



Speed Post/Online

No. J-11015/380/2008-IA.II (M)

Government of India

Ministry of Environment, Forest and Climate Change

Impact Assessment Division

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

Dated: 26th July, 2018

To,

M/s Hindustan Zinc Limited

Sindesar Khurd Mine

P.O. Dariba, Tehsil-Relmagra

District- Rajsamand

Rajasthan - 313 211

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Sub.: Expansion of Lead-Zinc Ore Production from 0.9 Million TPA to 1.08 Million TPA at Rajpura - Dariba Mine by M/s Hindustan Zinc Limited in mine lease area of 1142.2106 Ha, located at Village Panchayat-Mahenduria, Tehsil - Relmagra, District - Rajsamand, Rajasthan under clause 7(ii) of the EIA Notification, 2006-Environmental Clearance regarding.

Reference: File No. J-11015/380/2008-IA.II (M) dated 4th November, 2009.

Sir,

This has reference to above mentioned proposal of M/s Hindustan Zinc Limited for expansion of Lead-Zinc Ore Production Rajpura Dariba underground mine with enhancement of production capacity from 0.9 Million TPA to 1.08 million TPA (ROM) of Lead-Zinc ore i.e. 20% of the existing capacity. The mine lease is located near village Panchayat- Mahenduria, Tehsil – Relmagra, Dist - Rajsamand, Rajasthan. The latitudes and longitudes of the mine lease are 24°55'40.8"N to 24°57'49.0"N and 74°06'57.7"E to 74°08'41.4"E respectively. The lease area falls on Survey of India topo sheet no. 45 L/1 and 45 K/4. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

2. The Project Proponent had obtained earlier EC vide letter no J-11011/380/2008-IA.II(I) dated 4th November, 2009 for Zinc smelter(5,00,000TPA), Lead Smelter (1,25,00TPA), Captive power plant (255MW) and expansion of Rajpura Dariba Mine (6,31,000TPA) along with Beneficiation Plant (9,00,000 to 12,00,000 TPA) at village – Dariba, Tehsil-Relmagra, District- Rajsamand, Rajasthan.

3. The Project Proponent had submitted EIA/EMP report online to the Ministry seeking expansion in production capacity under clause 7 (ii) of EIA notification, 2006. The Proposal was considered by the Expert Appraisal Committee for expansion of earlier EC capacity of 0.9 Million TPA of Lead-Zinc ore production granted vide letter no. J-11011/380/2008-IA-II(I) dated 4.11.2009 to 1.08 Million TPA in the instant meeting. The Committee observed that the clause 7 (ii) of EIA Notification, 2006 states as below:-

"7(ii).Prior Environmental Clearance (EC) process for Expansion or Modernization or Change of product mix in existing projects:

All applications seeking prior environmental clearance for expansion with increase in the production capacity beyond the capacity for which prior environmental clearance has been granted under this notification or with increase in either lease area or production capacity in the case of mining projects or for the modernization of an existing unit with increase in the total production capacity beyond the threshold limit prescribed in the Schedule to this notification through change in process and or technology or involving a change in the product –mix shall be made in Form I and they shall be considered by the concerned Expert Appraisal Committee or State Level Expert Appraisal Committee within sixty days, who will decide on the due diligence necessary including preparation of EIA and public consultations and the application shall be appraised accordingly for grant of environmental clearance".

4. The project was considered in Expert Appraisal Committee (EAC) meeting held during October 23, 2007 wherein the Committee recommended the proposal for grant of Environmental Clearance for enhancement of production from 0.9 Million TPA to 1.08 Million TPA (ROM) of Lead –Zinc Ore with exemption from public hearing under clause 7(ii) of EIA notification,2006 subject to submission of undertaking to the effect that it shall inform the Ministry once demand is raised by State Government and adhere to the orders of the State Government, directions of the Hon'ble Supreme Court or any other court of law/ Tribunal. The PP was also advised to submit authenticated past production details and a statement of Consent & EC obtained since start of mining operations. Accordingly, the Ministry vide letter of even no. dated 09.11.2017 requested the project proponent to submit the requisite information.

5. It is mentioned that as per the Hon'ble Supreme Court, judgment dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India & Ors., has passed a detailed order interpreting Section 21(5) of the MMDR Act and directing payment of 100% penalty for illegal mining operations with reference to the relevant statutes, which inter-alia, include the Environment (Protection) Act 1986, the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Forest (Conservation Act, 1980 and the Mines and Minerals (Development & Regulation) Act, 1957. Based on the production details provided by the PP, it is observed that they had enhanced the production from 2002-2003 to 2007-2008 as per the above mentioned judgement. As per the Apex Court Order dated 2nd August 2017, the base year to decide the annual production capacity is 1993-94, it would be treated as expansion and it require prior EC at the time of expansion.

5. Further, the Ministry has issued the Office Memorandum no. 3-50/2017-IA.III(Pt) dated 30th May, 2018 for consideration of mining proposals involving violation of the EIA Notification, 2006 under the provision of S.O.804 (E) dated 14.03.2017 and additionally comply with the directions given by the Hon'ble Supreme Court, Judgment dated 2nd August, 2017 and it has been decided that the Project Proponent shall give an undertaking by way of affidavit to comply with all the statutory requirements by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017. The matter has been examined in the Ministry and it has been decided that since PP has not enhanced the production capacity after grant of EC in 2009 but PP has enhanced the production capacity before grant of EC and attracting the compliance of the Hon'ble Supreme Court Order dated 2nd August 2017. Accordingly, the PP, vide letter no. UH(RDM)/ENV/2018, dated 12.06.2018 has submitted the affidavit dated 12.06.2018 in compliance of Ministry's OM dated 30.05.2018 which *inter-alia* mentioned that all the statutory requirement shall be comply w.r.t. judgment of Hon'ble

Supreme Court dated 2nd August, 2017 in WP(C) No. 114 of 2014 in the matter of Common Cause Vs Union of India & Ors.

6. The PP explained that this expansion under 7(ii) has been considered in many cases in the EAC (Industry). It also cited reference to the OM with regard to 25% expansion for Coal Mining Projects, past projects of M/s Uranium Corporation India Limited and M/s NALCO which were given approval for expansion without EIA/EMP studies and Public hearing. Further, the PP stated that the EAC (Non-Coal) in October, 2016 had considered and recommended similar expansion proposal for its Sindesar-Khurd Lead-Zinc mines for 20% increase in lead-zinc ore production from 3.75 Million TPA to 4.5 Million TPA. The Ministry issued EC to the expansion proposal vide letter no. J-11015/10/2014-IA-II(M) dated 21.12.2016

7. The PP submitted that to achieve enhanced production of 1.08 Million TPA it has carried out changes in the mining operations with respect to infrastructure/ technology improvement or modernization and explained the impact of these changes to the Committee (comprising of mining experts) which will eventually help it in achieving enhanced production:

S.No.	Description	Benefits
1.	Introduction of road grader	Road graders are being introduced to improve road conditions
2.	Mechanization in diesel & explosive transportation	Mechanization is being planned in transportation of diesel dispensing & explosive transportation thereby improving safety, productivity and ergonomics.
3.	Leaky feeder communication system	Communication system is being introduced for communication for any breakdown, emergency or unplanned activities in the mine
4.	Top hammer drills	Top hammer drills are being introduced in underground so as to improve production drilling in lower levels of the mine and thereby reducing the dependency over compressed air. Improved productivities and ergonomics shall also count towards improved safety.
5.	Long feed jumbos	In order to improve development rates, it is proposed to introduce long 16 feed jumbo thereby improving advance per blast.
6.	Bulk emulsion charging system	In order to improve development rates and mechanizing charging, bulk emulsion charging system shall be introduced. Charmec shall also be introduced for the same.
7.	Mud pump	In order to strengthen mud handling system from existing manual to mechanized.
8.	Underground workshop	A world class underground workshop is to be introduced to improve the maintenance facility.
9.	Rock breaker & grizzly	In line with trackless mining, a rock breaker & grizzly are being proposed to be installed so as improve crusher performance.
10.	High speed exploration rigs	In order to enhance exploration capacity, it is proposed to introduce high capacity exploratory drill rig of smaller dimension.
11.	Raise boring	Raises are being developed with raise bores to fasted the raising and thereby improving the ventilation.
12.	Advanced Mine Planning techniques	Technical cell is being strengthened to design in advanced sophisticated software helping in scientific mining of minerals.
13.	Shotcrete	Shotcreting facility is under development so as to

S.No.	Description	Benefits
		improve development rates in poor ground conditions.
14.	Light motor vehicles for underground	For effective supervision, LMVs (Light Motor Vehicles) are proposed to be introduced.

8. The PP reported that the project is a fully mechanised underground Lead-Zinc mine and mined out with Blast hole Stopping method with back filling. The mine workings are approached by two shafts viz. Main shaft (surface to -110MRL) & Auxiliary shaft (Surface to 0MRL) and by a surface decline (surface to 200MRL). At present the Main shaft connects all the working levels from surface to -92MRL. The Main Shaft bottom is at -110MRL. The auxiliary shaft connects all the working levels from surface to 0MRL. Underground levels are also connected by ramps. In future, the deeper levels are proposed to be accessed by ramps. The Main Shaft is utilized for men & material hoisting by cage winding and for ore hoisting by skip winding. Auxiliary Shaft is utilized for men & material hoisting via cage only. A separate access (Surface Decline) is also developed for transportation of man, material, machinery, ore & waste. The cross section of surface decline is 4.7m (w) × 3.7m (h) suitable for hauling 30 ton capacity LPDPT. The additional water requirement of 7 KLD for the project is for drinking purpose only which would be sourced from Matrikundiya dam. The plant is reportedly running on 100% recycling basis for the last two years

9. PP submitted that in view of the above technological improvements, supplemented with construction of decline for movement of mining machinery, ore & waste and personnel, it is feasible to extract 1.08 Million TPA of lead-zinc ore without significant impact on baseline environmental scenario. The EIA studies for the instant proposal have also reportedly been carried out and data was collected for March – May, 2017 period wherein the impacts and mitigation measures with respect to the existing expansion proposal have been enumerated. All the parameters for water and soil quality were within permissible limits. The ambient air quality was also within permissible limits as this was underground mine and there were no significant emission sources near the site. The Committee deliberated the baseline data collected by the Project Proponent. The Committee noted that the PP is already carrying out its activity in the said mine lease area of 1142.2106 Ha and bound to implement the EMP as per the terms and conditions of EC granted by the Ministry and Consent conditions prescribed by the State Pollution Control Board. The mine lease core and buffer zone reportedly does not have any protected areas such as National Parks or Wildlife Sanctuaries, Reserve and/ or Protected forest. The additional waste generation due to development activities is envisaged to be 4,80,000 TPA from existing 35,000 TPA. The Committee noted that there would be significant increase in waste generation; however, the PP informed that the waste is proposed to be disposed off in underground voids through filling method. PP also informed that while filling back the waste into the voids, it has successfully achieved high consistency leading to low moisture content and ultimately less water consumption for waste management.

10. The Regional Office of the Ministry located at the Lucknow has submitted the certified compliance report vide dated 08.09.2017. The Committee deliberated on the compliance of earlier EC conditions. The Proponent explained the status of various conditions. The Committee noted the submissions made PP status and observed that PP has complied with the EC conditions. PP submitted that it possesses/ has applied for required permissions and clearances as mentioned below:

- a) **M.L. validity** – The mine lease is valid till 29th May 2030.
- b) **Approved mining plan** – The Scheme of Mining with progressive mine closure plan has been approved for 1.2 Million TPA of ore production vide letter no. 682(23) (773)/ 2011-kha nikha san. (Uttar)Udai dated 22.07.2015 under rule 12(3) and rule 23B of MCDR, 1988.

- c) **Environmental Clearance**– The EC was granted by MoEF, New Delhi for 0.9 Million TPA of lead-zinc ore production from Rajpura Dariba underground mine & 1.2 Million TPA of ore beneficiation vide letter no. J-11011/380/2008-IA II(I) dated 4.11.2009.
- d) **Consent to Operate** – The Consent to Operate was granted by Rajasthan State Pollution Control Board (RSPCB), Jaipur for carrying Mining & Beneficiation activities vide letter no. F (Mines)/ Rajsamand (Railmagra)/ 1(1)/2008- 2009/278-282 dated 23.04.2015 and the same is valid till 28.02.2018.
- e) **Permission from CGWA** – The NOC from CGWA for mine dewatering (446.50 KLD) was been obtained vide letter no. 21-4(315)/WR/CGWA/2008-212 dated 14.07.2009 and renewed vide letter dated 06.06.2012. Application for renewal for the same was submitted vide letter dated 27.05.2015. The application for obtaining NOC from CGWA for additional ground water dewatering (2698.5 KLD) has been submitted on dated 27.01.2017.

11. PP reported that the beneficiation plant is within the mining lease, hence, there shall be no external traffic associated with ore transportation to the smelter. However, concentrate will be transported through road and then to Fatehnagar. The concentrate will be transported through covered trucks/dumpers. The topography of the area is marked by N-S trending linear ridge with highest elevation of 561 aMSL. This ridge is flanked on either side by gently undulating surface having an average elevation between 490-500aMSL. Main shaft is at 501 aMSL. The area within leasehold does not include any major streams or river across it, hence not prone to any kind of flood. The existing depth of working is 700m and the proposed additional working depth is 800m making total depth of working as 1500m. The Project Proponent reported that there is no Schedule -I species in the core and buffer zone of the M.L.area.

12. The PP mentioned that it has made provision for Personal Protective equipment's to mine workers with necessary training and awareness programs. The Occupational Health measures were also explained and the Committee noted that proponent has monitored lead in blood. The Project Proponent reported that the workers were provided Self Rescuer in addition to basic PPEs like gum boot, helmet with cap lamp, dust mask, goggles, ear plug etc. Refuge chamber is installed at strategic locations to work as assembly points underground to support workers in during emergency in underground mine. The cost of the project is ₹700 Crores including additional cost of ₹400 Crores for instant proposal. The cost for Environmental Protection measures is proposed as ₹40 Crores including additional cost of ₹26 Crores for instant proposal. PP submitted that no R&R Plan is applicable for the instant proposal. The additional manpower requirement for the project is about 150. Project Proponent reported that there is no court case pending against the project.

13. The proposal was appraised before the EAC in its meeting held during October 24-25, 2016 wherein the Committee **recommended** the proposal for Expansion of Lead-Zinc Ore Production from 0.9 Million TPA to 1.08 Million TPA at Rajpura – Dariba Mine by M/s Hindustan Zinc Limited in mine lease area of 1142.2106 Ha, located at Village Panchayat – Mahenduria, Tehsil – Relmagra, District – Rajsamand, Rajasthan under clause 7(ii) of the EIA Notification, 2006.

14. The Ministry of Environment, Forest and Climate Change has examined the proposal in accordance with the provision of clause 7 (ii) of Environmental Impact Assessment Notification, 2006 and hereby amended the Environmental Clearance no. dated 4th November 2009 of M/s Hindustan Zinc Limited w.r.t. "Expansion of Lead-Zinc Ore Production from 0.9 Million TPA to 1.08 Million TPA at Rajpura – Dariba Mine in mine lease area of 1142.2106 Ha, located at Village Panchayat – Mahenduria, Tehsil – Relmagra, District – Rajsamand, Rajasthan under clause 7(ii) of the EIA Notification, 2006". **PP shall also comply the following conditions.**

- (i) **This Environmental Clearance will not be operational till such time the Project proponent complies with all the statutory requirements and Judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors, if any, applicable to this project.**
- (ii) **The Department of Mines and Geology, Government of Rajasthan shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.**

15. All other Specific and General conditions mentioned in this Ministry's EC letter no.J-11015/380/2008-IA. II (M) dated 04.11.2009 shall remain the same.

16. This issues with the approval of the Competent Authority.

Yours faithfully,


(Dr. R. B. Lal)
Scientist "E"

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 Addl. Principal Chief Conservator of Forests**, Ministry of Environment, Forest and Climate Change, Kendriya Bhawan, 5th Floor, Sector "H", Aliganj, Lucknow-226020.
- 5). **The Chief Wild Life Warden**, Government of Rajasthan, Secretariat, Jaipur
- 6). **The Member Secretary**, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 7). **The Chairman**, Rajasthan State Pollution Control Board, 4, Institutional area, Jhalana, Doongri, Jaipur.
- 8). **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur - 440 001.
- 9). **The District Collector**, District- **Rajsamand**, State of Rajasthan.
- 10). **Guard File.**
- 11). **MoEFCC website.**


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