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State Level Environment Impact Assessment Authority-Karnataka

(Constituted by MoEF, Government of India, under section 3(3) of E(P) Act, 1986)

SEIAA 71 MIN 2017

Date: 27-09-2019

To,

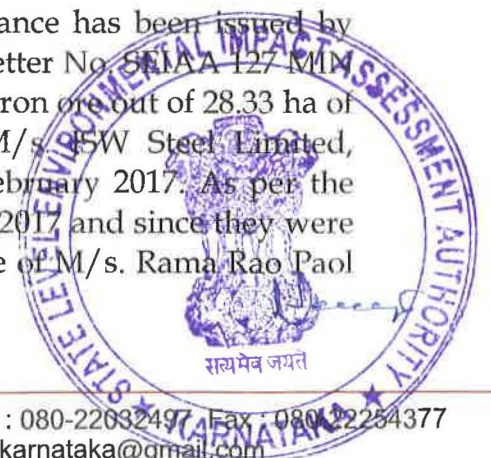
The Vice President Mines
M/s: JSW Steel Limited,
P.O. Vidyanagar,
Tornagallu, Sandur Taluk,
Bellary District.

Sir,

Sub: Mining of Iron Ore at Rama Iron Ore Mine (ML No. 2621) at Ramgad Reserved Forest, Ramgad Village, Sandur Mandal, Ballari District by M/s. JSW Steel Limited. - Issue of Environment Clearance - Reg.

This has reference to your application dated 16th August 2017 and 10th January 2019 bearing proposal No.SIA/KA/MIN/20420/2017 addressed to SEIAA, Karnataka on the subject mentioned above. It has been noted that the proposal is for grant of Environmental Clearance under the provisions of EIA Notification, 2006 for mining of Rama Iron Ore. The total mining lease area of the project is 33.80 Ha. Out of the total lease area, 18.66 Ha area is for mining, 1.32 Ha area is for roads, 2.20 Ha area is for green belt, 0.10 Ha area is for infrastructure, 11.16 Ha area is for backfilled area and 0.36 Ha area is undisturbed area. The method of mining proposed is Opencast Fully-Mechanized. Water requirement for the project is 205 KLD will be met from nearby bore-well. During the mining operation about 6,47,600 tonnes of waste will be handled for the plan period. The Indian Bureau of Mines has approved mining plan on 31st May 2017 for lease area of 33.80 Ha vide letter No.279/1092/2017/BNG. Capital cost of the project is about Rs.37.89 Crores. It is reported that there are no (i) Protected Areas notified under the Wild Life (Protection) Act, 1972, (ii) Critically Polluted areas as notified by the Central Pollution Control Board from time to time, (iii) Notified Eco-sensitive areas, (iv) Inter-State boundaries and international boundaries located in whole or in part within 10 km from the boundary of the proposed project site.

2. It is inter-alia, noted that Earlier Environment clearance has been issued by SEIAA, Karnataka to Sri. Ram Rao M. Poal by SEIAA vide letter No. SEIAA 127 MIN 2008 dated 30th December 2009 for extraction of 0.50 MTPA iron ore out of 28.33 ha of mining lease area. The said EC stands transferred to M/s. JSW Steel Limited, Mumbai vide letter No. SEIAA 127 MIN 2008 dated 4th February 2017. As per the request made by M/s JSW Steel Limited, Mumbai dated 9.1.2017 and since they were declared as the "Preffered Bidder" for the 'C category' mine of M/s. Rama Rao Poal (Rama) in an e-auction process.



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3. The present proposal is for seeking Environmental Clearance for proposed increase of iron ore production from 0.50 MTPA to 0.94 MTPA at Ramgad Reserved Forest, Ramgad Village, Sandur Taluk, Ballari District by M/s. JSW Steel Limited in an area of 33.80 Ha of Forest land. This is a project covered under Sl.no.1(a) of the Schedule under category B Projects of EIA Notification, 2006 and amendments made there on.

4. The project proposal has been considered by SEAC during the meeting held on 22nd and 23rd September 2017 and recommended to SEIAA for issue standard ToRs along with additional ToRs. The Authority during the meeting held on 12th October 2017 decided to issue ToR as recommended by SEAC for conducting the Environment Impact Assessment study in accordance with EIA Notification, 2006. Accordingly the ToR was issued on 2nd November 2017. The EIA study has been conducted by B.S. Envi-Tech Pvt. Ltd. Secunderabad, who have accreditation from NABET/QCI vide certificate no. NABET/EIA/1519/SA 064. The Final Environment Impact Assessment report has been submitted on 14th January 2019.

5. The State Expert Appraisal Committee (SEAC) appraised the project in its meeting held on 11th July 2019 recommended for issue of Environmental Clearance. The State Environment Impact Assessment Authority (SEIAA), Karnataka State has examined the application in its meeting held on 31st July 2019 in accordance with the EIA Notification 2006 and hereby accords environmental clearance under the provisions thereof to the above mentioned M/s. JSW Steel Limited for mining of Iron Ore with annual production mentioned in the table below subject to implementation of the following conditions and environmental safeguards:

Year	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year	Total
Production in Tonnes	9,39,998	9,39,981	9,39,993	9,40,021	9,39,924	46,99,918

A. SPECIFIC CONDITIONS:

1. Mining plan approved by Indian Bureau of Mines shall be strictly implemented and the mine shall not be operated beyond the validity period of the approved mining plan.
2. Project authorities shall get the health checkup done for the mines workers and the nearby villagers once in six months and submit report periodically.
3. The SEIAA, Karnataka reserves the right to withdraw the Environmental Clearance subject to any change in the mining policy by the State Government as may be applicable to this project.
4. This Environmental Clearance is co-terminus with the lease granted as per the MM (D & R) Act 1957.
5. The underground mining will involve continuous supply of fresh air and removal of noxious and other harmful gases. Measures for dust suppression, prevention of inundation and conservation of energy.
6. Hydro-geological study of the area shall be reviewed 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.



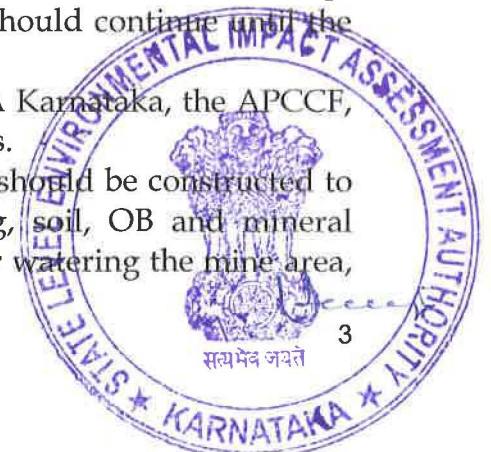
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7. Land-use pattern of the nearby villages shall be studied, including common property resources available for conversion into productive land. Action plan for abatement and compensation for damage to agricultural land/ common property land (if any) in the nearby villages, due to mining activity shall be submitted to the SEIAA, Karnataka within six months.
8. Need based assessment for the nearby villages shall be conducted to study economic measures which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.
9. Cultivable wasteland shall be identified and fodder farming shall be taken up in phased manner.
10. 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.
11. Status of tailing pond waste disposal and its management (including leachate) shall be regularly submitted to the SEIAA, Karnataka. The bottom of the tailing pond shall be made impervious to prevent contamination of ground water. Water quality monitoring outside the tailing pond area shall be monitored and data submitted regularly to the MoEF/CPCB/SPCB.
12. All the conditions stipulated in the Consent for establishment issued by the Karnataka State Pollution Control Board should be effectively implemented.
13. The mining operations shall not intersect ground water table.
14. The project proponent shall ensure that no natural watercourse and / or water resources are obstructed while mining.
15. The topsoil should be stacked at earmarked site only and should not be kept unutilized for a period more than 3 years. The topsoil should be used for reclamation and plantation.
16. Over burden shall be stacked at earmarked site (s) only and should not be kept active for long period. The maximum height of the dump should not exceed 30m having 3 terraces of 10m each. The overall slope of the dump shall not exceed 27°. The overburden dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas use of geo textiles shall be undertaken for stabilization of the dump. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.
17. Compliance status should be submitted to the SEIAA Karnataka, the APCCF, Regional Office MoEF, Bangalore on six monthly basis.
18. Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from mine working, soil, OB and mineral dumps. The water so collected should be utilized for watering the mine area,



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- roads, green belt development etc., the drains should be regularly de-silted particularly after monsoon and maintained properly.
19. Garland drain (size, gradient and length) shall be constructed for mine pit, soil, OB and mineral dumps and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and de-silted at regular intervals.
 20. Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data.
 21. The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board within 3 months and report be submitted to the Authority.
 22. Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new peizometers during the mining operation. The monitoring should be carried out four times in a year. Pre-monsoon (April - May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to the SEIAA Karnataka, the APCCF, Regional office MoEF, Bangalore, Central Ground Water Authority and Regional Director, Central Ground Water Board.
 23. Appropriate mitigation measures should be taken to prevent pollution of nearby water bodies in consultation with the State Pollution Control Board.
 24. The project proponent shall submit commitment from the competent authority for drawl of requisite quantity of water for the project before starting work on the project.
 25. Suitable rainwater harvesting measures on long-term shall be planned and implemented in consultation with Regional Director, Central Ground Water Board for complete rain water harvesting by constructing check dams.
 26. Vehicular emissions should be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles should be covered with a tarpaulin and shall not be overloaded.
 27. Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to SEIAA Karnataka, Department of Environment and Ecology, Govt. of Karnataka and the APCCF, Regional Office MoEF, Bangalore.
 28. This Environmental Clearance does not confer any right to the proponent on the land proposed for mining until and unless mining lease and all other statutory clearance are obtained from the respective department/agencies.
 29. The project authorities should undertake sample survey to generate data on pre-project community health status within a radius of 1 km from proposed mine.



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30. Consent to establish/operate should be obtained from State Pollution Control Board prior to start of production from the mine.
31. Proper sanitary facilities should be installed for the colony/work place. Domestic waste generated should be disposed in a scientific manner. Proper first aid facilities and health care facilities should be provided for the labourers.
32. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. The proponent shall contribute towards the cost of implementation of the plan and / or Regional Wildlife Management Plan for conservation of wild life. The amount so contributed shall be included in the project cost. A copy of the action plan may be submitted to the SEIAA, Department of Environment and Ecology, Govt. of Karnataka and the APCCF, Regional Office, MoEF, Bangalore within 3 months.
33. The project proponent shall delineate Mining Closure Plan/exit protocol to rehabilitate the mined out land to match its surrounding land use including removal, storage and reuse of topsoil from mining area to cover reclaimed area. Post Mining Land Use Plan with rehabilitation of mined out area (with Plan and Section) provided Flora Fauna Conservation Plan and submit to SEIAA.
34. Plantation monitoring programme during post project period for ensuring survival and growth rate of plantation in reclaimed area.
35. A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the SEIAA Karnataka, and the APCCF, Regional Office, MoEF, Bangalore 5 years in advance of final mine closure for approval.
36. Retention walls should be a minimum of 2.5 mtr height with base of 3 mtr.
37. Check dams and gully plugs along the smaller streamlets in the area, should be constructed to arrest the loose soil flow from the mine area.
38. Ground water augmenting measures should be undertaken immediately and detailed report submitted within 3 months time.
39. Slope of the mining bench and ultimate pit limit shall be as per the mining scheme approved by Indian Bureau of Mines.
40. The wastewater from the mine shall be treated to conform to the prescribe standards before discharging in to the natural stream. The discharged water from the Tailing Dam (if any) shall be regularly monitored and report submitted to the SEIAA, Karnataka, Central Pollution Control Board and the Karnataka State Pollution Control Board.
41. The Environmental Clearance is subject to the condition, if any stipulated by the Indian Bureau of Mines on the mining scheme submitted by the project proponent for its approval.
42. Particulars of ore and sub-grade ore production and dispatch till date should be provided by the mine owner and yearly report in future.
43. The link road from mining site to main road shall be maintained and black topped by the project proponent.



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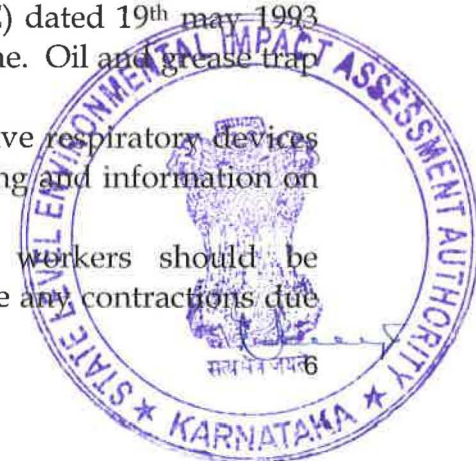
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44. The project authorities shall ensure that all the safety measures are in place while undertaking mining activity especially underground mining.
45. The mining lease area to be properly demarcated using the lat-long coordinates and duly erecting 4 feet concrete/granite pillars on the ground.
46. No mining shall be undertaken outside the mining lease area.
47. The project authorities shall undertake activities under Corporate Environment Responsibility (CER) with a total cost of not less than Rs. 39,00,000/- as committed by letter received on 20th August 2019 for the purpose of taking-up plantation and landscaping at Rama temple, Plantation of Butterfly larval food plants and medicinal plant near rain water harvesting structures proposed in R & R of Ramgad areas, Solar electrification of streets, Schools and temples of Ramgad village and afforestation within five years in accordance with the O.M. F. No.22-65/2017-IA.III dated 1st May 2018 and report be submitted to the Authority.

B. GENERAL CONDITIONS:

1. No change in mining technology and scope of working should be made without prior approval of the SEIAA Karnataka.
2. No change in the calendar plan including excavation, quantum of mineral and waste should be made.
3. Suitable ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for RPM, 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.
4. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the MoEF, Govt. of India, New Delhi .
5. Data on ambient air quality (RPM, SPM, SO₂, NO_x) should be regularly submitted to the SEIAA Karnataka, and the APCCF, Regional Office, MoEF, Bangalore and the State Pollution Control Board / Central Pollution Control Board once in six months.
6. Fugitive dust emission from all the sources should be controlled regularly. Water spray arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
7. Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc should be provided with earplugs / muffs.
8. Waste water from the mine should be properly collected, treated so as 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. Oil and grease trap shall be installed before discharge of effluents.
9. Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
10. Occupational health surveillance program of the workers should be undertaken periodically i.e. once in 3 months to observe any contractions due



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to exposure to dust and take corrective measures, if needed. Quarterly report in this regard should be submitted to the Karnataka State Pollution Control Board and the APCCF, Regional Office, MoEF, Bangalore.

11. A separate environmental management cell with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Head of the organization. The Environment management committee should be constituted with one of the member representing nearby village.
12. The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the SEIAA Karnataka, the Department of Environment and Ecology, Govt. of Karnataka and the APCCF, Regional Office, MoEF, Bangalore.
13. The APCCF, Regional Office of MoEF, Bangalore; the Karnataka State Pollution Control Board shall monitor compliance of the stipulated conditions. The project authorities should extend full co-operation to the Officer (S) of these offices by furnishing the requisite data / information / monitoring reports.
14. The project proponent shall submit six monthly report on the status of the implementation of the stipulated environmental safeguards to the SEIAA Karnataka, and the APCCF, Regional Office, MoEF, Bangalore; the Central Pollution Control Board and the Karnataka State Pollution Control Board.
15. A copy of the clearance letter will be marked to the concerned Panchayat. Local NGO, if any, from whom suggestion / representation has been received while processing the proposal.
16. The Karnataka State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's office for 30 days.
17. The project authorities should 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 <http://environmentclearance.nic.in> website of the MoEF&CC and <http://seiaa.karnataka.gov.in> and a copy to the APCCF, Regional Office, MoEF, Bangalore.
18. 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 Environmental (Protection) Act, 1986.
19. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
20. The SEIAA or any other competent authority may alter / modify the above conditions or stipulate any further condition in the interest of environment protection.



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21. The project authorities should inform the SEIAA Karnataka, Department of Environment and Ecology, Govt. of Karnataka and the APCCF, Regional Office, MoEF, Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
22. The project proponent should display the conditions prominently at the entrance of the project on a big panel board for the information of the public.
23. 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.
24. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under.



Yours faithfully,


(VIJAYKUMAR GOGI)
Member Secretary
SEIAA, Karnataka.

Copy to:

1. The Secretary, Ministry of Environment & Forests, Government of India, Paryavaran Bhavan, CGO Complex, Lodi Road, New Delhi - 110 003.
2. The Director, Department of Mines and Geology, Khanija Bhavan, Race course road, Bangalore - 560 001.
3. The Member Secretary, Karnataka State Pollution Control Board, Bangalore.
4. The APCCF, Regional Office, Ministry of Environment & Forests (SZ), Kendriya Sadan, IV Floor, E & F Wings, 17th Main Road, Koramangala II Block, Bangalore - 560 034.
5. Guard File.