



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

Environmental Planning & Coordination Organization

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No: 859 / SEIAA /17

Date: 23.6.17

To,
M/s Galaxy Mines and Minerals,
Shri Akshay Nayak (Partner)
309, Arniya Plaza,
27/2, Manorama Ganj,
P.O. – Indore (M.P.) - 452001

Sub: Case No. – 1249/2013 Prior Environmental Clearance for **Hardua Kala Laterite & Dolomite Mine** (Opencast Manual Method) in an area – 8.81 ha. for production capacity of 30,000 TPA at Khasra No. 20 Part at Village – Hardua Kala, Tehsil – Majholi, Distt. – Jabalpur (M.P.) by M/s Galaxy Mines and Minerals, Shri Akshay Nayak (Partner), 309, Arniya Plaza, 27/2, Manorama Ganj, P.O. – Indore (M.P.) 452001.

This has reference to your application received in SEIAA office on 18.02.2013 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 proceedings and the additional clarifications furnished in response to the observations of the State Level Expert Appraisal Committee (SEAC) and State Level Environment Impact Assessment Authority (SEIAA) constituted by the competent Authority.

II. It has been noted that the proposal is for **Laterite & Dolomite Mine** in an area of 8.81 ha. The mining lease area is located in Khasra no. 20 Part at Village – Hardua Kala, Tehsil – Majholi, Distt. – Jabalpur (M.P.). Geographically mining lease area falls under the co - ordinates latitude 23°34'11" N to 24°34'24.9" N and longitude 80°09'34.2" E to 80°09'44.2" E. There is no National Park/Sanctuary and interstate boundary within 10 km radius and no forest boundary within 250 m distance from mine site. The Mining plan is approved by the IBM (vide letter no. MP/Jabalpur/Laterite/MPLN/G-09/2011-12 dated 04-07-2012).

The proposed project is for production capacity of **30,000 TPA**. The mining will be carried out by opencast manual method. The total water requirement is 12 KLD (06 KLD for Dust Suppression+ 04 KLD for Green Belt + 02 KLD for Drinking), which shall be met from bore well and sump. The public hearing was conducted at Mine Parisar, Village - Hardua Kala, Tehsil – Majholi, Distt. – Jabalpur (M.P.) on 05.11.2015.

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 1^{4th} 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 442nd meeting dtd. 12.06.2017 and decided to accept the recommendations of 78th SEAC - II meeting dtd. 25.05.2017.

Hence, Prior Environmental Clearance is granted for **Hardua Kala Laterite & Dolomite Mine** (Opencast Manual Method) in an area – 8.81 ha. for production capacity of 30,000 TPA at Khasra No. 20 Part at Village – Hardua Kala, Tehsil – Majholi, Distt. – Jabalpur (MP), **for the lease period to** Shri Akshay Nayak, Partner M/s Galaxy Mines and Minerals, 309, Arniya Plaza, 27/2, Manorama Ganj, P.O. – Indore (M.P.) 452001, subject to the compliance of following specific conditions as recommended by SEIAA & SEAC and subsequent Standard Conditions.

A. Specific Conditions

1. PP shall leave 100m from the road as no mining zone. No mining activity will be performed in this area.
2. 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.
3. Plantation programme as mentioned in EIA/EMP and presented during presentation in SEIAA & SEAC shall be followed in content and spirit.
4. PP shall demarcate a barrier zone of 7.5 m as no mining zone in the periphery of mining lease area and develop a green belt. Three row plantation shall be carried out in the greenbelt area in current year with proper watering arrangement.
5. PP will be allowed to cut only 10 trees for mining only after getting proper consent from DFO, Jabalpur or concerned authority if required. As per Forest Rules mahua trees will be properly conserved on the site as far as possible by leaving appropriate space around the plant.
6. PP will plant total 9000 numbers of tree saplings during lease period. Out of which, 1000 numbers 3 years old tree saplings of suitable indigenous tree species will be planted in 0.915 ha area in first year as mentioned in plantation programme of EIA/EMP and presented during presentation in SEIAA & SEAC shall be followed in content and spirit. PP will also ensure to conserve and maintain the plantation for minimum 3 years after conceptual period of mining.
7. Top soil will be brought from outside for afforestation.
8. PP will construct concrete road in the village portion of transportation route passing through the village.
9. The mining operation shall be restricted to above ground water table and in no case it should intersect the ground water table. In case of working below the ground water table approval of the Central Ground Water Board shall be obtained.
10. PP should construct garland drain of 1220 m. length with size 2m x 1.5m all around the mining lease area alongwith 04 settling tanks size (20m x 6m x 3m). PP shall also ensure the proper cleaning and maintenance of garland drain and settling tank.
11. The over burden and waste will be stacked for five years and then simultaneously backfilled in the mined out area where plantation will be raised on it.
12. No overburden will be dumped outside the mine lease area.
13. Controlled blasting shall be carried out using delay detonator to prevent flying fragments during mining operation. Muffle blasting will also be practiced under supervision of qualified blaster.
14. Ground water table monitoring shall be done for pre monsoon and post monsoon season and record shall be maintained.
15. Regular water quality monitoring shall be carried out by PP before discharging it into the nearby Nallah & agriculture fields.
16. Payments of wages to the workers shall be done in consonance with the provisions in the labour laws.
17. Proper infrastructure with shelter, drinking water, toilet and first-aid facilities shall be provided for the labourers. A provision should be made to construct a pakka rest shelter along with toilet and drinking water facility.
18. PP should also carry out regular sprinkling in the mining lease area to arrest dust emission from mining activities affecting the nearby agriculture fields.
19. There will not be any discharge of mine waste water into the agriculture field and zero discharge will be maintained by PP.
20. MPPCB must ensure compliance of the conditions enumerated in the EC before giving any consent to operate.
21. Mining shall be limited to the area as shown in surface plan and as per the approved mining scheme.

22. Budget provision of Rs. 23.0 lakhs be made under Environmental Management Plan for plantation, dust suppression and road construction and maintenance.
23. PP must ensure under CSR the following activities for which a provision of 2.0 lakhs should be kept.
 - a) PP shall also provide 2 hand pumps in village Hardua Kala for supply of potable drinking water.
 - b) PP shall also provide separate toilet facility for girls and boys with proper arrangement of water (i.e, Water tanks & Pumps) in the school of nearby villages.
 - c) Need based fund to the development of nearby villages in consultation with the Grampanchayat and District Administration.
24. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
25. Necessary consents shall be obtained from MPPCB and the air / water pollution control measures have to be installed as per the recommendation of MPPCB.
26. Transportation of material shall be done in covered vehicles.
27. Transportation of minerals shall not be carried out through forest area.
28. Curtaining of site shall be done through thick plantation of two to three rows all around the boundaries of all part of lease and dominant wind direction.
29. The OB should be properly stacked inside the ML area in barrier zone and disposed off as per the submitted plan. PP shall bound to compliance the final closure plan as approved by the IBM.
30. The proposed plantation should be carried out along with the mining and PP would maintain the plants for five years including casualty replacement. Initially, dense plantation shall be developed along the site boundary (in three rows) including the village side to provide additional protection in one year only.
31. Authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 should be obtained by the PP if required.
32. All garland drains shall be connected to settling tanks through settling pits and settled water shall be used for dust suppression, green belt development and beneficiation plant. Regular de-silting of drains and pits should be carried out.
33. Fixed typed sprinklers should be provided on 200 meter long haul roads. However, regular water spraying should be practiced on transportation road for dust suppression.
34. If any tree uprooting is proposed necessary permission from the competent authority should be obtained for the same.
35. Appropriate and submitted activities shall be taken up for social up-liftment of the Region. Funds reserved towards the same shall be utilized through Gram Panchayat. Further any need base and appropriate activity may be taken up in coordination with local panchayat.
36. PP will take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
37. The commitments made in the public hearing are to be fulfilled by the PP.
38. Expansion or modernization in the project, entailing capacity addition with 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 parameters listed in Environmental Monitoring Plan approved by SEAC must be monitored at approved locations and frequencies.
3. Blast vibrations study shall be conducted and submitted to the Regional Office, MoEF, GoI, 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.

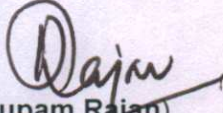
4. Controlled blasting techniques with sequential drilling shall be adopted. The blasting shall be carried out in the day time only.
5. Slope of the mining bench and ultimate pit limit shall be as per the mining scheme approved by Indian Bureau of Mines.
6. A final mine closure plan, along with details 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.
7. No change in the calendar plan including excavation, quantum of mineral and waste shall be made.
8. 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.
9. Adequate buffer zone shall be maintained between two consecutive mineral bearing deposits.
10. The transportation of the minerals extracted from the mining area shall be limited to day hours time only.
11. Maintenance of nearby 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.
12. 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.
13. 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.
14. The project proponent will ensure necessary protection measures around the mine pit, waste dumps and garland drain.
15. 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.
16. 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.
17. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Regional Office, MoEF, GoI, Bhopal and MP PCB on six monthly basis.
18. By the end of the lease period 33% of the area should be brought under plantation.
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, 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 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, 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.
23. 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.
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.
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 be 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

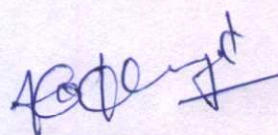
periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

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.


(Anupam Rajan)
Member Secretary
o/c

Endt No. 860 / SEIAA/17 Dated: 23.6.12
Copy to:-

1. Principal Secretary, Department of Environment, Government of Madhya Pradesh, Mantralaya, Bhopal.
2. Secretary, SEAC-II, Research and Development Wing Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5. Arera Colony Bhopal-462016
3. Member Secretary, Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal-462016
4. 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. Data Entry Operator, SEIAA for upload on website.
11. Guard file


(Alok Nayak)
Officer-in-Charge
o/c