

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

Environmental Planning & Coordination Organization

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No: 3/9

/ SEIAA /17

Date: 1.5.12

To, M/s Nirmala Minerals, Pathak Ward P.O. Katni, District - Katni (MP) -483501

Sub: - Case No. 96/2008, Prior Environmental Clearance for Agaria Iron ore mine (Open cast Semi-mechanized Method) in an area of 20.141 ha for production capacity of 50000 TPA at Khasra No.1093 at Village - Agaria Tehsil- Sihora District - Jabalpur (M.P) by M/s Nirmala Minerals, Pathak Ward P.O. Katni, District - Katni (MP) -483501.

This has reference to your letter received in SEIAA office on 05.06.2008 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 Agaria Iron Ore Mine in an area of 20.141 ha. The mining lease area is located in Khasra No. 1093 at Village - Agaria Tehsil- Sihora District - Jabalpur (M.P.). It lies at geographical co-ordinates at latitude 23°22'21.6" to 23°22'45.1" N and longitude 80°08'36.1" to 80°09'02.7" E. There is no National Park/Santuary within 10 Km radius. Mining Plan is approved by the IBM (vide letter no. MP/Jabalpur/Iron Ore/MPLN/R-19/06-07 dtd. 25.07.2007).

The proposed project is for production capacity 50000 TPA. The mining will be carried out by Opencast Semi Mechanized method. The the total water requirement is 11M³/day (5 M³/day - Dust Suppression + 2 M³/day - Green Belt + 4 M³/day - Domestic use), which shall be met by mine sump and groundwater. The public hearing was conducted at Mining site at Village- Agaria Tehsil- Sihora District - Jabalpur on 02.09.2009,

- 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 14th Septezber 2006.
- IV. Based on the information submitted, as at Para (II) above and others the State Level Environment Impact Assessment Authority (SEIAA) considered the case in its 421st meeting dtd. 10.04.2017 and decided to accept the recommendations of 82nd SEAC meeting dtd. 13.10.2011.

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Hence, Prior Environmental Clearance is granted for Agaria Iron ore mine (Open cast Semi-mechanized Method) in an area of 20.141 ha for production capacity of 50000 TPA at Khasra No.1093 at Village - Agaria Tehsil- Sihora District - Jabalpur (MP) for the lease period to M/s Nirmala Minerals, Pathak Ward P.O. Katni, District - Katni (MP) -483501, subject to the compliance of following specific conditions as recommended by SEIAA & SEAC-II and subsequent Standard Conditions.

A. Specific Conditions

- 1. Before commencing any mining activity fencing shall be carried out all around the lease area. Proper watch and ward arrangements should be made with installation of signage at 4 corners of lease area to avoid any untoward incident involving public and animals by the PP.
- 2. During the first year, three row plantation in the buffer zone (7.5 M) will be carried out in the entire periphery of the lease area and additional thick plantation to be taken up towards habitation site in north and north east side. 5000 trees (3 years old) should be planted in the first year with proper watering arrangement. PP should ensure plantation of native species like Mahua, Khamar, Neem, Bemboo, Saja, Tendu, Kachnar, Khair, Bel, Imli, Karrange, Pipal and Mango. The cost per plant is reported by the PP to the Rs. 500/-, so a provision of 25 lakhs should be kept in the EMP for plantation and its upkeep.
- 3. The PP shall demarcate a minimum buffer zone of 100 m from the periphery of the nearest human habitation and the existing canal in consultation with Revenue/WRD/Mining Department around the mining lease area and this will be treated as "no mining activity zone".
- 4. Before commencing the mining activity, site demarcation should be done leaving 250 m. from the forest boundary as a "no mining zone". This lease area should be thickly planted by native species. The demarcation should be done by the Revenue Officials in the presence of DFO, Jabalpur Forest Department and Mining Officer, Jabalpur.
- 5. According to the report of CGWB in respect of Jabalpur District (STATUS OF GROUND WATER LEVELS IN MADHYA PRADESH DURING MAY 2015), the minimum and maximum ground water table has been indicated as 7 m. and 22 m. respectively. There is every likelihood that to achieve the ultimate depth as per the approved mining plan, the ground water table shall be intersected. PP should ensure that before commencement of mining operation below the ground water table, the approval of the Central Ground Water Board should be obtained. A copy of the Prior EC should also be addressed to Director, CGWB, Paryavas Bhavan Bhopal with copy to the Regional Officer, CGWB, Jabalpur for necessary action.
- 6. PP shall protect the existing trees within a lease area and no existing trees shall be cut.
- 7. Monthly air & water quality monitoring shall be carried out by PP in consultation with Regional Officer, MPPCB. Jabalpur.
- 8. To protect the human habiation from dust emissions, the entire periphery from north to north east should have a solid curtaining of suitable material prepherably steel sheets of 6 m. height.
- 9. Transportation of the material shall not be carried out through the village road instead Ghatsimariya by pass road shall be used for transportation of materials.
- 10. PP shall strengthened and maintain the transportation road and also construct an additional 0.90 km Tar road from northen side of the lease area to Pratappur and Gosalpur road as committed during presentation. Tree plantation on both side of the proposed tar road should be undertaken. The cost of tar road @ 25 lakhs per km should be included in the EMP.
- 11. PP shall carry out the water quality analysis through authorised laboratory and if fluoride is found or any other content higher than the prescribed limit shall inform the PHE office immediately for taking further precautionary measures.
- 12. Water fogging arrangment on internal roads, loading and unloading and transfer point shall be provided and properly maintained.
- 13. PP shall abide by all safety rules as prescribed by IBM and Industrial health and safety from time to time.
- 14. In order to check siltation due to run off during incessant rains, check dams shall be constructed which will be de-silted after the rainy season.
- 15. Interim health check-up of mine workers shall be carried out in 15 days and PP shall also maintain proper record of the health check-up and submit the report to RO, MPPCB, Jabalpur.

- 16. Groundwater monitoring within mine site in surrounding villages shall be carried out and report shall be submitted to RO, MPPCB and PHE every month.
- 17. PP should construct garland drain in the entire periphery of the mining lease of size 2m x 1.5m alongwith the 04 settling tanks RCC/Mansonary of size 20m x 6m x 3m around the pit area and mining lease boundary with a provision of mine sump of 10000 sq m area upto 03 m depth.
- 18. PP has informed during presentation that it is a zero discharge mine and about 1.0m3/ day of waste water will be generated from domestic use during mining operation and the generated domestic waste water shall be reused after proper treatment for plantation purposes. PP shall ensure the committment carried out during the presentation.
- 19. PP shall carry out the mining operations in such a way that a canal situated at 300 m in south direction and a perennial source of water supply is about 1.2 km from the proposed lease area shall not be contaminated.
- 20. Payments of wages to the workers shall be done in consonance with the provisions in the labour laws.
- 21. PP shall suitably modify budget for the activities to be carried out under EMP.
- 22. The PP shall undertake the following activities in nearby villages on priority and made an appropriate budget provisions under the CSR for these activities:
 - Sanitation activities including construction of toilets in consultation with village Panchayat.
 - b) Installation of rainwater harvesting structure.
 - c) Plantation of fruit bearing plants in nearby villages.
 - d) Providing pipeline for drinking water supply to Agaria Village.
- 23. CSR activities shall be finalised on the basis of the needs of nearby villages in consultation with Gram Panchayat and finalised by the Collector..
- 24. Prior to the initiation of activities PP shall obtain all the necessary permissions from the regulatory authorities.
- 25. Garland drains have to be constructed surrounding all the overburden dumps. The drains shall be connected to the settling tank having sufficient holding capacity.
- 26. The clear water from the holding tank shall be used for various mining activities including the horticulture.
- 27. Controlled blasting and / or drilling will be carried out in the mining as per the guidelines of explosive department.
- 28. Regular spraying of water by Tanker fitted water sprinkling system over haulage roads shall done.
- 29. Under no circumstances the existing plantation shall be removed in the project boundary.
- 30. Appropriate arrangement shall be made for the treatment and disposal of the waste water expected from the domestic activities of the workers.
- 31. Dense plantation has to be carried out in the lease area as per the plan submitted.
- 32. Major approach roads shall be black topped & properly maintained.
- 33. Emissions from the plant operations including crusher, screens, conveyor transfer points and storage facilities have to be checked through installation of wet dust suppression systems.
- 34. Screen of the stone crusher should be covered to minimize the fugitive emissions.
- 35. Top soil should be preserved separately and should be spread over surface for plantation.
- 36. Garland drain shall be provided all around the OB area which should be connected to appropriate settling tank.
- 37. Ground vibrations due to blasting operations should comply with the DGMS standards.
- 38. Proper stabilization of OB dumps has to be ensured through appropriate plantation.
- 39. Utilization of sub-grade mineral has to be ensured as far as possible.
- 40. Safe transportation of materials should be ensured along with construction of haulage road to avoid fugitive emission.
- 41. Particulate matter emissions have to be maintained as per the MPPCB norms.
- Thick green belt around the lease area shall be developed. (at least in 33% of total lease area).

- 43. Periodic health check up camps shall be organized by the proponent at mining site.
- 44. Provision of first-aid, rest shelter for workers with amenities like drinking water, fan, toilet etc. shall be made by the proponent.
- 45. All safety equipments such as air masks, gum-boots, ear-plugs and helmets etc shall be provided for the mine workers as per the provisions.

B. Standard Conditions

- All activities / mitigative measures proposed by PP in Environmental Impact Assessment and approved by SEAC must be ensured.
- 2. All activities / mitigative measures proposed by PP in Environmental Management Plan and approved by SEAC must be ensured.
- 3. All parameters listed in Environmental Monitoring Plan approved by SEAC must be monitored at approved locations and frequencies.
- 4. 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.
- Controlled blasting techniques with sequential drilling shall be adopted. The blasting shall be carried out in the day time only.
- Slope of the mining bench and ultimate pit limit shall be as per the mining scheme approved by Indian Bureau of Mines.
- A final mine closure plan, along with details of Corpus Fund, shall be submitted to the Regional Office, MoEF, GoI, Bhopal and MP PCB within 5 years in advance of final mine closure for approval.
- No change in the calendar plan including excavation, quantum of mineral and waste shall be made.
- 9. 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.
- 10. Adequate buffer zone shall be maintained between two consecutive mineral bearing deposits.
- 11. The transportation of the minerals extracted from the mining area shall be limited to day hours time only.
- 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.
- 13. 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.
- 14. 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.
- 15. The project proponent will ensure necessary protection measures around the mine pit, waste dumps and garland drain.
- 16. 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.
- 17. 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 35o. The OB dump shall be backfilled and shall be scientifically vegetated with suitable native species to prevent erosion & surface run off.
- 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.
- 19. 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, GoI, Bhopal and MP PCB every year.
- 20. 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.
- 21. Four ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for RSPM, SPM, SO2, NOx 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.
- 22. Data on ambient air quality (RPM, SPM, S02, NOx) 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.
- 23. Ambient air quality at the boundary of the mine premises shall confirm to the norms prescribed in MoEF notification no. GSR/826(E) dtd. 16.11.09.
- 24. 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.
- 25. 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.
- 26. Rain water harvesting shall be undertaken to recharge the ground water source. Status of implementation shall be submitted to the Regional Office, MoEF, Gol, Bhopal and MP PCB within six months and thereafter every year from the next consequent year.
- 27. 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, Gol, Bhopal, MP PCB, Central Ground Water Authority and Regional Director, Central Ground Water Board.
- 28. The waste water from the mine if any, shall be treated 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 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, Gol, Bhopal, Central Pollution Control Board, and the State Pollution Control Board.
- 29. 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.
- 30. 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.
- Project Proponent shall ensure appropriate arrangement for shelter and drinking water for the mine workers.

- 32. 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.
- 33. Commitment towards CSR have to be followed strictly.
- 34. Special measures shall be adopted to prevent the nearby settlements from the impacts of mining activities.
- 35. The Project Proponent shall inform to the Regional Office, MoEF, Gol, 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.
- 36. 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, Gol, Bhopal and MP PCB.
- 37. 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.
- 38. 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.
- 39. 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.
- 40. The project proponent has to strictly follow directions/guideline issued by the MoEF, Gol, CPCB and other Govt. agencies from time to time.
- 41. 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.
- 42. 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 1st June and 1st December of each calendar year.
- 43. 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.
- 44. 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.
- 45. The Ministry or any other competent authority may alter/modify the conditions or stipulate any further condition in the interest of environment protection.
- 46. 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.
- 47. 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.
- 48. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
- 49. The proponent shall upload the status of compliance of the stipulated EC 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 MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient levels

as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

50. 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 along with the status of compliance of EC conditions and shall also be sent to the Regional Office of MoEF.

Endt No. / SEIAA/17

Dated: /- 5-12

Copy to:-

1. Principal Secretary, Department of Urban Development & Environment, Government of Madhya Pradesh, Mantralaya, Bhopal.

- 2. Member Secretary, SEAC, Research and Development Wing Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony Bhopal-4620 16
- 3. Member Secretary, Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal-462016
- Collector, District Jabalpur, (M. P)
- 5. Divisional Forest Officer, District Jabalpur, (M. P)
- 6. I.A. Division, Monitoring Cell, MoEF& CC, Gol, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi- 110 003.
- 7. Director (S), Regional office of the MOEF, Western Region, Kendriya Paryavaran Bhawan, Link Road No. 3 Ravi Shankar Nagar, Bhopal-462016
- 8. Director, Geology & Mining, Madhya Pradesh, 29-A, Khanij Bhawan, Arera Hills, Bhopal - 462002.
- 9. District Mining Officer, District Jabalpur, (M. P)
- 10. DEO, SEIAA, for update on website
- 11. Guard file

(Dr. Sanjeev Sachdev) Officer-in-Charge