



STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY, (SEIAA), ORISSA.

(Constituted vide order No. S.O. 2674 (E) Date 17th Nov. 2008 of Ministry of Environment & Forest, Govt. of India, Under Environment Protection Act, 1986.) Qr. No. 5RF-2/1, Unit-IX, Bhubaneswar-751022
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Ref. No. _____

Dt. _____

SEIAA – 105/10

From

Bhagirathi Behera, IFS
Director, Environment-cum-
Spl. Secretary to Government
& Member Secretary, SEIAA, Odisha

To

Sri Dilip Kumar Das, Director
Ultra Minerals & Ferro Alloys Pvt. Ltd
Alipingala House, Jaganath Lane, Badambadi,
Po-Arundaya market, Cuttack-753012
Ph- 0671-2312744, 9437124610

Sub: Environmental Clearance for chrome ore Beneficiation plant of 36000 TPA of M/s Ultra Minerals & Ferro Alloys Pvt. Ltd. at Nischinta in the district of Cuttack.

Sir

This has reference to your letter no UMFAPL/MoEF/TOR/01 dt. 12.11.2007 along with the application in the prescribed format submitted to MoEF, Govt. of India and subsequent letter dt. 12.04.2010, dt. 30.04.2010, dt. 04.05.2010, dt. 23.06.2010, dt.04.08.2010, dt. 09.08.2010, dt. 25.08.2010, dt. 28.09.2010 dt. 02.12.2010, dt. 10.01.2011, dt. 16.02.2011, dt. 04.03.2011, dt. 18.03.2011, dt. 07.05.2011, dt. 19.09.2011, dt. 25.10.2011 and dt. 01.11.2011 on the above mentioned subject I am directed to say that the SEIAA, Odisha have considered the application for put up a chrome ore beneficiation plant of 36,000 TPA capacity on 0.9 ha. of agriculture land already acquired. It is situated at a distance of 500m from the NH-5 3,200 TPM of low grade chrome ore to be procured from Sukinda will be processed to produce 24,000 TPA marketable product. The tailing of 12,000 TPA will be stored in their plant premises. 237 KLD water is required in the process and the source is ground water. The proposal has obtained ToR on 18th July 2008 vide letter no. J-11015/1166/2007-IA.II(M), Government of India, Ministry of Environment and Forests (I.A, Division-II), New Delhi. The public consultation of the project was held on 31.01.2010. The low grade chromites will be purchased from the mine owners of the Sukinda Region. A mutual agreement has been made with the Mine owners at Sukinda region are B.C Mohanty & Sons Pvt. Ltd. for 12000 Metric Tonne of low grade chrome ore per annum. Balance will be procured from OMC and IDC through the

general Auction procedure. The proposal was placed in the earlier discussed in the SEAC meeting held on 07th December, 2010. The SEAC decided not to allow such type of polluting unit which will discharge toxic pollutant outside the area of source of raw-material. The committee also decided to reject such proposal and request the SEIAA, Odisha to take a policy decision in this regard. Subsequently, the SEAC prepared a guidelines for COB plant outside the area of source of raw-materials and decided to allow such standalone COB plant which will satisfy the guidelines prepared by the SEAC. The SEAC also requested to the SEIAA, Odisha to send such proposal which will satisfy the above guidelines. The proponent modified the proposal as per guidelines and submitted for fresh appraisal for grant of Environmental Clearance. The proponent made a detailed presentation on the proposal.

Based on the information / documents and clarifications furnished by the proponent and on recommendation of SEAC, Odisha, the State Environment Impact Assessment Authority, Odisha hereby accords Environmental Clearance in favour of the project for a period of 5 (five) years under the provisions of the Environment Impact Assessment Notification, 2006 and 2009 and subsequent amendment thereto under various MoEF, Govt. of India circulars thereunder and subject to the following stipulated conditions.

Stipulated Conditions:-

A. Specific Conditions

- 1) The project proponent shall obtained Consent to Establish and Consent to Operate from the State Pollution Control Board, Odisha and effectively implement all the conditions stipulated therein.
- 2) The environmental clearance is subject to approval of the State Land use Department, Government of Odisha for diversion of agricultural land for nonagricultural use.
- 3) The project proponent shall carry out conditioning of the ore with water to mitigate fugitive dust emission, without affecting flow of ore in the ore processing and handling areas.
- 4) The effluent from the ore beneficiation plant shall be treated in the tailing thickener and the tailings slurry shall be transported through a closed pipeline to the tailing pond.
- 5) The tailing pond shall be lined with appropriate impervious lining on all sides as well as the bottom to prevent any leachate going from the tailing pond into groundwater.
- 6) The garland drain shall be constructed around the tailing pond before the starting operation on the project.
- 7) The decanted water from the tailing pond shall be re-circulated and there should be zero discharge from the tailing pond.
- 8) Appropriate technology shall be used for maximum recovery of ore in order to reduce slurry discharge and to increase the life of the tailing pond.
- 9) Plantation shall be raised all around the beneficiation plant site and the tailing pond including a green belt in 4.86 ha. width around the plant, tailing disposal area, roads, over dump yards etc. by planting the native species in consultation with the local DFO/ Agriculture Department.
- 10) Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RSPM such as haul road, loading and unloading point and transfer points. It shall be ensured

- that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- 11) Garland drains with appropriate size, gradient and length shall be constructed to arrest silt and sediment flows from ore dumps and directly into the water bodies. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
 - 12) The sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the project site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.
 - 13) Effluents containing Cr^{+6} shall be treated to meet the prescribed standards before reuse/discharge. Effluent Treatment Plant should be provided for treatment of mine water discharge and wastewater generated from the workshop and mineral separation plant.
 - 14) Run off from the mineral and reject dumps and other surface run off should be analyzed for Cr^{+6} and in case its concentration is found higher than the permissible limit the water should be treated before reuse/discharge.
 - 15) Separate impervious concrete pits for disposal of sludge shall be provided for the safe disposal of sludge generated from the beneficiation operation.
 - 16) The project proponent shall ensure that the treated effluents conforming to the prescribed standards shall only be discharged.
 - 17) Regular monitoring of water quality for surface water sources as well as ground water sources shall be carried out. The groundwater shall be monitored downstream of beneficiation plant as well as tailing pond upto groundwater table and record of monitoring data should be maintained and submitted on six monthly basis to the Ministry of Environment and Forests, its Regional Office, Bhubaneswar, the Central Ground Water Authority, the Regional Director Central Ground Water Board and the State Pollution Control Board.
 - 18) The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director Central Ground Water Board.
 - 19) Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers in and around the project area during the beneficiation process. The monitoring shall be carried out four times in a year pre-monsoon (April-May) monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to Ministry of Environment and Forests, its Regional Office Bhubaneswar, Central Ground Water Authority and Regional Director, Central Ground Water Board.
 - 20) The proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of ground water required for the project.
 - 21) Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.
 - 22) Appropriate mitigative measures shall be taken to prevent pollution of the nearby surface water source in consultation with the State Pollution control Board.
 - 23) The transportation of mineral shall be carried out through the covered trucks. Vehicular emissions shall be kept under control and regularly monitored. Measures

- shall be taken for maintenance of vehicles used in beneficiation operations and in transportation of ore to the beneficiation plant. The vehicles carrying the mineral shall not be overloaded.
- 24) Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
 - 25) The project proponent shall constitute an emergency management team under the control of project incharge to deal with the emergency situation pertaining to the tailing dam for the timely and effective control of emergency situation. It shall be ensured that training programme & mock drills shall be organized for the employees.
 - 26) Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and the wastewater generated during the beneficiation process.
 - 27) The project authorities should undertake sample survey to generate data on pre-project community health status within a radius of 1 km from the proposed project.
 - 28) Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed. Health records of the workers shall be maintained.
 - 29) Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.
 - 30) 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.
 - 31) The critical parameters such as quality of discharged water shall be monitored (TDS, DO, PH, TSS and Cr⁺⁶). The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location in public domain. The circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in his regard for its compliance.
 - 32) The applicant will take necessary steps for socio-economic development of the people of the area on need based assessment for providing employment, education, health care, drinking water and sanitation, road and communication facilities etc. after a detailed primary socio-economic survey.

General Conditions

1. No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA, Odisha.
2. Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest and wildlife department.
3. Regular Ambient Air Quality Monitoring shall be carried out. The monitoring stations will be set up in consultation with the SPCB. At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, RSPM, SO₂ and NO_x are anticipated in consultation with the State Pollution control Board. It will be ensured that at least one monitoring station is set up in up-wind & in down-wind direction along with those in other directions. The instruments used for ambient air quality monitoring shall be calibrated regularly.

4. Data on ambient air quality (RSPM, SPM, SO₂, NO_x) shall be regularly submitted to the Ministry including its Regional office located at Bhubaneswar and the State Pollution Control Board/Central Pollution Control Board once in six months.
5. Measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. shall be provided with ear plugs/muffs.
6. Industrial wastewater shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.
7. Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
8. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
9. Separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
10. The project authorities should inform to the Regional Office located at Bhubaneswar regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
11. The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the SEIAA, Odisha.
12. The project proponent shall submit six monthly report on the status of the implementation of the stipulated environmental safeguards to the SEIAA, Odisha, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment clearance conditions on their website including display at mine site and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests, Bhubaneswar.
13. A copy of clearance letter will be marked to concerned panchayat/local NGO, if any, from whom suggestion/representation has been received while processing the proposal. The clearance letter shall also be put on the web site of the company.
14. The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board.
15. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
16. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
17. The above conditions will be enforced inter-alia, under the provisions of the water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability Insurance Act, 1991, Hazardous Waste (Management & Handling) Rules, 1989 and Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 along with their amendments

and rules made thereunder and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Odisha and any other Court of Law relating to the subject matter.

Member Secretary

Memo No _____/Dt. _____

Copy to

1. Ministry of Environment & Forests, Govt. of India, Paryavaran Bhawan, C.G.O Complex, Lodhi Road, New Delhi for kind information.
2. Principal Secretary, Forests & Environment Dept., Government of Odisha for kind information.
3. Chairman, State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-8, Bhubaneswar for kind information.
4. Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment & Forests, A-31, Chandrasekharpur, Bhubaneswar for kind information.
5. Chairman, Central Pollution Control Board, CBD-cum-office Complex, East Arjun Nagar, New Delhi-110032 for kind information.
6. Collector & District Magistrate, Cuttack for kind information and necessary action.
7. Chairman/Member/Member Secretary, SEIAA for kind information.
8. Chairman, SEAC/Secretary, SEAC, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar for kind information.
9. Guard file for record.

Member Secretary