

State Level Environment Impact Assessment Authority, Jharkhand.

C – 170, Road No. 4, Ashok Nagar. Ranchi. Jharkhand.834 002. Tel #: 0651–2243488; Fax #: 0651–2243487. E-mail: info@jseiaa.com; website: www.jseiaa.org

Letter No.- EC/ SEIAA / 2014-15 / 316 / 2014/ \$23

Ranchi, Date: 12/12/19

To: Mr. Jagnarayan Singh,
M/s Bihar Hard Coke Mfg.Co. Pvt. Ltd,
Rekha Niwas, L C Road, Hirapur,
Dhanbad, Jharkhand- 826001.

Sub.: Prescribing of ToR to Expansion of Non Recovery Coke Oven Plant of M/S Bihar Hard Coke Mfg. Co. Pvt. Ltd., Village- Udaipur, Tehsil- Kalyanpur ISM, District-Dhanbad, Jharkhand.-Regarding.

Ref: Your application & Letter dated:-10-07-2014.

Sir,

Reference is invited to your letter along with the application in the prescribed format (Form-I) and a copy of the pre-feasibility report to prescribe the ToRs for undertaking detailed EIA study for the purpose of obtaining environmental clearance under the provisions of the EIA Notification, 2006 in respect of the above mentioned project.

M/s Bihar Hard Coke Mfg. Co. Pvt. Ltd. have proposed for expansion up of their Hard Coke Oven Plant from existing 14,271 TPA to 44,800 TPA at Village- Udaipur, Tehsil-Kalyanpur ISM, Dhanbad, Jharkhand. No extra land is required for the proposed expansion. (Existing: 5.07 Acres and Additional area: Nil). Green belt will be developed in 2.47 acres. The latitude and longitude of the project site is 23° 51' 22.2" N and 86°23'58.4" E respectively. No Forest land is involved. No national park/wild life sanctuary is located within 10 Km. Tundi reserve forest is located at a distance of 8 km (NW) and Topchanchi reserve forest 5 km (SW). Total cost of the project is Rs. 3.08 Crores. The proposed project is a Category B project as per the Schedule of EIA Notification 2006.

SEIAA, Jharkhand has approved the ToRs suggested by SEAC in its meeting held on 24.11.2014.

After detailed deliberations, the SEAC prescribed following ToRs for undertaking detailed EIA/EMP study:

- 1 Executive summary of the project.
- 2 Photographs of the existing and proposed plant area.
- 3 A certified report of the status of compliance of the conditions stipulated in the environmental clearance and Consent to Operate for the existing operation of the project from JSPCB.
- 4 A line diagram/flow sheet for the process and EMP.
- 5 Recent monitoring report which shall include data on AAQ, stack emission data, water quality, solid waste etc. shall be submitted.

- 6 Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, compliance to the notice(s).
- A site location map on Indian map of 1:10, 00,000 scale followed by 1:50,000/1:25,000 scale on an A3/A2 sheet with at least next 10 Kms of terrains i.e. circle of 10 kms and further 10 kms on A3/A2 sheets with proper longitude/latitude/heights with min. 100/200 m. contours should be included. 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site.
- Present land use should be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quick bird, Ikonos, IRS P-6 pan sharpened etc. for the 10Km radius area from proposed site. The same should be used for land used/land-cover mapping of the area.
- 9 Location of national parks / wildlife sanctuary / reserve forests within 10 km. radius should specifically be mentioned. A map showing land use/land cover, reserved forests, wildlife sanctuaries, national parks, tiger reserve etc in 10 km of the project site.
- 10 Details and classification of total land (identified and acquired) should be included. Necessary documents indicating acquisition of land should be included.
- 11 Coordinates of the plant site with topo sheet co-ordinates should also be included.
- 12 A list of industries within 10 km radius of the plant area.
- 13 Residential colony should be located in upwind direction.
- 14 Action plan for the green belt development plan in 33 % area should be included.
- 15 Ecological status (Terrestrial and Aquatic) is vital. Detailed description of the flora and fauna (terrestrial and aquatic) should be given with special reference to rare, endemic and endangered species and various issues addressed and included.
- 16 At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing proceedings and item-wise details along with time bound action plan should be included. Socio-economic development activities need to be elaborated upon.
- 17 Total capital cost and recurring cost/annum for environmental pollution control measures should also be included.
- 18 Any litigation pending against the project and / or any direction / order passed by any Court of Law against the project, if so, details thereof.

Process Related:

- 19 A line diagram / flow sheet for the process and EMP shall be submitted.
- 20 Project site layout plan showing raw materials and other storage plans, bore well or water storage, aquifers (within 1 km.) green areas, water bodies and rivers/drainage passing through the project site should be included.
- 21 List of raw material required and source along with mode of transportation should be included. All the trucks for raw material and finished product transportation must be "Environmentally Compliant".
- 22 Mass balance for the raw material and products should be included.
- 23 Studies for slurry, sludge material and solid waste generated should also be included, if the raw materials used has trace elements and a management plan. Manufacturing process details for all the process units should be included.

- 24 Possibility of installation of WHRB will be explored and details included.
- 25 Energy balance data for all the components should be incorporated.

Air Environment

- 26 Site-specific micro-meteorological data like temperature, relative humidity, hourly wind speed and direction, rainfall etc.
- 27 Ambient air quality at monitoring should be carried out adequately as per NAAQS 2009. Ambient air quality monitoring along with cumulative impact should be included for the day (24 hrs) for maximum GLC along with following:
- 28 The suspended particulate matter present in the ambient air must be analyzed for the presence of poly-aromatic hydrocarbons (PAH), i.e. Benzene soluble fraction. Chemical characterization of RSPM and incorporating of RSPM data.
 - i. Emissions (g/second) with and without the air pollution control measures.
 - ii. Meteorological inputs (wind speed, m/s), wind direction, ambient air temperature, cloud cover, relative humidity & mixing height using SODAR on hourly basis.
 - iii. Model input options for terrain, plume rise, deposition etc.
 - iv. Print-out of model input and output on hourly and daily average basis.
 - v. A graph of daily averaged concentration (MGLC scenario) with downwind distance at every 500 m interval covering the exact location of GLC.
 - vi. Details of air pollution control methods used with percentage efficiency that are used for emission rate estimation with respect to each pollutant.
 - vii. Applicable air quality standards as per LULC covered in the study area and % contribution of the proposed plant to the applicable Air quality standard. In case of expansion project, the contribution should be inclusive of both existing and expanded capacity.
 - viii. No. I-VII are to be repeated for fugitive emissions and any other source type relevant and used for industry.
 - ix. Graphs of monthly average daily concentration with down-wind distance.
 - x. Specify when and where the ambient air quality standards are exceeded either due to the proposed plant alone or when the plant contribution is added to the background air quality.
- 29 Fugitive dust protection or dust reduction technology for workers within 30 m of the plant active areas.
- 30 Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features.
- 31 Air pollution control measures during charging of raw materials and during operation of the furnace shall be detailed.
- 32 Air Quality Impact Predication based on CPCB/MoEF approved model(s) shall be presented.
- 33 Impact of the transport of the raw materials and end products on the surrounding environment should be assessed and provided.

34 An action plan to control and monitor secondary fugitive emissions from all the sources as per the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008.

Water Environment

- 35 Presence of aquifer/aquifers within 1 km of the project boundaries and management plan for recharging the aquifer should be included.
- 36 If surface water is used from river, rainfall, discharge rate, quantity, drainage and distance from project site should also be included.
- 37 Ground water analysis at 8 locations with bore well data, litho-logs, drawdown and recovery tests to quantify the area and volume of aquifer and its management.
- 38 'Permission' for the drawl of water should be obtained from concerned authorities. Water balance data must be provided.
- 39 Action plan for rainwater harvesting measures should be prepared and the same should be got duly approved from Ground Water Directorate, Government of Jharkhand.
- 40 Surface water quality at 8 locations must be ascertained.
- 41 If the site is within 10 km radius of any major river, Flood Hazard Zonation Mapping is required at 1:5000 to 1;10,000 scale indicating the peak and lean river discharge as well as flood occurrence frequency.
- 42 Pre-treatment of raw water, treatment plant for waste water generated (mainly from the coke quenching) should be described in detail. Design specifications may be included. Details of sludge handling shall be specified.

Solid Waste Management

- 43 Action plan for solid/hazardous waste generation, storage, utilization and disposal particularly slag from all the sources should also be included.
- 44 Identification and details of land to be used for all type of slag disposal in the secured land fill as per CPCB guidelines should be included.
- 45 End use of solid waste/slag and its composition should be covered.
- 46 Toxicity should be assessed following standard leaching procedures particularly the Toxicity Characteristic Leachate Procedure (TCLP) test for the slag.

Safety and Health

- 47 Risk/Disaster Management needs to be provided.
- 48 Occupational Health:
 - a) Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
 - b) Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of

the same. Details regarding last month analysed data of abovementioned parameters as per age, sex, duration of exposure and department wise.

- c) Annual report of health status of workers with special reference to Occupational Health and Safety.
- d) Plan and fund allocation to ensure the occupational health & safety of all contract and sub-contract workers.

49 Corporate Environment Policy

- I. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- II. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms/ conditions? If so, it may be detailed in the EIA.
- III. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
- IV. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.

It was decided that 'TORs' prescribed by the State level Environment Impact Assessment Authority (SEIAA) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation should be provided. The final EIA report shall be submitted to the SEIAA for obtaining environmental clearance.

The TORs prescribed shall be valid for a period of two years for submission of the EIA/EMP Report.

Sd/Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.

Memo No. EC/SEIAA/2014-15/316/2014/623 Copy to:

Dated: 12/12/14

1. Member Secretary, Jharkhand State Pollution Control Board, Ranchi.

Secretary, SEAC, Jharkhand, Ranchi for information and necessary action.

State Level Environment Impact Assessment Authority, Jharkhand.

