



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

**Environmental Planning & Coordination Organization**

Paryavaran Parisar, E-5. Arera Colony  
Bhopal-4620 16

visit us <http://www.mpseiaa.nic.in>

Tel:0755-2466970, 2466859

Fax : 0755-2462136

No: 3442 / SEIAA /16

Date: 8.9.16

To,  
Madhya Pradesh State Mining Corporation Ltd,  
Paryawas Bhawan Block No.1,  
Second Floor (A), Jail Road, Bhopal (M.P) - 462011

**Sub: - Case No. 1856/2014**, Prior Environmental Clearance for Mardeora Rock Phosphate Mine (Open cast other than fully mechanized) in an area of 48.758 ha for expansion of production capacity from 26300 TPA to 1,55,000 TPA at khasra nos. 125/1, 917, 953/1 at Village Mardeora, Tehsil Baxwaha, District Chhatarpur, MP by Madhya Pradesh State Mining Corporation Ltd, Paryawas Bhawan Block No.1, Second Floor (A), Jail Road, Bhopal (M.P) - 462011

This has reference to your letter received in SEIAA office on 01.10.2014 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 Mardeora Rock Phosphate Mine in an area of 48.758 ha. The mining lease area is located in Khasra Nos. 125/1, 917, 953/1, Village Mardeora, Tehsil Baxwaha, District Chhatarpur. The nearest village Mardeora is located at the distance of 0.70 km -S & the nearest Lanch river is located at the distance of 3.0 km - W. There is no National Park/Sanctuary and interstate boundary within 10 Km radius. There is no forest boundary within 250 m from mining site.

The proposed project is for expansion of production capacity from 26300 TPA to 1,55,000 TPA. The mining lease period is for 20 years. The mining will be carried out by Open cast other than fully mechanized. The water requirement is 96 KLD. The water met from existing mine pit, Settling tank, Bore well and Hand Pump will be used for domestic purpose, dust suppression and green belt development. An area of 17.4 ha shall be covered under plantation. The public hearing was conducted at village Baxwaha on 07.11.2015 at Gram Panchayat Bhawan.

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 September 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 363<sup>rd</sup> meeting dtd. 29.08.2016 and decided to accept the recommendations of 38<sup>th</sup> SEAC-II meeting dtd. 13.07.2016.

Hence, Prior Environmental Clearance for Mardeora Rock Phosphate Mine (Open cast other than fully mechanized) in an area of 48.758 ha for expansion of production capacity from 26300 TPA to 1,55,000 TPA at khasra nos. 125/1, 917, 953/1 at Village Mardeora, Tehsil Baxwaha, District Chhatarpur, M. P. **for the lease period** to Madhya Pradesh State Mining Corporation Ltd, Paryawas Bhawan Block No.1, Second Floor (A), Jail Road, Bhopal (M.P) - 462011., subject to the compliance of following specific conditions as recommended by SEIAA & SEAC and subsequent Standard Conditions.

**A. Specific Conditions**

1. A 7.5 Meter board strip shall be maintained as buffer zone within the lease area all along the adjoining mining.

2. All pits will be merged together to create reservoir.
3. Mining should not be carried out on stabilized old dumps.
4. PP should ensure the organized benching for open cast mining.
5. Location of crusher should be away from Pakka Road if installed in future.
6. Pucca Road is about 20 meters away from the ML area thus a setback of 10 meters be left from the ML area excluding the 17.50 meters area is no mining zone.
7. PP will monitor water level and quality of ground water of the dug wells and tube wells existing in the surrounding area with the consultation of CGWB.
8. Adequate number of settling tanks should be constructed on mining lease for storage of water.
9. Check dams should be constructed on nallah flowing in nearby area of mining lease to trap the soil.
10. PP should initiate the plantation in the beginning of mining operation.
11. PP shall consult the local panchayat / Skill Development Department and frame activities to be undertaken in CSR like vocational & technical training for local youth & womens.
12. A separate establishment with proper facilities such as toilet, drinking water , First –aid, rest room etc. to be provided within lease area for ladies, children, visitors, doctors, etc.
13. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
14. Transportation of material shall be done in covered vehicles.
15. Necessary consents shall be obtained from MPPCB and the air / water pollution control measures have to be installed as per the recommendation of MPPCB.
16. Permission / NOC shall be obtained from Gram Panchayat for lifting water from the village resources and shall be furnished to MPPCB while obtaining necessary consents under the provisions of Air / Water consents.
17. Curtaining of site shall be done through thick plantation all around the boundaries of the lease area.
18. The proposed plantation should be carried out along with the mining and PP would maintain the plants for five years including casualty replacement.
19. All the commitments made in the public hearing are to be fulfilled by the PP.
20. Appropriate activities shall be taken up for social up-liftment of the Region. Funds reserved towards the same shall be utilized through Gram Panchayat.
21. PP will take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
22. The validity of the EC shall be as per the provisions of EIA Notification subject to the following: Expansion or modernization in the project, entailing capacity addition with 18 SECOND STATE EXPERT APPRAISAL COMMITTEE-2 (MINING) MINUTES OF THE 38th MEETING 13/07/16 change in process and or technology and any change in product - mix in proposed mining unit shall require a fresh Environment Clearance

### **Standard Conditions**

1. 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.
5. Controlled blasting techniques with sequential drilling shall be adopted. The blasting shall be carried out in the day time only.
6. Slope of the mining bench and ultimate pit limit shall be as per the mining scheme approved by Indian Bureau of Mines.
7. 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.
8. 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.
12. 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 35°. The OB dump shall be backfilled and shall be scientifically vegetated with suitable native species to prevent erosion & surface run off.
18. 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, Gol, 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, 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.
22. 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.
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 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, 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.
31. 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](http://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 1<sup>st</sup> June and 1<sup>st</sup> 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, SO<sub>2</sub>, NO<sub>x</sub> (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 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 EC conditions and shall also be sent to the Regional Office of MoEF.

*Rajm*

(Anupam Rajan)  
Member Secretary

3443  
Endt No. / SEIAA/16 Dated: 8.9.16

Copy to:-

1. Principal Secretary, Department of Environment, Government of Madhya Pradesh, Mantralaya, Bhopal.
2. 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
4. Collector, District Chhatarpur, M. P.
5. Divisional Forest Officer, District Chhatarpur, 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 Chhatarpur, M. P.
10. DEO, SEIAA – for upload on website.
11. Guard file

*Sanjeev Sachdev*

(Dr Sanjeev Sachdev)  
Officer-in-Charge