

**F. No. J-11011/35/2012-IA II(I)**  
Government of India  
Ministry of Environment, Forest and Climate Change  
(Impact Assessment Division)

Indira Paryavaran Bhawan  
Jor Bagh Road, Ali Ganj,  
New Delhi - 110003

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Dated the 27<sup>th</sup> May, 2015

To ✓

**M/s Vulcan Alloys**  
Plot no. 130, Bajaj Nagar,  
Nagpur, Maharashtra-440010

**Email: vulcanalloys@gmail.com; Fax No.- Nil**

**Subject: Proposed Low and medium Carbon Ferro Manganese Plant (6000 TPA) of M/s Vulcan Alloys located at Plot No.B-23, MIDC, Butibori, Dist. Nagpur, Maharashtra – Environmental Clearanceregarding.**

Sir,

This has reference to your letter dated 18/12/2014 along with copies of EIA/EMP report seeking environment clearance under the provisions of the EIA Notification, 2006. The TOR was awarded by MoEFCC vide F.No. J-11011/35/2012-IA.II(I) dated 15<sup>th</sup> June, 2012 for preparation of EIA-EMP report. Public Hearing has been exempted for the project since the project is located within Butibori MIDC Industrial Area.

The proposed project activity is listed at S.No. 3(a) in primary metallurgical industry under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEFCC.

2.0 M/s Vulcan Alloys has Proposed Low and medium Carbon Ferro Manganese Plant (6000 TPA) located at B-23 Butibori MIDC area, Tehsil-Hingna, District- Nagpur, State- Maharashtra. Latitude 20°55'41.31"N, Longitude 78°57'26.07"E. The total land requirement for the project will be 1800 m<sup>2</sup>. The land is part of the Butibori MIDC Industrial Area. Plant site elevation is 274 m above MSL. The nearest highway is NH-7 (Butibori to Nagpur) (3.88Km, ESE). Nearest railway station is Butibori Railway station (5.95 Km, E ). River Krishna is 1.46km (SW) & Vena River is 2.71 Km (E), Wadegaon Lake is 7.66 km E, Nanhi Lake is 9.5 Km W. No protected areas as per Wildlife Protection Act,1972 (Tiger reserve, Elephant reserve, Biospheres, National parks, Wildlife sanctuaries, community reserves and conservation reserves) exists with 10 km radius of the plant boundary. The total cost of the project is Rs. 60 lakhs.





3.0 The furnace is a simple vessel with 4 circumferential parts combined to make single circular unit, detachable and movable. Before production, the vessel is combined to form a cylindrical shape and lined with fine slag powder for insulation. Thermite reaction takes place in the vessel at high temperature using a reducing agent and hence no external fuel / electricity is required. Vessel is air-cooled post reaction and takes about 2-3 days for cooling & reuse. The diameter of the vessel is 2 meters, Height - 1.75 meters, Capacity – 5 tons, Thickness – Mild steel material 6 – 8 mm thickness, total no of vessels are 10.

4.0 The raw materials sources and composition required for proposed project are given in the following table. The principal raw materials to be used are manganese ore, Silico Manganese, aluminium and lime.

Following table shows the requirement of raw material and its capacity

S. N.	PRODUCT	CAPACITY (TPA)
1.	Low and Medium Carbon Ferro Manganese	6000
<b>Raw materials to be used for the production</b>		
2.	Manganese Ore	7500
3.	Silico Manganese	4500
4.	Aluminium	1000
5.	Lime	2000

5.0 Total quantity of raw water required is 8KLD. MIDC Butibori has water supply network for the individual industry. The current permitted power demand from the MIDC is 200 hp, which will suffice for the ferro alloys plant. There is no special requirement for power; the power requirement can be fulfilled by the existing facilities provided by MIDC. One DG set of 627 KVA will be kept stand by in case of power failure. It is estimated to employ direct indirect employment of 20 people of various skills for the plant.

6.0 At all the transfer points, dust collector will be installed along with bag filters. Water spraying will control the fugitive emissions from storage area as well as internal open storage yard. Bag filters will be proposed for the plant with air cooler. Existing roads will be strengthened for transportation of material, goods etc.

7.0 As the water requirement is only for cooling and domestic purposes and there would be less wastewater generation from the plant. Hence at present there appears to be no requirement for any Effluent Treatment Plant. Domestic discharges from canteens and toilets would be channelized through proper sewage channel to soak pits. For any additional wastewater generation, it would be sent to existing CETP in MIDC for treatment.

8.0 The matter was considered during the 31<sup>st</sup> meeting of EAC held on 8<sup>th</sup> – 9<sup>th</sup> January, 2015. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions.

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9.0 Based on the information submitted, presentation made before the Committee, the MoEFCC 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:**


- i. No Ferro Chrome shall be manufactured without prior approval from the Ministry of Environment, Forest and Climate Change.
- ii. Continuous monitoring facilities for the process 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/Nm<sup>3</sup>.
- iii. 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.
- iv. Stock piles of raw material should be store din covered sheds. The bottom should be lined.
- v. The total water requirement shall not exceed 8m<sup>3</sup>/day. The unit shall obtain requisite permission from the concerned authorities for water drawl. 'Zero' effluent discharge shall be strictly followed and no wastewater should be discharged outside the premises.
- vi. 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.
- vii. 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 Nagpur, SPCB and CPCB.
- viii. Slag produced in Ferro Manganese (Fe-Mn) production shall be reused/sold to potential buyers.
- ix. An action plan for control of Cr and As in air and water shall be prepared and submitted to the Ministry's Regional Office at Nagpur, SPCB and CPCB within 6 months of issue of environment clearance letter.





- x. 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.
- xi. At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on local needs and village-wise activity-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Nagpur. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office at Nagpur.
- xii. The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall *inter-alia* address (i) Standard operating process/procedure to bring into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xiii. Risk Analysis and Assessment and an On-Site and Off-site Emergency preparedness cum-Disaster Management Plan with emphasis on disaster prevention along with the control measures shall be prepared and a copy submitted to the Ministry's Regional Office at Nagpur, SPCB and CPCB within 6 months of issue of environment clearance letter.
- xiv. 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 Maharashtra Pollution Control Board 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, Forest and Climate Change (MoEFCC).
- iii. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Nagpur and the SPCB/CPCB once in six months.
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- 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 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. Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the MoEFCC as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Nagpur. 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 MOEFCC at Nagpur. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (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 MOEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Nagpur / CPCB / SPCB 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 along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEFCC at Nagpur 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 SPCB and may also be seen at Website of the MoEFCC 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 should be forwarded to the Regional office at Nagpur.
- 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.
10. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
11. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
12. 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.

  
(Dr. Satish.C. Garkoti)  
Director

**Copy to:-**

1. The Secretary, Department of Environment, Govt. of Maharashtra.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi, 110 032.

3. The Chairman, Maharashtra Pollution Control Board, "Kalpataru Point, 3rd and 4th floor, Opp. Cine Planet, Sion Circle, Road Number 8, Jay Bharat Mata Nagar, Air Force Quarters, Sion, Mumbai, Maharashtra 400022".
4. The Additional Principal Chief Conservator of Forests (C) Regional Office (WCZ), Ministry of Environment, Forest and Climate Change, Nagpur
5. Guard File / Record File/Monitoring file.

**(Dr. Satish.C. Garkoti)**  
**Director**