

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

Research and Development Wing
Madhya Pradesh Pollution Control Board
Paryavaran Parisar, E-5, Arera Colony
Bhopal-4620 16
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No: 4657 EPCO-SEIAA /12

Date: 30/6/2012

To,
M/s Madhya Pradesh State Mining Corporation Ltd.,
Paryavas Bhawan, Block no. 1 A,
2nd Floor, Jail Road, Arera Hills
Distt. - Bhopal.-462011
Ph. No. 0755-2763391, 2763392

Sub: Case No. 470/2009, Prior Environmental Clearance for Rock Phosphate mine in an area of 48.758 ha for production capacity of 26,300 MT/year at village Mardeora, Tehsil Bijawar, District Chhatarpur M.P by M/s Madhya Pradesh State Mining Corporation Ltd, Bhopal.

This has reference to your letter No. geology / 2009-10/ 177 dtd. 06.10.09, received in SEIAA office on 07.10.2009, ToR issued by SEAC on 23.04.2010 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 Report 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 Rock Phosphate mine in an area of 48.758 ha. The mining lease area is located in Khasra No. 125/1, 917, 953/1 at village Mardeora, Tehsil Bijawar, District Chhatarpur, M.P. It lies at latitude 24° 21' 28" to 24° 22' 35" N and longitude 79° 08' 55" to 79° 10' 40" E. It is government revenue land. The village Basai is about 0.6 km - SW. The water body Chandaiya Main Canal is 1.0 km -W from mining site and Panna National Park is 110 km distance from the proposed site. The mining area is 3 km from forest boundary of Chhatarpur, Forest Division & 150 m from forest boundary of Sagar Forest Division. The distance of interstate boundary is 25 km from village mardeora.

The total production capacity will be 26,300 MT / year for Rock Phosphate. The mining lease period is from 27.09.1997 to 26.09.2017 for a period of 20 years. The mining will be carried out by open cast semi - mechanized method. The water requirement is 16 KLD which would be met from ground water & mine pit water. It will be used for dust suppression, domestic use, green belt, and crusher. An area of 20.4 ha shall be covered under plantation. The public hearing was conducted on 21.01.2011 at village Mardeora.



- 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 as per Para II above and others, the State Level Environment Impact Assessment Authority (SEIAA) considered the case in its 97th meeting dtd 20.06.12 and decided to accept the recommendations 95th SEAC meeting dtd 08.05.2012.
- V. Hence, Prior Environmental Clearance is accorded Rock Phosphate mine in an area of 48.758 ha for production capacity of 26,300 MT/ year at village Mardeora, Tehsil Bijawar, District Chhatarpur M.P by M/s Madhya Pradesh State Mining Corporation Ltd., 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. Water consumption shall not exceed 16 KLD. Ground-water shall be used only for drinking purpose whereas for process only the pit water shall be used.
 2. Adequate Pollution Control Equipments shall be installed in the proposed crusher.
 3. Water body proposed to be developed (12.5 Ha) should be provided with suitable safety and protective measures. The pond so developed shall be lined with flooring and fenced.
 4. Silt settling tanks shall be constructed in the barrier zone area to settle the suspended particles. It should be ensured that the silt content (suspended solids) in the mine discharge is as per the MPPCB norms.
 5. Regular fluoride monitoring shall be done in ambient air and ground-water.

Endt No.
Copy to:-

466 / EPCO - SEIAA/12 Dated: 30/6/2012

Member Secretary

1. Principal Secretary, Department of 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
4. Collector, District Chhatarpur, M.P.
5. Divisional Forest Officer, District Chhatarpur, M. P.
6. Division, Monitoring Cell, MoEF, Gol, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi- 110 003
7. Director (S), Regional Office, Western Region, Kendriya Paryawarn Bhawan, Link Road No. 3 Ravi Shankar Nagar, Regional office of the MOEF, Bhopal-462016
8. District Mining Officer, District Chhatarpur M. P.
9. Guard file

(Dr R. P. Singh)
Officer-in-Charge

State Environment Impact Assessment Authority, M.P.

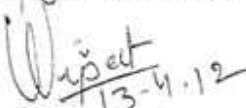
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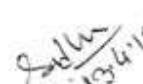
Annex-I

Standard Conditions related to Activity 1 (a) - Mining of Minerals (open cast) 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


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1 of 5

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Dated 20/6/2012

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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, SO₂, NO_x 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

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2 of 5


485-66
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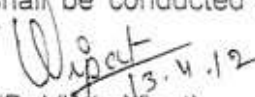
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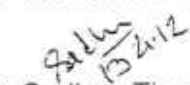
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should be undertaken in consultation with the State Pollution Control Board. The monitored data for criteria pollutants shall be regularly up-loaded and displayed on the company's website.

25. Data on ambient air quality (RPM, SPM, SO₂, NO_x) 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 confirm 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, Gol, 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, Gol, 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 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.
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


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3 of 5


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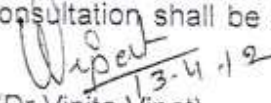
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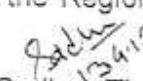
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health records of the workers. Awareness programme for workers on impact of mining on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures shall 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, 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.
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, Gol, 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,


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4 of 5

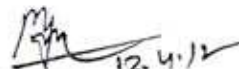
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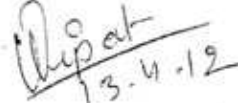
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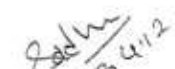
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MoEF, Gol, Bhopal, MP PCB and to the competent authority of the State Govt. within six months.

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 1st June and 1st 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 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. 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.
52. 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, NO_x (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.
53. 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.


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5 of 5

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