not be manufactured at the site. The manufacturing process will involve grinding of Cement Clinker with Slag / Flyash and Gypsum.

The existing coal fired slag drier should be removed and Roller Press unit should be installed. The proposed Roller Press should have dual function - drying and grinding of slag and should be dual fuel operated - CBM and Coal. However, Coal should be used only in case of non-availability of CBM.

It is noted that the salient features of the project, for which Environmental clearance has been considered are as follows :

- i. Location of the Site - Jl. No. - 62 & 63, Vill. - Sujara, Near DSP Slag Bank, Durgapur - 713203, Dist. - Burdwan, West Bengal.
- ii. Land Area - within the existing plant premises, total area 40 acres (16.19 ha).
- iii. Greenbelt area - 5.75 ha, 35% of land area.
- iv. Raw Materials -

| Raw Materials        | Pre Expansion (tonnes per annum) | Post Expansion (tonnes per annum) |
|----------------------|----------------------------------|-----------------------------------|
| Clinker              | 2,34,000                         | 5,07,000                          |
| Granulated Slag      | 3,48,000                         | 7,54,000                          |
| Gypsum               | 18,000                           | 39,000                            |
| CBM for Roller Press |                                  | 10,000 SCMD                       |
| CBM for CPP          |                                  | 70,000 - 80,000 SCMD              |
| Coal                 | 14 tonnes per day                |                                   |

Conditions for Environmental Clearance for the proposed expansion of the existing Cement Grinding Unit and installation of CBM based Captive Power Plant by M/s. Birla Corporation Ltd., Unit : Durgapur Cement Works at JI. No. - 62 & 63, Vill. - Sujara, Near DSP Slag Bank, Durgapur - 713203. Dist. - Burdwan, West Bengal.

|         |                   |                    |
|---------|-------------------|--------------------|
| HSD, FO | 0.14 kLD, 0.08kLD | 0.14 KLD, 0.08 kLD |
|---------|-------------------|--------------------|

v. Additional Production Capacity – Portland Slag Cement (0.7 Million tonnes per annum), Power 13.86 MW.

vi. Machineries –

| Major Machineries  | Pre Expansion cap.   | Expansion cap.      | Post Expansion cap.   |
|--------------------|----------------------|---------------------|-----------------------|
| 1. Slag Dryer      | 100 tonnes per hour  | To be dismantled    | -                     |
| 2. Roller Press    | -                    | 95 tonnes per hour  | 95 tonnes per hour    |
| 3. Cement Mill     | 4x30 tonnes per hour | -                   | 4x 27 tonnes per hour |
| 4. Cement Silo     | 9,600 tonnes         | 10,000 tonnes       | 19,600 tonnes         |
| 5. Packing Machine | 240 tonnes per hour  | 480 tonnes per hour | 720 tonnes per hour   |
| 6. Slag conveyor   | -                    | 200 tonnes per hour | 200 tonnes per hour   |
| 7. Stacker Feed    | -                    | 400 tonnes per hour | 400 tonnes per hour   |
| 8. Reclaimer       | -                    | 200 tonnes per hour | 200 tonnes per hour   |

vii. Air Pollution Control System – Bag Filters with stack height of adequate height shall be provided for emission sources. The proposed bag filters shall be designed for outlet dust concentration of 30 mg/Nm<sup>3</sup>, as proposed.

| Process Units              | No. of Stack | Air Pollution Control Equipment | Designed Dust Outlet Concentration (mg/Nm <sup>3</sup> ) |
|----------------------------|--------------|---------------------------------|--|
| Roller Press               | 6            | Bag Filter                      | 30   |
| Slag Silo                  | 2            | Bag Filter                      | 30   |
| OPC Silo                   | 1            | Bag Filter                      | 30   |
| Slag & OPC Silo Extraction | 3            | Bag Filter                      | 30   |
| Packer                     | 2            | Bag Filter                      | 30   |
| Cement Silo                | 2            | Bag Filter                      | 30   |
| CPP                        | 2            |                                 | 15   |

viii. Additional Water Requirement – 72 kLD (avg.), DSP supply.

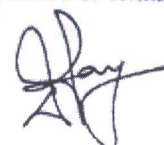
ix. Total Wastewater (after expansion) – 37 kLD, zero discharge of effluent will be implemented, cooling water to be recirculated, domestic effluent to be discharged through septic tank to soak pit.

x. Solid Waste – dust from APCD shall be reused. Hazardous Wastes shall be disposed off as per norms.

xi. Additional Power Requirement – 6 MVA, proposed CPP/ Utility system DVC.

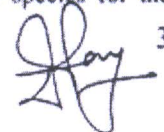
xii. DG Sets – 1x860 KVA (standby).

State Level Environment Impact Assessment Authority (SEIAA), examined the proposal and also perused the recommendations of the State Level Expert Appraisal Committee (SEAC). After due consideration of the project proposal, and after considering the recommendations of the State Level Expert Appraisal Committee (SEAC), the State Level Environment Impact Assessment Authority accords Environmental Clearance to the project as per provisions of the EIA notification no. S.O. 1533 (E) dt. 14<sup>th</sup> September, 2006 of Ministry of Environment & Forests, GOI, subject to strict compliance of terms and conditions as mentioned below.

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**A. SPECIFIC CONDITIONS :**

- i. The gaseous emissions from various process units should conform to the load / mass based standards prescribed by the Ministry of Environment & Forests and the State Pollution Control Board from time to time. At no time the emission level should go beyond the prescribed standards.
- ii. Cement grinding shall be carried out in closed cement mill. Provision of dust extraction and pollution control systems alongwith stack of adequate height should be made for control of emission. Highly efficient Bag Filters & ID Fan should be provided for all emission sources including transfer points. Stack emissions shall be monitored at regular intervals and records maintained. The stack emission should not exceed 30 mg/Nm<sup>3</sup>, as proposed. The post expansion emission load should be less than the existing emission load as mentioned in the Board's letter dated 02.03.2010.
- iii. The burner should be designed accordingly to limit the core flame temperature for ensuring low NO<sub>x</sub> emission. Positive oxygen balance should be maintained. Adequate thickness of insulating material shall be provided to prevent heat loss from CPP.
- iv. The mitigation measures should be adopted during construction phase of the proposed expansion project as mentioned in the EIA-EMP report.
- v. Regular monitoring of the ambient air quality shall be carried out in and around the plant and records shall be maintained. The ambient air quality standards as per GSR 826 (E) dated 16.11.2009 to be maintained.
- vi. Finished cement should be collected in silo and packaging should be done through pneumatically controlled system. Suction system should be installed at packaging section to minimize fugitive emission.
- vii. All vibrating screens, storage bins will be adequately covered. Covered storage yards shall be provided for raw materials. Closed unloading of raw materials and closed conveyor belt for transportation with bag filter at transfer points should be provided. Suction head should be provided at all transfer points.
- viii. Adequate dust suppression and extraction system should be provided in material storage areas, material unloading and transfer points for controlling fugitive emission. Fugitive dust emissions from ball mill and storage areas shall be collected in bag filters and recycled back to the process. Water sprinkling arrangement and spray systems shall be made in the raw material stock yards, cement bag loading areas and other high dust potential areas.
- ix. Groundwater shall not be abstracted without prior permission of the local body as well as the competent authority as per The West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.
- x. Process effluent discharge is not permitted. No liquid effluent shall be generated by adoption of dry grinding process.
- xi. Clinker manufacturing / heating is not permitted under this environmental clearance.
- xii. Solid waste viz. dust generated shall be properly recycled and reutilized in the process itself.
- xiii. As proposed, CBM gas will not be stored but it will be brought through pipeline. As CBM is highly flammable hazardous substance with risk of fire and explosion, adequate measures should be adopted as proposed in the Risk Assessment study and Disaster Management Plan.
- xiv. Adequate provisions should be made for harvesting rainwater. The unit may develop water body of adequate capacity to harvest rainwater. The harvested water should be used for plantation, firefighting, washing and cleaning etc. Recharging of Groundwater is not permitted.
- xv. Three tier Green belt shall be maintained within the plant premises as per norms. At least 35% of the area should be kept for green belt development, as proposed. Apart from greenbelt, the unit may also develop social forestry giving priority to the fruit trees. Selection of appropriate species for the

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- plantation programme may be done in consultation with DFO / West Bengal Wasteland Development Corporation Ltd/ West Bengal Biodiversity Board. There should not be any removal/destruction of vegetative cover both at the establishment as well as the operational stage, without the sanction of appropriate authority.
- xvi. Ambient noise level should not exceed the permissible limit. 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 should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
  - xvii. All internal roads should be pitched. Proper lighting and proper pathway inside the factory premises should be constructed to ensure safe vehicular movement. Provision of separate pathway for entry and exit of vehicles should be considered. Vehicles should conform to pollution under control (PUC) norms. Proper house keeping shall be maintained within the premises.
  - xviii. Health and safety of workers should be ensured. Workers should be provided with adequate personnel protective equipment and sanitation facilities. Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
  - xix. Adequate measures to be adopted to ensure industrial safety. Proper fire detection & protection systems to be provided to control fire and explosion hazards.
  - xx. The implementation and monitoring of Environmental Management Plan should be carried out, as proposed.
  - xxi. The Corporate Social Responsibility Plan with specific financial commitment should be implemented for the proposed project. Atleast 5% of the project cost should be utilised for Corporate Social Responsibility programmes.

#### **B. GENERAL CONDITIONS :**

- i. The environmental clearance accorded shall be valid for a period of 5 years for the proposed project.
- ii. Prior Consent-to-Establish (NOC) for the proposed expansion project must be obtained from WBPCB before commencement of construction. All other statutory clearances should be obtained by project proponent from the competent authorities.
- iii. The project proponent shall comply with all the environmental protection measures and safeguards recommended. Further, the unit must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.
- iv. All the conditions, liabilities and legal provisions contained in the EC shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of management of the project to any other entity.
- v. Provision should be made for the supply of kerosene or cooking gas to the labourers during construction phase. All the labourers to be engaged for construction works should be screened for health and adequately treated before issue of work permits. Environmental sanitation should be ensured for the workers.
- vi. The project proponent should make financial provision in the total budget of the project for implementation of the environmental safeguards. The project authorities will provide requisite funds both recurring and non-recurring to implement the conditions stipulated by the SEIAA, West Bengal along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose.
- vii. No further expansion or modifications in the plant should be carried out without prior approval of



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- the State Level Environment Impact Assessment Authority, West Bengal. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, West Bengal.
- viii. The West Bengal Pollution Control Board, who would be monitoring the implementation of environmental safeguards, should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to the WBPCB regularly. A complete set of all the documents should also be forwarded to the State Level Environment Impact Assessment Authority, West Bengal.
  - ix. The State Level Environment Impact Assessment Authority, West Bengal reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time-bound and satisfactory manner.
  - x. The Project Proponent should inform the public that the project has been accorded environmental clearance by the SEIAA, West Bengal and copies of the clearance letter are available with the State Pollution Control Board/Committee and may also be seen at Website of the SEIAA, West Bengal (<http://enviswb.gov.in>). This should be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned.
  - xi. The Project Authorities should inform the State Pollution Control Board as well as the SEIAA, West Bengal, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work/project implementation.
  - xii. The above stipulations would be enforced along with those under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2009, the Public Liability Insurance Act, 1991, the Environment Impact Assessment Notification 2006 and their amendments.

Yours faithfully,



(Debal Ray)

Member Secretary, SEIAA &  
Chief Environment Officer