F. No. J-11011/156/2010-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: ahuja.rai@nic.in Tele/fax: 011 – 2436 3973

Dated: 16<sup>th</sup> February, 2012

To

The Director

M/s. Gajanan Ferro Pvt. Ltd

17, Tulsi Bhawan, Bistapur,

Jamshed pur, Jharkhand 831001

Fax no. 0657-2249611

E mail: gajananferro@rediffmail.com

Sub: Ferro Alloy Plant 4 x 5 MVA (Si - Mn - 26,400 TPA or Fe-Si - 14,400 TPA or Product mix of both) at Village Kadambeda, P.S. Dhalbhumgarh, District East Singbhum in Jharkhand by M/s Gajanan Ferro Private Limited- regarding Environmental Clearance

Sir.

This has reference to your letter no. nil dated 21.07.2011 along with copies of EIA/EMP and public hearing reports seeking environmental clearance under the provisions of EIA Notification, 2006.

- 2. The Ministry of Environment and Forests has examined your application. It is noted that M/s Gajanan Ferro Private Limited have proposed for the Ferro Alloy Plant 4 x 5 MVA (Si Mn 26,400 TPA or Fe-Si 14,400 TPA or Product mix of both) at Village Kadambeda, P.S. Dhalbhumgarh, District East Singbhum in Jharkhand The land area acquired for the project is 6.545 acres of which 2.16 acres will be brought under green belt. No rehabilitation and resettlement is involved. No National Parks / Wild life Sanctuary / Reserve Forests are located within 10 km radius of the project site. No rare endemic and endangered species of flora and fauna are reported within 10km of the project site. Total cost of the project is Rs. 49.53 Crores. Rs. 161.55 Lakhs and Rs. 34.00 Lakhs have been earmarked towards total capital cost and recurring cost/annum respectively for environmental pollution control measures.
- 3. It is noted that Mn ore (36,168 TPA), Fe-Mn Slag (10,454 TPA), coke breeze (9,504 TPA), Quartz (10.850TPA), Dolomite (2640TPA), Iron scrap (8,294 TPA) and Pet Coke (7690 TPA) will be used as raw materials. Coal/coke will be used as reducing agent. Quartz, dolomite will be used as de-sulphurizing agents.
- 4. Bag filter system with spark arrestor, ducting, valves, ID fans will be provided to control particulate emissions from furnace. The clean gas will be released to the atmosphere by the ID fans through chimney. Dry fog dust suppression system will be provided to control dust emission at material handling and transfer points.
- 5. Total water requirement of 69m³/day will be sourced from bore wells. The central ground water authority vide letter dated 5.08.2011 has given permission to draw water. The treated effluent will be used for dust suppression and green belt development. Service water will be passed through oil separator to remove oil content in the effluent. Domestic effluent will be treated in septic tank followed by soak pit. No effluent will be discharged outside the premises and zero discharge will be adopted. Rain water harvesting will be carried to conserve the fresh water. Power requirement of 20 MVA will be sourced from JSEB.

- 6. Solid waste will be generated in the form of Silco manganese Slag (29,000 TPA and will be used in road development/ Colour glass/ insulated bricks. Ferro silicon slag (12 TPD) which will be used for construction of roads and filling of low lying areas. The bag filter dust (800 TPA) will be recycled in the process. No ferro chrome will be manufactured.
- 7. The Ferro Alloy Plants are listed at S.N. 3(a) under Primary Metallurgy Industry under Category A and appraised by the Expert Appraisal Committee-1 (Industry) in the Ministry
- 8. The proposal was considered by the Expert Appraisal Committee-1 (Industry) in its 28<sup>th</sup> meeting held during 26<sup>th</sup> 27<sup>th</sup> September, 2011. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public hearing for the project was held on 19.04.2011.
- 9. Based on the information submitted by you, presentation made by you and consultant, Environ India, Kolkata, West Bengal, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14<sup>th</sup> September 2006 subject to strict compliance of the following Specific and General conditions:

## A. SPECIFIC CONDITIONS:

- No charcoal shall be used as fuel. Pet coke shall be used as fuel instead of charcoal from unknown sources.
- ii. Continuous monitoring facilities for all the stacks and sufficient air pollution control equipments viz. fume extraction system with bag filters, ID fan and stack of adequate height to submerged arc furnace shall be provided to control emissions below 50 mg/Nm³.
- iii. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 shall be followed.
- iv. 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.
- v. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement should be met from other sources.
- vi. 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 Environment (Protection) Act, 1986 whichever are more stringent. Leachate study for the effluent generated and analysis should also be regularly carried out and report submitted to the Ministry's Regional Office at Bhubaneswar SPCB and CPCB.
- vii. The total water requirement shall not exceed 69 m³/day. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.
- viii. All the ferro alloy slag shall be used for land filling inside the plant or used as building material only after passing through Toxic Chemical Leachability Potential (TCLP) test. Otherwise, hazardous substances shall be recovered from the slag and output waste and be disposed in secured landfill as per CPCB guidelines.

- ix. Slag produced in Ferro Manganese (Fe-Mn) production shall be used in manufacture of Silico Manganese (Si-Mn).
- x. No Ferro Chrome shall be manufactured without prior approval from the Ministry of Environment & Forests.
- xi. Risk and Disaster Management Plan along with the mitigation measures should be prepared and a copy submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xii. As proposed, green belt should be developed in at least 33 % of the project area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xiii. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 19<sup>th</sup>April, 2011 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 Bhubaneswar.
- xiv. At least 5 % of the total cost of the project should be earmarked towards the Enterprise social commitment and item-wise details along with time bound action plan (need based) should be prepared and submitted to the Ministry's Regional Office at Bhubaneswar Implementation of such program shall be ensured accordingly in a time bound manner.
- xv. 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, 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 Jharkhand Pollution Control Board (JPCB) 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, SO<sub>2</sub> and NO<sub>X</sub> are anticipated in consultation with the JPCB 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 Bhubaneswar and the JPCB / 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 19<sup>th</sup> May, 1993 and 31<sup>st</sup> December, 1993 or as amended form 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. Requisite funds shall be earmarked towards the 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 JPCB. The criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NOx (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 Bhubaneswar, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhubaneswar / CPCB / JPCB shall monitor the stipulated conditions.
- xiii. The environmental statement for each financial year ending 31<sup>st</sup> 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 JPCB 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 Bhubaneswar.

- Project authorities shall inform the Regional Office as well as the Ministry, the XV. date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.
- The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 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, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

## Copy to:-

Secretary, Department of Forest, Govt. of Jharkhand, Nepal House, Ranchi. 1.

Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office, 2. (EZ) A-3, Chandrashekharpur, Bhubaneswar-715023.

Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office 3.

Complex, East Arjun Nagar New Delhi – 110 032. Chairman, Jharkhand State Pollution Control Board, T.A Division Building (Ground 4. Floor) HEC Campus, Dhurwa, Ranchi -834004.

Director (Monitoring Cell), Ministry of Environment and Forests, Paryavaran Bhavan, 5. CGO Complex, New Delhi.

6. Guard File/Monitoring File/Record File.

> (Dr. P. L. Ahujarai) Scientist 'F'