

**State Environment Impact Assessment Authority, M.P.**  
**(Government of India, Ministry of Environment & Forests)**

**Research and Development Wing**  
Madhya Pradesh Pollution Control Board  
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No: 1266/ EPSCO-SEIAA /12

Date: 7-3-12

To,  
M/S Balasore Alloys Ltd.,  
Balgopalpur,  
Balasore,  
Orissa-756020

Phone No. 06782 - 275781-85

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**Sub: - Case No 251/2008**, Prior Environmental Clearance for Manganese ore mine in 11.766 ha for production capacity of 2,000 MTPA at village Jarah Mohagaon, Tehsil Katangi, District Balaghat by M/S Balasore Alloys Ltd., Balgopalpur, Balasore, Orissa.

This has reference to your letter No. Nil dtd. 08.12.2008 received in SEIAA office on 15.12.2008, ToR issued on SEAC on 11.02.2009 and subsequent letters seeking Prior Environmental Clearance for the above project under the EIA Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., the Form - I, Pre-Feasibility Report, ToR and subsequently submission of EIA, Public Hearing and the additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) and State Environment Impact Assessment Authority (SEIAA) constituted by the competent Authority.

- ii. It has been noted that the proposal is for manganese ore mine in an area of 11.766 ha. The mining lease area is located in Khasra No. 71/11, 71/12, 71/13, 71/2, 71/6, 71/4, 71/3, 71/8, 71/5, 71/7, 71/9, 71/10, 71/14, 71/15, 71/16, 71/1, 72/2, 73/1, 73/3, 74/3, 75, 76/1, 76/2, 78/1, 76/8, 78/5, 76/6, 78/3, 76/7, 78/4, 73/2, 74, 77/1, 77/3, 76/3, 76/4, 76/5, 78/2, 77/2, 79, 80, 81/1, 79, 80, 81/2, 79, 80, 81/3, 79, 80, 81/4, 79, 80, 81/5, 79, 80, 81/6, 82, 83/1, 83/2, 84, 85, 86/1-2 at village Jarah Mohagaon, Tehsil Katangi, District Balaghat, M. P. It lies at latitude 21° 44' 15" and longitude 79° 54' 23" E, at an attitude of 340 m MSL. It is a private land. The nearest village Jarah Mohaganon is about 1.0 km. The nearest water body is about 2.50 km. The nearest forest boundary is 2.25 km from the mining lease area and there is no national park / sanctuary within 35 km distance of the proposed site. Interstate boundary is about 52 Km from the mining area.

The total production capacity will be capacity 2,000 TPA for manganese ore. The mining lease period is for 20 years. The anticipated life of the mine is 13 years. The mining will be carried out by open cast manual / semi mechanized method. The average mRL would be 340 AMSL. The total mineable reserves are 23895.00 Tonnes. The water requirement is 6 KLD which would be met from mined pit water. It will be used for dust suppression and plantation. Mining solid waste of about 38,930

Cum m will be generated at the end of lease period. An area of 4.7913 ha shall be covered under plantation. The public hearing was conducted on 14.07.2009.

- iii. The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated September 14, 2006.
- iv. Based on the information submitted by you, as at Para 2 above and others, the State Level Environment Impact Assessment Authority (SEIAA) considered the case in its 78<sup>th</sup> meeting held on 11.01.12 and decided to accept the recommendations 68<sup>th</sup> SEAC meeting held on 30.09.10.

Hence Prior Environmental Clearance is accorded for manganese ore mine in an area of 11.766 ha for production capacity of 2,000 at village Jarah-Mohagaon, Tehsil Katangi, District Balaghat, M. P., under the provisions of EIA notification dtd. September 14, 2006, subject to the compliance of the Standard Conditions enclosed at Annex-I and the following additional Specific Conditions as recommended by SEIAA & SEAC:

1. The PP should get the consent of the private land owners before execution of the mining operation and submit a copy of these to the office of SEIAA.

Sd/-  
(Manohar Dubey)  
Member Secretary

Endt No. 1267/ EPCO - SEIAA/12 Dated: 7-3-12

Copy to:-

1. Principal Secretary, Department of Environment, Government of Madhya Pradesh, Mantralaya, Bhopal.
2. Chairman, State Environment Impact Assessment Authority, Research and Development Wing Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5. Arera Colony Bhopal-4620 16
3. Member Secretary, SEAC, Research and Development Wing Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5. Arera Colony Bhopal-4620 16
4. Member Secretary, Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal-462016
5. Collector, Distt-Balaghat-M.P.
6. Divisional Forest Officer, Distt. Balaghat, M. P.
7. Division, Monitoring Cell, MoEF, GoI, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi- 110 003
8. Director (S), Regional Office, Western Region, Kendriya Paryawarn Bhawan, Link Road No. 3 Ravi Shankar Nagar, Regional office of the MOEF, Bhopal-462016
9. District Mining Officer, Distt. Balaghat, M. P.
10. Guard file

Sd/-  
(Dr R P Singh)  
Officer-in-Charge

**Standard Conditions related to Activity 1 (a) - Mining of Minerals of Category B projects under the Schedule of Ministry of Environment and Forests, Gol notification dtd 14-09-06**

1. Any addition of the mining area, change of Khasra numbers, enhancement of capacity, change in mining technology, modernization and scope of working shall again require prior environmental clearance as per EIA notification, 2006.
2. All activities / mitigative measures proposed by PP in Environmental Impact Assessment and approved by SEAC must be ensured.
3. All activities / mitigative measures proposed by PP in Environmental Management Plan and approved by SEAC must be ensured.
4. All parameters listed in Environmental Monitoring Plan approved by SEAC must be monitored at approved locations and frequencies.
5. Blast vibrations study shall be conducted and submitted to the Regional Office, MoEF, Gol, Bhopal and MP PCB **within six months**. The study shall also provide measures for prevention of blasting associated impact on nearby houses and agricultural fields.
6. Controlled blasting techniques with sequential drilling shall be adopted. The blasting shall be carried out in the day time only.
7. Slope of the mining bench and ultimate pit limit shall be as per the mining scheme approved by Indian Bureau of Mines.
8. A final mine closure plan, along with details of Corpus Fund, shall be submitted to the Regional Office, MoEF, Gol, Bhopal and MP PCB within 5 years in advance of final mine closure for approval.
9. No change in the calendar plan including excavation, quantum of mineral and waste shall be made.
10. Mining will be carried out as per the approved mining plan. In case of any violation of mining plan, the Environmental Clearance given by SEIAA will stand cancelled.
11. Adequate buffer zone shall be maintained between two consecutive mineral bearing deposits.
12. The transportation of the minerals extracted from the mining area shall be limited to day hours time only.
13. Maintenance of near by local roads through which transportation of minerals are undertaken shall be carried out by the company regularly at its own expenses. The roads shall be black topped.
14. Measures for prevention and control of soil erosion and management of silt shall be undertaken. Protection of dumps against erosion shall be carried out with geo textile matting or other suitable material, and thick plantations of native trees and shrubs shall be carried out at the dump slopes. Dumps shall be protected by retaining walls.
15. Trenches / garland drains shall be constructed at foot of dumps and coco filters installed at regular intervals to arrest silt from being carried to water bodies. Adequate number of check dams and gully plugs shall be constructed across seasonal/ perennial Nallahs, if any, flowing through the ML area and silts arrested. De- silting at regular intervals shall be carried out.

16. The project proponent will ensure necessary protection measures around the mine pit, waste dumps and garland drain.
17. Top soil / solid waste shall be stacked properly with proper slope and adequate safeguards and shall be utilized for backfilling (wherever applicable) for reclamation and rehabilitation of mined out area. Top soil shall be separately stacked for utilization later for reclamation and shall not be stacked along with over burden.
18. Over burden (OB) shall be stacked at earmarked dump site(s) only and shall not be kept active for long period. The maximum height of the dump shall not exceed 20 m, each stage shall preferably be of maximum 10 m and overall slope of the dump shall not exceed 35°. The OB dump shall be backfilled and shall be scientifically vegetated with suitable native species to prevent erosion & surface run off.
19. Minimum 1000 plants shall be planted in one year and 5000 plants shall be planted in first five years.
20. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Regional Office, MoEF, Gol, Bhopal and MP PCB on six monthly basis.
21. By the end of the lease period 33% of the area should be brought under plantation.
22. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO / Agriculture Deptt. Herbs & shrubs shall also form a part of afforestation programme besides tree plantation. The company shall involve local people for plantation programme. Details of year wise afforestation programme including rehabilitation of mined out area *shall be submitted* to the Regional Office, MoEF, Gol, Bhopal and MP PCB every year.
23. Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of minerals and others shall have valid permissions as prescribed under Central Motor Vehicle Rules, 1989 and its amendments. The vehicles transporting minerals shall be covered with a tarpaulin or other suitable enclosures so that no dust particles / fine matters escape during the course of transportation. No overloading of minerals for transportation shall be committed. The trucks transporting minerals shall not pass through wild life sanctuary, if any in the study area.
24. Four ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for RSPM, SPM, SO<sub>2</sub>, NO<sub>x</sub> monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board. The monitored data for criteria pollutants shall be regularly up-loaded and displayed on the company's website.
25. Data on ambient air quality (RPM, SPM, SO<sub>2</sub>, NO<sub>x</sub>) should be regularly submitted to the Regional office, MoEF, Gol, Bhopal and the State Pollution Control Board / Central Pollution Control Board once in six months.
26. Ambient air quality at the boundary of the mine premises shall conform to the norms prescribed in MoEF notification no. GSR/826(E) dtd. 16.11.09.
27. Fugitive dust emissions from all the sources shall be controlled. Water spraying arrangement on haul roads, loading and unloading and at transfer points shall be provided and properly maintained. The dust emission shall be monitored regularly as per norms and records to be submitted to the Regional Office, MoEF, Gol, Bhopal and MP PCB regularly.

28. Measures shall be taken for control of noise levels below 75 dBA in the work environment. Workers engaged in operations of HEMM, etc., shall be provided with ear plugs / muffs and health records of the workers shall be maintained.
29. Rain water harvesting shall be undertaken to recharge the ground water source. Status of implementation shall be submitted to the Regional Office, MoEF, GoI, Bhopal and MP PCB **within six months** and thereafter every year from the next consequent year.
30. Regular monitoring of ground and surface water sources for level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year i.e. pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected shall be regularly sent to Regional Office, MoEF, GoI, Bhopal, MP PCB, Central Ground Water Authority and Regional Director, Central Ground Water Board.
31. The waste water from the mine if any, shall be treated 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 oil and grease trap shall be installed for the effluents generated from the workshop, if any, before discharging into the natural stream. The discharged water from the tailing dam, if any shall be regularly monitored and report submitted to the Regional Office, Ministry of Environment & Forests, GoI, Bhopal, Central Pollution Control Board, and the State Pollution Control Board.
32. Hydro-geological study of the area shall be reviewed by the project proponent annually. In case adverse effect on ground water quality and quantity is observed mining shall be stopped and resumed only after mitigating steps to contain any adverse impact on ground water is implemented.
33. Occupational health check up for the workers including identification of work related health hazards, training on malaria eradication, HIV, and health effects on exposure to mineral dust etc. shall be carried out. Periodic monitoring for exposure to respirable mineral dust on the workers shall be conducted and records maintained including health records of the workers. Awareness programme for workers on impact of mining on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures shall be conducted followed by follow up action wherever required. It should be made available for inspection whenever asked. Necessary funds for this also should be earmarked.
34. Project Proponent shall ensure appropriate arrangement for shelter and drinking water for the mine workers.
35. Persons working in dusty areas shall be provided with protective respiratory devices and they shall also be imparted adequate training and information on safety and health aspects.
36. Commitment towards CSR have to be followed strictly.
37. Special measures shall be adopted to prevent the nearby settlements from the impacts of mining activities.
38. The Project Proponent shall inform to the Regional Office, MoEF, GoI, Bhopal and MP PCB regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
39. The necessary funds as per mandate shall kept for environmental protective measures which should be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the Regional Office, MoEF, GoI, Bhopal and MP PCB.

40. The Regional Office, MoEF, Gol, Bhopal and MP PCB shall monitor compliance of the stipulated conditions. A complete set of documents including Environment Impact Assessment Report, Environmental Management Plan, Public hearing and other relevant documents should be given to Regional Office, MoEF, Gol, Bhopal and MP PCB.
41. A copy of the environmental clearance shall be submitted by the Project Proponent to the Heads of the Local Bodies, Panchayat and Municipal Bodies, as applicable, in addition to the relevant officers of the Government who in turn has to display the same for 30 days from the date of receipt.
42. The Project Proponent shall 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 and also at web site of the State Level Environment Impact Assessment Authority (SEIAA) website at **www.mpseiaa.nic.in** and a copy of the same shall be forwarded to the Regional Office, MoEF, Gol, Bhopal.
43. The project proponent has to strictly follow directions/guideline issued by the MoEF, Gol, CPCB and other Govt. agencies from time to time.
44. Action plan with respect to suggestion/improvement and recommendations made and agreed during public hearing consultation shall be submitted to the Regional Office, MoEF, Gol, Bhopal, MP PCB and to the competent authority of the State Govt. within six months.
45. The Project Proponent has to submit half yearly compliance report of the stipulated prior environmental clearance terms and conditions in hard and soft copy to the Regulatory Authority on 1<sup>st</sup> June and 1<sup>st</sup> December of each calendar year.
46. The SEIAA of M.P. reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
47. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
48. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
49. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
50. Any appeal against this prior environmental clearance shall lie with the Green Tribunal, if necessary, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
51. 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 and the Public Liability Insurance Act, 1991 along with amendments and rules.