

F. No. J-11011/643/2008- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi – 110 003

E-mail : pb.rastogi@nic.in
Telefax : 011: 2436 7668
Dated 13th May, 2010

To, ✓
The Director
M/s Oswal Smelters (P) Ltd.
No.6, 2nd Main road, Ramachandrapuram
Bangalore – 560 021, Karnataka.

E-mail : sanjay@oswalminerals.com / pelcpl@gmail.com ;
Fax No. : 080-23123114 / 22978724 ;

Subject: Ferro Alloy Plant at Sy. No. 31-1, 2, 3, 32-1A, 2B, 37-2, 38-1, 2 & 48-1 Village Gollapuram, Mandal Hindupuram, District Anantapuram, Andhra Pradesh by M/s Oswal Smelters Private Limited – Environment clearance reg.

**Ref. : 1. Ministry's even no. letter dated 2nd December, 2009.
2. Your letter no. nil dated 29th August, 2009.**

Sir,

This has reference to your letter no. nil dated 29th August, 2009 alongwith application in Form I, draft Terms of Reference, Pre-feasibility and EIA/EMP and subsequent communication vide letter dated 29th December, 2009 for environmental clearance on the above mentioned project

2.0 The Ministry of Environment and Forests has examined your application. It is noted that proposal is for the Ferro Alloys Plant at Sy. No. 31-1, 2, 3, 32-1A, 2B, 37-2, 38-1, 2 & 48-1 Village Gollapuram, Mandal Hindupuram, District Anantapuram, Andhra Pradesh by M/s Oswal Smelters Private Limited. Total land acquired is 29.82 acres. No national park and wild life sanctuary is located within 10 km radius of the project site. Narsimhapur Reserve Forest is located at 13.5 km. Inter-state border is at a distance of 6 km from the proposed site. Gollapuram Guddampalli, Melya, Jogireddipalli villages are located near the project site. Total cost of the project is Rs. 56.03 Crores. Following are the details of facilities and products from the proposed plant:

| S.N. | Facility | Plant configuration | Products and production capacities |
|------|-----------------------|---------------------|---|
| 1 | Submerged arc furnace | 3x9 MVA | Ferro Silicon - 19,000 MTPA (or) Silico Manganese - 42,750 MTPA (or) Ferro Manganese - 55,000 MTPA (or) Ferro Chrome - 42,750 MTPA |

3.0 Ferro alloys will be produced by direct reduction of respective metal ores with the help of Carbon as reducing agent and electricity as heat source. Ferro alloys will be smelted at about 1350°C-1500°C in a conventional, open Submerged Electric Arc Furnace (SEAF). Manganese ore, Chrome ore, quartz, Manganese slag, pet coke, reductants and electrode paste, casing sheet, M.S. round, lancing pipe, Oxygen will be the raw materials required.

4.0 Fume extraction system with bag filters, dust suppression system, water spraying etc. will be provided to control emissions. Total ground water requirement will be 94 m³/day. Closed circuit cooling system will be adopted. No effluent will be discharged outside the plant and 'zero' discharge will be adopted. Ferro-Manganese slag will be used in the manufacture of Silico-Manganese. Ferro-Silicon slag will be provided to cast iron foundries. Ferro-Chrome slag will be processed for Chrome recovery in the Ferro Chrome recovery plant and Chromium will be recovered by jigging process. TCLP test will be performed before disposing slag in a secured land fill. Green belt will be developed in 10 acres out of total 29 acres within the plant premises.

5.0 Public hearing/consultation meeting was held on 12th August, 2009.

6.0 The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 subject to compliance to the following specific and general conditions:

A. SPECIFIC CONDITIONS :

- i) Petroleum coke shall be used as fuel instead of charcoal from unidentified sources.
- ii) Continuous monitoring facilities for all the stacks and sufficient air pollution control equipments viz. fume extraction system with bag filters, I D fan and stack of adequate height to submerged arc furnace to control emissions below 50 mg/Nm³. Monitoring of total Chromium (Cr) and Carbon monoxide (CO) shall also be ensured. Standards for Nickel (Ni), Chromium (Cr) and Lead (Pb) shall be within permissible limit. At no time, the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.
- iii) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- iv) In-plant control measures for checking fugitive emissions from all the vulnerable sources like bag filter, cyclones, spark arrestor shall be provided. Fume and dust extraction system with bag filters shall be provided at the raw material handling, transfer and discharge points to control fugitive emissions. Further, specific measures like water sprinkling at raw material handling and storage, loading, unloading and transfer points shall be provided to suppress fugitive emissions and asphaltting or concreting of the roads shall be done to control fugitive emissions. Dust curtains shall be provided all around the work area to prevent the dust emission during construction.
- v) Secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.

- vi) Total ground water requirement from the proposed expansion shall not exceed 94 m³/day. Closed circuit cooling system shall be adopted to recycle/reuse water to reduce water consumption. The treated wastewater shall be utilized for dust suppression and green belt development. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises. Sanitary wastewater shall be treated in septic tanks followed by soak pit system.
- vii) Prior permission for the drawl of 94 m³/day ground water from the State Ground Water Board/Central Ground Water Authority (SGWB/CGWA) shall be obtained and a copy submitted to the Ministry's Regional Office at Bangalore within 3 months of issue of environment clearance.
- viii) Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.
- ix) Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent.
- x) 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.
- xi) Product fines, flue dust shall not be dumped anywhere but reused in the process. SAF slag shall not be dumped but efforts shall be made to reuse in environment-friendly manner.
- xii) Chrome recovery plant shall be installed to recover Chromium through jizzing process. Discharge from metal recovery plant shall be monitored for the Chromium content and maintained within the permissible limit before recycling and reuse. Slag tailing shall be dumped in own premises in secured land fill as per CPCB guidelines after recovery of the metal. Used oils/lubricants shall be sold to authorized recyclers/reprocessors.
- xiii) All the Chromate and Silico-Manganese slag shall be used for road making only after passing through Toxic Chemical Leachability Potential (TCLP) test. Otherwise, Ferro chrome shall be recovered from the slag and output waste shall be disposed in secured landfill as per CPCB guidelines. If the ferro chrome slag is to be supplied to any other agency, all the details indicating further utilization, 'Memorandum of Understanding' etc. shall be submitted to the Ministry and its Regional Office at Bangalore. All the other solid wastes shall be properly disposed off in environment-friendly manner.
- xiv) Slag produced in Ferro-Manganese (Fe-Mn) production shall be used in manufacture Silico-Manganese (Si-Mn). As proposed, Ferro-Silicon slag shall be provided to cast iron foundries for further utilization.
- xv) Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office at Bangalore, APPCB and CPCB. ✓

- xvi) As proposed, green belt shall be developed in at least 10 acres (33 %) out of total 29 acres to mitigate the impact of fugitive emissions within and around the plant premises as per the CPCB guidelines in consultation with DFO.
- xvii) Prior permission from the State Forest Department shall be taken regarding likely impact of the expansion of the proposed steel plant on the reserve forests. Measures shall be taken to prevent impact of particulate emissions / fugitive emissions, if any from the proposed plant on the surrounding reserve forests viz. Narsimhapur RF located within 15 km from the project site. Further, Conservation Plan for the conservation of wild fauna in consultation with the State Forest Department shall be prepared and implemented.
- xviii) All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Ferro chrome units shall be strictly implemented.
- xix) All the commitments made to the public during the Public Hearing/Public Consultation meeting held on 12th August, 2009 shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Bangalore.
- xx) At least 5 % of the total cost of the project (Rs. 2.80 Crores) shall be earmarked towards the corporate social responsibility and item-wise details alongwith time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bangalore. Implementation of such program shall be ensured accordingly in a time bound manner.
- xxi) 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 must strictly adhere to the stipulations made by the A.P. Pollution Control Board (APPCB) and the State Government.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- iii. 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, SO₂ and NO_x are anticipated in consultation with the APPCB including one ambient air quality monitoring station in the downwind direction. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bangalore and the APPCB / CPCB once in six months.
- iv. Industrial wastewater shall be properly collected, 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. ✓

- v. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) 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).
- vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vii. The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
- viii. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.
- ix. As proposed, Rs. 3.00 Crores and Rs. 0.72 Crores shall be earmarked towards total capital cost and recurring cost/annum for environmental protection measures and judiciously utilized to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.
- x. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
- xi. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the APPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF at Bangalore, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bangalore / CPCB / APPCB shall monitor the stipulated conditions.
- xiii. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail. ✓

- xiv. 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 APPCB and may also be seen at Website of the Ministry of Environment and Forests 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 Regional office at Bangalore
- xv. 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 commencing the land development work.

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

8.0. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

9.0. 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.

10.0. The above conditions shall 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, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.



(Dr. P.B. Rastogi)
Director

Copy to :

1. The Secretary, Department of Environment and Forests, Govt. of Andhra Pradesh, Mantralaya, Hyderabad, A.P.
2. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi – 110032.
3. The Chairman, Andhra Pradesh Pollution Control Board, Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad 500 018, A. P.
4. The Chief Conservator of Forests (Central), Ministry of Environment & Forest, Regional Office (SZ), Kendriya Sadan, IVth Floor, E & F Wing, 17th Main Road, Koramangla, Bangalore - 560 034, Karnataka.
5. Adviser, IA-II (I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi. - 110003.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
7. Guard file.
8. Record file
9. Monitoring file.



(Dr. P.B. Rastogi)
Director