



STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA), ODISHA

{ Constituted vide order No. S.O. 1899 (E) Date 17th August, 2012
Ministry of Environment & Forest, Govt. of India, Under Environment Protection Act, 1986.}
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Ref. No. 2844/SEIAA

Dt. 21.01.2015

From

Shri S. B. Samant, IFS
Member Secretary,
State Environment Impact Assessment Authority, (SEIAA)
Odisha, Bhubaneswar

To

Sri Dillip Kumar Agrawal, Mine Owner
M/s Kirikita Graphite Mines
Santikunj, Farm Road,
Po- Modipara,
Dist-Sambalpur-768002
Phone-0663-2403651

Sub: Environmental Clearance for production of graphite ore up to 1198 TPA over an area 27.029 ha. (Excluding the Gramya Jungle Jogya area of 4.779 ha.) at village Kirikita in the district of Nuapada of M/s Kirikita Graphite Mines of Sri Dillip Kumar Agrawal.

Sir,

This has reference to your letter no nil dated 03.06.2010, letter no. nil dated 08.08.2011, letter no. nil dated 11.09.2013, letter no. nil dated 20.06.2014 and letter no. nil dated 22.8.2014 seeking environmental clearances for the above project under EIA Notification 2006. The proposal has been appraised as per the provisions under the EIA Notification 2006 and on the basis of the documents enclosed with the application and clarifications furnished in response to the observation of the State Expert Appraisal Committee, Odisha.

The proposed Kirikita Graphite Mines over an area of 27.029 ha. (Excluding the Gramya Jungle Jogya area of 4.779 ha.) for production of 1198 TPA graphite ore of Sri Dillip Kumar Agrawal is located at village Kirikita, District- Nuapada, Odisha. The original mining lease area of 31.808 ha consist of 4.779 ha Gramya Jungle Jogya area. Now, the proponent has made an appeal on dt. 22.8.2014 to consider their proposal for grant of environmental clearance for non-forest area as per MoEF, Govt.of India guidelines vide F.No.II-362/2012-FC,dt.01.02.2013.

The mining lease was granted for prospecting vide letter No. 11(M) SM-62/95-10305/SM dated 29.10.1996. Opening notice and prospecting scheme were submitted on 27.07.1998. During the prospecting period five bore holes, four trenches and two pits have been put to ascertain the existence of ore zone. The mining lease was granted in favour of Sri D.K Agrawal vide letter No. II(M) SM-60/99-10545/SM, Bhubaneswar dt. 21.11.2002 and executed from 14.02.2005. The mining plan for the period of 2004-05 to 2008-09 was prepared and approved by IBM vide letter No. BBS/Nua/Gr/MP-169 on 21.01.2004. The mining operation in the mining lease area was commenced on 22.06.2006. As such mining plan remained valid for 2006-07 to 2010-11. The mining scheme has been prepared for the period of 2011-12 to 2010-16 and approved by IBM on dt. 29.07.2011. There is no perennial nala within the mining lease area. The method of mine is open cast semi-mechanized. The total water requirement is 3.5 m³ /day and the source of water is ground water. There is no National Parks/Sanctuaries, Biosphere Reserves, Wildlife Corridors (Tiger/Elephant) present within 10 km radius of the project area. The TOR was issued by the SEAC on dt. 07.07.2009 for EIA study. Public hearing was conducted on 28.04.2011.

Considering the information/documents furnished and clarifications provided during presentation made by the consultant M/s Kalyani Laboratories Pvt. Limited Bhubaneswar on behalf of the project proponent, the State Expert Appraisal Committee (SEAC) after due considerations of the relevant documents submitted by the project proponent and clarification/documents furnished to it have recommended for Environmental Clearance with certain stipulations. The State Environment Impact Assessment Authority (SEIAA) after considering the proposal and recommendations of SEAC, Odisha hereby accords Environmental Clearance in favour of the project for a period of 5 (five) years under the provisions of EIA Notification 2006 and 2009 and subsequent amendments thereto under various MoEF, Govt. of India circulars subject to strict compliance of the terms and conditions as follows.

Stipulated Conditions:-

1. This Environmental Clearance is accorded only for the non forest area of 27.029 ha. (Excluding the Gramya Jungle Jogya area of 4.779 ha.)
2. No mining activities will be allowed in forest area (4.779 ha) for which the FC is not available.
3. The maximum production from the mine at any given time shall not exceed 1198 TPA.
4. The applicant (Project proponent) will take all necessary measures for prevention, control and mitigation of Air Pollution, Water Pollution, Noise Pollution and Land Pollution including solid waste management as mentioned by him in Form-I, Final EIA reports and Environment Management Plan (EMP) in compliance with the prescribed statutory norms and standards.
5. The applicant will take necessary steps for socio-economic development of the people of the area on need abased assessment for providing employment, education, health care, drinking water and sanitation, road and communication facilities etc.



6. The applicant will comply to the points, concerns and issues raised by the people during public hearing on 28.04.2011 in accordance with the commitments made by him thereon.
7. The applicant will take statutory clearance /approval /permissions from the concerned authorities in respect of his project as and when required.
8. For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of Environmental Clearance including results of monitored data (both in hard copies as well as by e-mail) to the State Environmental Impact Assessment Authority (SEIAA) Odisha, Regional Office of MoEF, the respective Zonal office of CPCB and the SPCB on 1st June and 1st December of each calendar year.
9. The core zone should be monitored intensively with no. of stations as prescribed by CPCB, Delhi and unit of pollutant level should be expressed as NAAQ of CPCB, Delhi. The detailed methodology adopted for analysis of samples shall be clearly indicated.
10. The proponent shall submit baseline data on flora & fauna and CSR activities already carried out within three months to the SEIAA.
11. Adequate buffer zone shall be maintained between two consecutive mineral bearing deposits.
12. Zero waste mining concept shall be implemented either by putting up pelletisation plant or dispose of low grade ores/fines to prospective buyers.
13. The following shall be implemented viz. (a) dump run-off should be diverted into setting ponds (b) adequate rain water harvesting and ground water recharging facilities should be developed in the core zone; (c) attempt should be made to achieve zero water balance.
14. Maintenance of roads through which transportation of ores are undertaken shall be carried out by the project proponent regularly at its own cost.
15. Fugitive dust generation shall be controlled. Fugitive dust emission shall be regularly monitored at locations of nearest human habitation (including schools and other public amenities located nearest to sources of dust generation as applicable) and records shall be submitted to the SEIAA, Odisha.
16. Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
17. Efforts may be made to use surface water instead of ground water for mining and allied activities. Detail proposal of rain water harvesting and surface runoffs managements shall be furnished. These should be collected and used in dust suppression and plantation.
18. Transportation of ore shall be done by covering the trucks with tarpaulin or other suitable mechanism so that no spillage of ore/dust takes place.
19. Rain water harvesting shall be undertaken to recharge the ground water source.
20. Monitoring of ground and surface water quality shall be regularly conducted and records should be maintained and data shall be submitted regularly to the SEIAA, Odisha.



21. The proponent shall ensure that no silt originating due to mining activity is transported in the surface water course. 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.
22. Trenches/garland drains shall be constructed at foot of dumps to arrest silt from being carried to water bodies. Adequate number of Check Dams shall be constructed across seasonal /perennial nallahs (if any) flowing through the ML area and silts be arrested. De-silting at regular intervals shall be carried out.
23. Provision shall be made for the housing of the labourers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
24. Occupational health and safety measures 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. The Proponent shall engage a full time qualified doctor who is trained in occupational health. 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 undertaken (at interval of five years or less) shall be conducted followed by follow up action wherever required Occupational Health Centre shall be established near the mine site itself.
25. Shelter belt i.e. Wind Break of 15 m width and consisting of at least 5 tiers around lease facing the human habitation, school/agricultural fields etc. (if any in the vicinity), in the safety zone/back-filled & reclaimed areas, around voids & roads shall be raised. Green belt development and selection of plant species shall be as per CPCB guidelines. Density of the trees has to be around 2500 plants per hectare. Herbs and shrubs shall also form a part of afforestation programme besides tree plantation. Help & guidance of local DFO may be sought in the matter. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the SEIAA, Odisha within six months.
26. The top soil shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long (not more than 3 years). The topsoil shall be used for land reclamation and plantation.
27. The over burden (OB) generated during the mining operation shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time and its phase-wise stabilization shall be carried out. Proper terracing of OB dump shall be carried out so that the overall slope shall not exceed 28^o Backfilling shall be done as per approved mining plan. Back-filling to start from 3rd year onwards of the mining operation & the entire quantity of waste generated shall be backfilled & liquidated within five years. There shall be no eternal over-burden



dumps after the 6th year of the mining operation. The backfilled area shall be afforested. Back-filling has to be done in a manner that it is restored to the normal ground level. Monitoring & management of rehabilitated areas should continue till the vegetation is established & becomes self-generating. Compliance status to be reported to the appropriate authorities.

28. The funds earmarked for the environment protection measures shall be judiciously utilized. Under no circumstances this funds shall be diverted for other purposes. Year-wise expenditure for this fund should be reported to the SEIAA, Odisha.
29. The critical parameters in the ambient air within the impact zone, peak particle velocity at 300 m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, pH and Total Suspended Solids (TSS)]. 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 data so recorded should be regularly submitted to the Ministry including its Regional office located at Bhubaneswar and the State Pollution Control Board / Central Pollution Control Board once in six months. 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. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x 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.
30. A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the SEIAA 5 years in advance of final mine closure for approval.
31. The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water) required for the project.
32. The Project Proponent should ensure advertising in at least two local newspapers widely circulated in the region, one of which shall be in vernacular language informing the Public that, the project has been accorded environment clearance and copies of the clearance letters are available with SEIAA, Odisha and the Odisha State Pollution Control Board (OSPCB) and may also be seen on the website of the board. The advertisement shall be made within 7 (seven) days from the date of issue of the environmental clearance & a copy of the same should be forwarded to the Regional office of MoEF, Bhubaneswar.
33. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad /Municipal Corporation, urban local Body and the Local NGO, if any, from whom suggestions /representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
34. The environment 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 environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.

35. Any appeal against this environmental clearance shall lie with the Hon'ble National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.

The above mentioned stipulated conditions shall be complied in time bound manner. Failure to comply with any of the conditions mentioned above may result in withdrawal of this environmental clearance and attract action under the provisions of Environment Protection (EP) Act, 1986.

Yours faithfully,


21.01.15
Member Secretary

Memo No 2145/SEIAA /Dt. 21.01.2015

Copy to

1. Ministry of Environment & Forests, Govt. of India, Paryavaran Bhawan, C.G.O Complex, Lodhi Road, New Delhi for kind information.
2. Principal Secretary, Forests & Environment Dept., Government of Odisha for kind information.
3. Chairman, State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-8, Bhubaneswar for kind information.
4. Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment & Forests, A-31, Chandrasekharapur, Bhubaneswar for kind information.
5. Chairman, Central Pollution Control Board, CBD-cum-office Complex, East Arjun Nagar, New Delhi-110032 for kind information.
6. Collector & District Magistrate, Nuapada for kind information and necessary action.
7. Chairman/Member/Member Secretary, SEIAA for kind information.
8. Chairman, SEAC/Secretary, SEAC, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar for kind information.
9. Guard file for record.


21.01.15
Member Secretary