

F. No. J-11015/208/2014-IA.II (M)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhavan,
Aliganj, Jor Bagh Road
New Delhi-110 003

Dated: 26th May, 2016

To,

M/s Rashtriya Ispat Nigam Limited (RINL)
Visakhapatnam Steel Plant,
4th Floor, 4th Tower, NBCC Plaza Sector 5,
Pushp Vihar, New Delhi 110017

Tel. No. 011 – 29564206, Fax No. 011-29563514
Email: unit_delhi@rediffmail.com

Sub.: Banera Iron Ore Mine with proposed production capacity of 39,393 TPA (ROM) by M/s Rashtriya Ispat Nigam Limited (RINL), located at village-Baran, Sultangarh, Banera, Nanodia, Kajlodia, Kishanpuriya & Lapia, Tehsil-Banera, District-Bhilwara, Rajasthan (MLA: 945.8575ha)-Environmental Clearance Regarding.

Reference: Online Proposal no. IA/RJ/MIN/25061/2014.

Sir,

This has reference to the above mentioned EC proposal for opening of new mine with proposed production capacity of 39,393 TPA (ROM) of iron ore mining in the MLA of 945.8575ha. The mine lease area is located at Village-Baran, Sultangarh, Banera, Nanodia, Kajlodia, Kishanpuriya & Lapia, Tehsil-Banera, District-Bhilwara, Rajasthan. The proposed ML area falls under Survey of India Toposheet Nos. 45 K/11 & 45 K/10 and bounded between 25°28'20.3982" N to 25°31'33.2292" N Latitude and 74° 37' 34.6188" E to 74° 41' 22.9812" E Longitude.

2. The proposal of TOR was considered by the Reconstituted Expert Appraisal Committee in its 22nd meeting held during August 26-27, 2014 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TOR was issued by MoEFCC, vide letter of even no. dated 23.09.2014. The Proponent submitted the EIA/EMP Report online to Ministry for seeking Environmental Clearance after conducting Public Hearing. The Project Proponent has submitted the proposal for opening of new mine @ 2 million TPA (ROM) along with Crushing & Beneficiation @ 2 million TPA and Palletization Plant @ 0.6 Million TPA in the MLA of 945.8575ha. The proposal of EC was considered by the EAC in its meeting held during April 25-26, 2016 wherein the Committee noted that since the Mining Plan is approved for 39,393 TPA (ROM) by IBM and not for 2.0 Million TPA (ROM) and accordingly the EAC may only considered the proposal for mining of Iron Ore with proposed production capacity of 39,393 TPA (ROM). The Committee deliberated

and recommended the Proposal for Environmental Clearance for Mining of Iron Ore with proposed production capacity of 39,393 TPA (ROM).

3. The Mines and Geology Department, State Govt. of Rajasthan, vide letter dated 31.05.2013 has issued Letter of Intent for mining of Iron Ore in favour of M/s RINL for an area of 945.8575 ha. The Mining Plan along with Progressive Mine Closure Plan has been approved by IBM Ajmer vide letter dated 03.11.2015. The approximate total mineable reserve is 39,393 tonnes under UNFC 122 category and remaining resources of 8,36,947 tonnes under UNFC 334 category respectively. Apart from the above, around 303.0473 Million tonnes of un-classified resources have also been established by RINL through geo-physical method of exploration. However, for the initial 5 years of the plan period w.e.f. date of execution of ML, the production capacity of the mine will be limited to 39,393 TPA (ROM). This ROM quantity will be excavated and stacked in front of the proposed crushing plant. The Committee deliberated the issues w.r.t. Mining Plan and is of the view that since the Mining Plan is approved for 39,393 TPA (ROM) by IBM and not for 2.0 Million TPA (ROM) and according the EAC may only considered the proposal for mining of Iron Ore with proposed production capacity of 39,393 TPA (ROM).

4. Total mine lease area 945.8575ha with proposed production capacity of 39,393 TPA (ROM). Out of which 452.4335ha is for Agricultural land, 229.6821ha is for Waste land, 132.7365ha is for Grazing land, 26.5322ha is for Settlements and 104.4732ha is for Others (Water reservoir etc.). Method of mining is open cast mechanized. Conventional shovel dumper combination of opencast mining will be deployed. The wastes generated in the form of overburden, inter-burden, coarse tails will be disposed of as external dumps within the ML area. Multilevel crushing, screening, grinding and magnetic separation will be carried out to produce the concentrate from the ROM ore. The make-up water for the project comes to around 320 m³/hr or 7.6 MLD. The sewerage water from Bhilwara town will be the source of water for Industrial use. An 8 MLD STP will be set up near the Bhilwara town for the above purpose and the treated water will be brought to the Mining Lease (ML) area through pipeline. However, the potable water requirement at mine site is only 25 KLD. The Project Proponent vide letter dated 21.02.2014 has requested the Commissioner Municipality of Bhilwara to reserve the available sewage of 8 MLD for treatment and uses.

5. Project Proponent reported that there is no National Parks, Wildlife Sanctuaries, Tiger Reserves falls within the study area (10 km radius of the mine boundary). The State Govt. of Rajasthan, vide letter dated 30.04.2015 has confirmed that mine lease area does not fall under Aravali Hills. There is one Schedules-I species namely Peafowl reported in the buffer zone. Accordingly, the conservation plan has been prepared and the Chief Wildlife Warden, Jaipur has forwarded the authenticated Map and Conservation Plan for Schedule-I species. The Proponent has proposed a sum of about Rs. 18.5 Lakhs for conservation of Schedule -I species. The DFO Bhilwara vide letter dated 17.10.2014 has confirmed the lease area does not involved the forest land and there is no Wildlife Sanctuary in the applied area. The NOC from the Gram Panchayat has been obtained by the project proponent for mining in Grazing land.

6. The baseline data was generated for the period during winter season i.e. December 2014 to February 2015. The Committee deliberated the baseline data collected by the Project Proponent. Project Proponent reported that the project

involves R&R and compensation details for 323 households have been submitted in R&R plan. The total R&R cost will be about Rs. 38.12 Crores. Basic amenities will be provided in the resettlement site like electricity, road, drinking water, schools, health care facilities and other public utilities. The Committee deliberated the issues on R&R and is of the view that the Project Proponent shall constitute a Committee to monitor the R&R related issues for implementation and shall submit the report to Regional Office of the MoEFCC six monthly.

7. The Public Hearing for the proposed project was conducted on 05.11.2015 at 11:00 AM at Panchayat Samiti Karyalay, Banera, Tehsil – Banera, District - Bhilwara. The Public Hearing was presided over by Shri Anandi Lal Vaishnav, ADM (City) Bhilwara. The representatives from the Rajasthan State Pollution Control Board were also present. The issues raised during the Public Hearing, commitment made by the project proponent and action plan with budgetary provisions has been discussed during the meeting. Project proponent has made the action plan along with budgetary provisions. The Committee deliberated and is of the view that project proponent needs to implement the Action Plan and the implementation report has to be submitted to the regional office if the MoEF & CC every six month.

8. The capital cost estimated of the proposed mines/ beneficiation/ pallet plant complex as Rs. 749.32 Crores. The Project Proponent has earmarked Rs. 2.9 Crores towards EMP as a capital cost and Rs. 90.0 lakhs per annum as a recurring cost. The Project Proponent has earmarked Rs. 30.0 lakhs per annum towards Socio-Economic Welfare measures for the nearby villages; Rs. 3812 lakhs towards R&R cost; and Rs. 12500 lakhs towards mine closure plan. The Project Proponent reported that there is no court case / litigation is pending against the project.

9. The Ministry of Environment, Forest and Climate Change has examined the proposal in accordance with the Environmental Impact Assessment Notification, 2006 and further amendments thereto and hereby accords the environmental clearance under the provisions thereof to the above mentioned proposal of **M/s Rashtriya Ispat Nigam Limited (RINL) for Banera Iron Ore Mine with proposed production capacity of 39,393 TPA (ROM) of Iron Ore in the mine lease area of 945.8575ha, located at village-Baran, Sultangarh, Banera, Nanodia, Kajlodia, Kishanpuriya & Lapia, Tehsil-Banera, District-Bhilwara, Rajasthan** subject to compliance of the followings terms and conditions and environmental safeguards mentioned below:-

A. Specific conditions

- (i) Environmental clearance is granted subject to final outcome of **Hon'ble Supreme Court of India, Hon'ble High Court of Rajasthan, Hon'ble NGT** and any other Court of Law, if any, as may be applicable to this project.
- (ii) **This Environmental Clearance is subject to obtaining requisite NBWL Clearance from the Standing Committee of National Board for Wildlife, if any, applicable for this Mining project.**
- (iii) No mining activities will be allowed in forest area, if any, for which the Forest Clearance is not available.

- (iv) The Project Proponent shall obtain Consent to Operate from the State Pollution Control Board, Rajasthan and effectively implement all the conditions stipulated therein.
- (v) Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- (vi) Project Proponent shall carry out vibration studies well before approaching any such habitats or other buildings to evaluate the zone of influence and impact of blasting on the neighborhood. Within 500 meters of such sites vulnerable to blasting vibrations, avoidance of use of explosives and adoption of alternative means of mineral extraction, such as ripper/dozer combination/rock breakers/surface miners etc. should be seriously considered and practiced wherever practicable. A provision for monitoring of each blast should be made so that the impact of blasting on nearby habitation and dwelling units could be ascertained. The covenant of lease deed under Rule 31 of MCR 1960 provides that no mining operations shall be carried out within 50 meters of public works such as public roads and buildings or inhabited sites except with the prior permission from the Competent Authority.
- (vii) Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers. The material transfer points should invariably be provided with Bag filters and or dry fogging system. Belt-conveyors should be fully covered to avoid air borne dust; Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured.
- (viii) The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centres.
- (ix) There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.
- (x) Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical check-up once in six months and necessary medical care/preventive measures undertaken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers should also be adopted.
- (xi) Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall complete all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing.

- (xii) The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, Forest and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry.
- (xiii) The Project Proponent shall make necessary alternative arrangements, where required, in consultation with the State Government to provide alternate areas for livestock grazing, if any. In this context, Project Proponent should implement the directions of the Hon'ble Supreme Court with regard to acquiring grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded against felling, lest the cattle abandon the grazing ground or return home by noon.
- (xiv) The Proponent shall install online Ambient Air Quality Monitoring System and there should be system for display of digital AAQ data at least at three locations as per wind direction. Online provisions of pH and turbidity meters at discharge points of STP and ETP and also at water storage ponds in the mining area may be made. Project Proponent should display the result digitally in front of the main Gate of the mine site.
- (xv) The Project Proponent has to take care of gullies formed on slopes. Dump mass should be consolidated with proper filling/leveling with the help of dozer/compactors. The report on slope and stability monitoring should be sent to MoEFCC and its Regional office every six-months.
- (xvi) The reclamation at waste dump sites shall be ecologically sustainable. Scientific reclamation has been followed. The local species may be encouraged and species are so chosen that the slope, bottom of the dumps and top of the dumps are able to sustain these species. The aspect of the dump is also a factor which regulates some climatic parameters and allows only species adopted to that micro climate. This may be recommended to be studied by hiring Expert Ecology Group.
- (xvii) As per the Company Act, the CSR cost should be 2 % of average net profit of last three years. Hence CSR expenses should be as per the Company Act/Rule for the Socio Economic Development of the neighborhood Habitats which could be planned and executed by the Project Proponent more systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. The report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office located at Lucknow on six monthly basis.
- (xviii) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forest and Climate Change 5 years in advance of final mine closure for approval.

B. General conditions

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment, Forest and Climate Change.

- (ii) No change in the calendar plan including excavation, quantum of iron ore mineral and waste should be made.
- (iii) Mining shall be carried out as per the provisions outlined in mining plan approved by Indian Bureau of Mines (IBM) as well as by abiding to the guidelines of Directorate General Mines Safety (DGMS).
- (iv) The lands which are not owned by Proponent, mining will be carried out only after obtaining the consents from all the concerned land owners as per the provisions of the Mineral Concession Rules, 1960 and MMDR Act, 1957.
- (v) The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8m and width 20 m and overall slope of the dumps shall be maintained to 45°. The OB 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. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office located at Lucknow on six monthly basis.
- (vi) Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. The drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dumps to prevent run off of water and flow of sediments directly into the river and other water bodies 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 shall be constructed at the corners of the garland drains and desilted at regular intervals.
- (vii) Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM₁₀ and PM_{2.5} such as haul road, loading and unloading point and transfer points. Fugitive dust emissions from all the sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. Monitoring of Ambient Air Quality to be carried out based on the Notification, as amended from time to time by the Central Pollution Control Board.

- (viii) Vehicular emissions shall 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 limestone will be transported by covered conveyor belt to the cement plant which shall be set up based on this deposit. The vehicles carrying the mineral shall not be overloaded.
- (ix) Regular monitoring of ground water table to be carried out at the upstream and depth of water available in the dug well is to be measured. Monitoring to be done by establishing a network of existing wells and constructing new piezometers. The project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations.
- (x) Plantation shall be raised in a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.
- (xi) Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain.
- (xii) Regular monitoring of water quality upstream and downstream of water bodies shall be carried out and record of monitoring data should be maintained and submitted to the Ministry of Environment, Forest and Climate Change and Climate Change, its Regional Office, Lucknow, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.
- (xiii) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease 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 pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Lucknow, Central Ground Water Authority and Regional Director, Central Ground Water Board.
- (xiv) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, 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. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office, Lucknow.
- (xv) Provision shall be made for the housing of construction labour 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.

- (xvi) The critical parameters as per the Notification 2009 such as PM₁₀, PM_{2.5}, NO_x, and SO_x in the ambient air within the impact zone, peak particle velocity at 300m 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))]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.
- (xvii) 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 ear plugs / muffs.
- (xviii) Industrial waste water (workshop and 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 should be installed before discharge of workshop effluents.
- (xix) 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.
- (xx) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- (xxi) 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 Ministry and its Regional Office located at Lucknow.
- (xxii) The project authorities should inform to the Regional Office located at Lucknow regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xxiii) The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest and Climate Change, its Regional Office, Lucknow, Central Pollution Control Board and State Pollution Control Board.
- (xxiv) The Regional Office of this Ministry located at Lucknow shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- (xxv) A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.

(xxvi) 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.

(xxvii) 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 web site of the Ministry of Environment, Forest and Climate Change at <http://envfor.nic.in> and a copy of the same should be forwarded to the Regional Office of this Ministry located Lucknow.

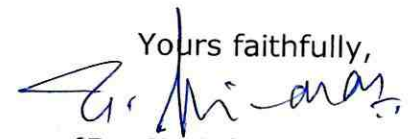
10. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

11. 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.

12. 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 and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Rajasthan and any other Court of Law relating to the subject matter.

13. 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.

Yours faithfully,



(Dr. U. Sridharan)

Director (S)

Tele-fax: 011-24695304

Copy to:-

- 1). **The Secretary**, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi
- 2). **The Secretary**, Department of Mines & Geology, Government of Rajasthan, Secretariat, Jaipur
- 3). **The Secretary**, Department of Environment, Government of Rajasthan, Secretariat, Jaipur
- 4). **The Secretary**, Department of Forest, Government of Rajasthan, Secretariat, Jaipur
- 5). **The Secretary**, Irrigation Department of Government of Rajasthan, Secretariat, Jaipur
- 6). **The Chief Wildlife Warden** of the State Govt. of Rajasthan, Jaipur
- 7). **The Additional Principal Chief Conservator of Forests**, Ministry of

Environment, Forest & Climate Change, Regional Office (CZ), Kendriya Bhawan, 5th Floor, Sector "H", Aliganj, Lucknow-226020.

- 8). **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- 9). **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 10). **The Chairman**, Rajasthan State Pollution Control Board, 4, Institutional area, Jhalana, Doongri, Jaipur.
- 11). **The Member Secretary**, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 12). **The Director**, Department of Irrigation, Government of Rajasthan, Jaipur.
- 13). **The District Collector**, District- **Bhilwara**, Rajasthan.
- 14). **Guard File.**
- 15). **MoEFCC website**


(Dr. U. Sridharan)
Director (S)