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

सत्यमेव जयते

Letter No.-**EC/ SEIAA / 2014-15 / 503/ 2014/** 864 Ranchi, Date: 01/5/15

To: **Mrs. Pinky Agarwal,**
H. No.- 13, Line No- 1, Kashidih,
Sakchi, Jamshedpur,
Jharkhand - 831001.

Sub.: Prescribing of **ToR** to **Magnetite Iron Ore Beneficiation Plant of M/S Radhika Enterprises at Mouza- Hiramili, P.O.- Chandil, Tehsil- Chandil, District- Sariakela-Kharsawan, Jharkhand.-** Regarding.

Ref: Your application & Letter dated:-12-11-2014.

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 Radhika Enterprises at Proposed Magnetite Iron Ore Beneficiation Plant having 24,000 TPA at Mouza- Hiramili, P.O.-Chandil, Tehsil- Chandil, District- Sariakela- Kharsawan, Jharkhand. The latitude and longitude of the project site is 22° 58' 10.17" N and 86°01'46.74" E respectively. No Forest land is involved. No national park/wild life sanctuary/ecologically sensitive area located within 10 km radius of the project site. The cost of the project is Rs. 98.75 Lakhs. The power requirement has been indicated as 223 KW and water requirement as 78 to 80 KLD i.e. m^3/day. Land required for the project is 2 acres.

The status of proposed units are as given below:-

Proposed Units

S. No.	Plant details	Capacity
1.	Magnetite Iron Ore Beneficiation	24,000 TPA

SEIAA, Jharkhand has approved the ToRs suggested by SEAC in its meeting held on 02.04.2015.

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

1. Executive summary of the project.
2. Photographs of the proposed plant area.

3. 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.

4. 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.

5. Details and classification of total land (identified and acquired) should be included. Necessary documents indicating acquisition of land should be included.

6. Coordinates of the plant site with topo sheet co-ordinates should also be included.

7. A list of industries within 10 km radius of the plant area.

8. Residential colony should be located in upwind direction.

9. Action plan for the green belt development plan in 33 % area should be included. The species selected should be able to thrive on low nutrient soil. They should be able to adapt to local conditions and should be resistant to drought and extreme temperatures. PP should take up this activity immediately (since land has already been procured) and the details of plantation done should be given in EIA Report. The details of plantation already done should be given.

10. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant reserves (existing as well as proposed), if any, within 10 km of the project should be clearly indicated. Necessary clearance, if any, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above should be obtained from the State Wildlife Department/ Chief Wildlife Warden under the Wildlife (Protection) Act, 1972 and copy furnished.

11. A detailed biological study for the study area [core zone and buffer zone (10 km radius of the periphery of the project) shall be carried out. Details of flora and fauna, duly authenticated, separately for core and buffer zone should be furnished based on field survey clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.

12. 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.

13. Total capital cost and recurring cost/annum for environmental pollution control measures should also be included.

14. 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:

15. A line diagram / flow sheet for the process including existing units and EMP shall be submitted. Also details of technology may be included.
16. 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.
17. 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".
18. Mass balance for the raw material and products should be included.
19. Studies for slurry, sludge material / tailings 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.
20. Energy balance data for all the components should be incorporated.

Air Environment

21. Site-specific micro-meteorological data like temperature, relative humidity, hourly wind speed and direction, rainfall etc.
22. 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:
    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.
23. Fugitive dust protection or dust reduction technology for workers within 30 m of the plant active areas.

24. 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.

25. Air pollution control measures during charging of raw materials and during operation of the furnace shall be detailed.

26. Air Quality Impact Predication based on CPCB/MoEF approved model(s) shall be presented.

27. Impact of the transport of the raw materials and end products on the surrounding environment should be assessed and provided.

28. 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

29. Presence of aquifer/aquifers within 1 km of the project boundaries and management plan for recharging the aquifer should be included.

30. If surface water is used from river, rainfall, discharge rate, quantity, drainage and distance from project site should also be included.

31. 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.

32. 'Permission' for the drawl of water should be obtained from concerned authorities. Water balance data must be provided.

33. Action plan for rainwater harvesting measures should be prepared and the same should be got duly approved from Ground Water Directorate, Government of Jharkhand / Central Ground Water Board / Authority .

34. Surface water quality at 8 locations must be ascertained.

35. 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.

36. Pre-treatment of raw water, treatment plant for waste water should be described in detail. Design specifications may be included.

Solid Waste Management

37. Action plan for solid/hazardous waste generation, storage, utilization and disposal particularly sludge/tailings from all the sources should also be included.

38. Identification and details of land to be used for all type of solid waste tailings disposal in the secured land fill as per CPCB guidelines should be included.

39. End use of solid waste/tailings and its composition should be covered.

40. Toxicity should be assessed following standard leaching procedures particularly the Toxicity Characteristic Leachate Procedure (TCLP) test for the slag.

41. Proposed treatment of runoff from the tailings pond if any, should be provided. The water collected has to be analysed and reused in the plant.

Safety and Health

42. Risk assessment and disaster management plan should inter-alia include breach of tailing pond, if any, pipeline failure and over flow from the tailing pond etc., if any, proposed in the project.

43. Details regarding expected Occupational & Safety Hazards. Protective measures for Occupational Safety & Health hazards so that such exposure can be kept within permissible exposure level so as to protect health of workers. Health of the workers with special reference to Occupational Health. Plan of exposure specific health status evaluation of workers; pre placement and periodical health status of workers; plan of evaluation of health of workers by pre designed format, chest x ray, Audiometry, Spirometry Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations and plan of monthly and yearly report of the health status of workers with special reference to Occupational Health and Safety.

44. Biological as well as health impact of fines and other dust generated in the plant should be studied. The proposed mitigation measures with EMP should also be provided.

45. Other issues

    a. Impact on local transport infrastructure due to the project should be evaluated. Projected increase in truck traffic as a result of the project in the present road network (including those outside the project area) and whether it is capable of handling the increased load should be estimated. Arrangement for improving the infrastructure, if contemplated including action to be taken by other agencies such as State Government, if any, should be covered.
    b. Measures of socio economic influence to the local community proposed to be provided by project proponent. As far as possible, quantitative dimension should be given.
    c. Detailed environmental management plan to mitigate the environmental impacts due to the project should be prepared and furnished.
    d. The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage clearly showing the land features of the adjoining area.

46. 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.

47. Public hearing.

The following general points should be noted:

    i. Properly indexed, page numbered.
    ii. Period/date of data collection should be clearly indicated. (non-monsoon)

iii. Authenticated English translation of all material in Regional languages should be provided.

iv. The letter/application for environmental clearance should quote the SEIAA, Jharkhand file No. and also attach a copy of the letter.

v. Site related monitoring shall be carried out for 3 months in one season (non monsoon).

vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report

vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.1I (I) dated 4th August, 2009, which are available on the website of this Ministry should also be followed.

viii. The consultants involved in the preparation of EIA / EMP report after accreditation with Quality Council of India (QCI) / National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA /EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc.

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 as per OM F No. J11013/41/2006-IA-II(I) part dated 22nd August 2014.

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

Memo No.**EC/SEIAA/2014-15/503/2014/** 864 Dated: 01.05.15

Copy to:

1. Member Secretary, Jharkhand State Pollution Control Board, Ranchi.
2. Secretary, SEAC, Jharkhand, Ranchi for information and necessary action.

1/5/2015

Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.