

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IMPACT ASSESSMENT DIVISION)
NON-COAL MINING SECTOR

SUMMARY RECORD OF 9th MEETING OF THE COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 9th meeting of the Expert Appraisal Committee for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during **September 24-25, 2019**. The list of participants is annexed herewith. After welcoming the Committee Members, discussion on each of the Agenda Items was taken up ad-seriatim.

1.1 Deliberation & Circulation on the Minutes of the 8th EAC Meeting held during August 27-28, 2019:

The Minutes of the 8th Meeting of EAC held during **August 27-28, 2019**, were circulated to the members of the Committee. The Committee made brief deliberations on the proposals placed in the last meeting and approved the same with the following amendments:

(a) Page no.9 & 18 of the Minutes of EAC held during August 27-28, 2019:

Para 11: The phrase "The cluster certificate with regards to other mining leases within a distance of 500m has been obtained from the Office of Assistant Mining Engineer, Mines and Geology Department, Panchkula vide letter no. 336 dated 20.05.2019 as per which there are other three mining leases within 500 meters of this mining lease i.e. Shamtoo – 1 Block/ PKL B-11 (46.50 Ha) and Shamtoo – 2 Block/ PKL B-12 (45.0 HA) and Sukhdarshanpur Block/ PKL B-13 (37.38 Ha)" should be replaced as follows:

"The cluster certificate with regards to other mining leases within a distance of 500m has been obtained from the Office of Assistant Mining Engineer, Mines and Geology Department, Panchkula vide letter no. 336 dated 20.05.2019 as per which there is only one mining lease [Shamtoo – 1 Block/ PKL B-11 (46.50 Ha)] within 500 meters of the Rattewali Block/PKL B 10. But for calculation of impact other mining lease viz. Shamtoo – 2 Block/ PKL B-12 (45.0 HA) and Sukhdarshanpur Block/ PKL B-13 (37.38 Ha) were also considered."

Para 17: The word Scraper loader should be replaced with Scraper & loader.

DAY 1: September 24, 2019 (Tuesday)

2.1. Mining of 2732 TPA of Manganese Ore from Kawatha Manganese Mine [ML Area 26.67 Ha] located at Village – Kawatha, Tehsil Saoner, District- Nagpur Maharashtra by M/s. Rachana A Belorkar-EC Regarding

Proposal No IA/MH/MIN/95635/2016; File No J-11015/227/2016-IA.II (M); Consultant: Anacon Labs.

The proposal of M/s. Rachana A Belorkar is for production of Manganese Ore from Kawatha Manganese Mine [ML Area 26.67 Ha] located at Village – Kawatha, Tehsil Saoner, District- Nagpur Maharashtra. The mine lease area falls in the Survey of India Topo-Sheet No. 55K/15. The latitudes and longitudes of the Mine lease fall between Latitudes 21° 29' 57.810" N to 21° 29' 32.541" N & Longitudes 78° 53' 39.245" E to 78° 54' 5.703" E.

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category –B1, Project as the mining lease area is less than 100 Ha. Further, as per EIA notification, 2006, "Any project or activity specified in Category 'B' is treated as Category 'A', if located in whole or in part within 5 km from the boundary of (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". In the instant case the mine lease area is located at 0.5 km distance from Madhya Pradesh - Maharashtra Interstate Boundary and thus the project was considered as Category 'A' project in the Ministry.
3. The Project Proponent applied online on 04.11.2016 vide proposal no IA/MH/MIN/60128/2016 for prescribing Term of Reference (ToR) and submitted Form-1 and Pre-Feasibility report. The proposal was considered in EAC meeting held on 15-16 December, 2016, 20-21 February, 2017 and EAC in its meeting held on 23-24 October, 2017 recommended the proposal for prescribing Term of Reference (ToR). The ToR letter was issued on 09.11.2017. The Project Proponent applied vide proposal No. IA/MH/MIN/95635/2016 for grant of EC online on

19.02.2019 and submitted the EIA Report after conducting the Public Hearing. As the documents were not complete in all respect EDS was raised on 11.04.2019 & 9.05.2019. The PP submitted the information on 16.04.2019 & 9.08.2019 and the proposal is now placed in EAC Meeting held on 24-25 September, 2018, wherein, the PP submitted the following.

4. The proponent mentioned that the prospecting license for Manganese over an area of 26.67 Ha was granted to applicant on 22-09-2008 for a period of 2 years. The said prospecting license was executed with the collector, Nagpur on behalf of the Govt. of Maharashtra on 15th January 2009 with validity up to 14th January 2011. The Letter of Intent (LOI) was granted vide letter no MMN-0915/CN99/industry-9 dated 18.01.2016 against Mining lease application dated 20th Jan 2011, from Gov. of Maharashtra. The mining lease over an area of 26.67 ha for extraction of manganese ore was executed on 16.05.2017 and is valid till 15.05.2067

5. The PP submitted that Mining Plan and Progressive Mine Closure Plan of proposed mining lease area is approved by Indian Bureau of Mines, Nagpur vide letter no. NGP/MN/MPW-1173/NGP-2016 dated 3.08.2016. The mineable reserve under Proved category is calculated to be about 6400 tonne and production of Ore will be 2732 TPA (Detailed exploration is proposed in Mine lease area to enhance the Reserve quantity). The current Mining Plan is only for 5 years handling only 1.5 Ha area out of total mining lease area of 26.67 Ha. Detailed exploration will be done in remaining unbroken area. The mined out area will be backfilled and plantation will be carried out on reclaimed area after winning all possible minerals. Life of mine on the basis of proved reserve and proposed production capacity of Manganese mineral is 5 years @2732 TPA. PP submitted that this is a new area for grant of mining lease and though the area had been prospected by trial pits, trenches and drilling but detailed prospecting operations are required for assessment of reserves and future planning. It is to drill 7 bore holes at 100 m x 100 m grid to a depth of 30 meters during the period of mine plan for further proving of Mn ore to have clear subsurface geology of deposit/ore body which is inclined.

6. The PP submitted that the method of mining is manual opencast. The bench height will be 1.5 m and width of the benches is 1.5 M. The proposed working by putting 34 mm dia DTH holes by Drilling short holes for blasting will be having diameter of 34 mm and depth of 1.20 m. The blasting will be carried out by using proper explosives. Controlled and occasional blasting will be carried out and will be procured/purchase from approved explosives vendor. PP submitted that the waste generation in ML area will be mainly in the form of top soil and Waste rock (Rejects). The proposed manganese mine is having on an average 3 meter of OB and will be removed while reclamation. A total of 6,074 cum. of soil and waste material (Soil: 1272 m³ and Waste: 4802 m³) will be generated during the plan period. The dumps will be suitably stabilized by means of proper terracing in the retreating fashion and after attaining the proposed height, plantation would be carried out. The angle of repose of these dumps will not be more than 45°. Garland drain and retaining wall will be constructed during the plan period. Slope stability investigations would be carried out in the conceptual period to avoid land slide and develop the mine accordingly so that there will not be any accidental hazard. Most of the production will be sold and hence there will not be any generation of un-sealable ore. The generation of waste material will be about 80% of total excavation which will be dumped in the non-mineralized part near the working pits. The surrounding area is agricultural land the mining pit would be developed as a reservoir before final closure of mine. During exploitation of Mn ore only physical mineral rejects/fines would be generated to the tune of about 20% of total ROM, which can be considered as a waste material. (ROM by mining of In-Situ ore is 4778 MT for 5 years i.e. 955.6 Tones per year). The mineral waste will be dumped on one side of the area earmarked for ore stacking yard in the non-mineralized area. The waste will be loaded in to tippers by labours and same will be dumped at designated dumping place, the dumps height will be maximum 6 meter, after dumping and stabilization plantation will be done on inactive site of dump. The soil will be temporarily stacked within the mine lease area and will be used for spreading on the safety barrier for plantation.

7. The PP submitted that depth of water level during Summer (pre-monsoon) season is 5-10 mbgl and during Post Monsoon Season is 4-8 mbgl. The total water requirement for project is 15 KLD (8 KLD for dust suppression, 1.0 KLD for Domestic use, 6.0 KLD for plantation). PP submitted that the ultimate pit limit will be 4 m from the lease boundary and The UPL depth will be 352 mRL in the northern ore body and 349 mRL in the southeastern ore body. The pit slope will be maintained at 45°. However, 7.5 m distance (safety zone) from the lease boundary will be maintained.
8. PP submitted that it is proposed to plant 570 saplings in 0.2850 Ha area in green belt during the mining scheme period. During further mining and conceptual plan period, plantation will be carried out on green belt. At conceptual stage of 5 year plan, total plantation area will cover 0.2850 Ha of the mine lease area. Apart from this, plantation will also be carried out on benches of mined out pits and partially backfilled area. Mostly local flora species will be used for plantation in the mine. The mineral waste will be dumped on one side of the area earmarked for ore staking yard in the non-mineralized area. The dumping will be done manually by transporting the mineral waste material from the sorting area through baskets as head loads through the laborers to the dumping site. The height of these dumps shall be maintained not more than 3 meters. The waste material generated will be proposed to be dumped in non-mineralized area near the working pits and height of the dumps shall be maintained about 6 meters in the terracing pattern with spread out to the desired width to form the stable structures so that the erosion of dumps due to rains and storms shall be minimum. Plantation will be done on these terrace and slopes to stabilize these dumps. Moreover, garland drain will be constructed along the boundary of these waste dumps. This will help in minimizing environment pollution and with due course of time these dumps shall develop a blanket of grass. During the mining operations, plantation will be developed around the mine lease area as green belt. Also plantation will be carried out in other areas of proposed ML area. This will form a screen to cover the mine pits and OB/waste dumps. Also, the plantation will help in attenuating noise generated due to the mining and mineral transport activities.

9. PP submitted that the Mining lease area of project is 26.67 Ha which spreads in Kh No. 251, 253, 254, 255, 259, 27, 268, 269, 271, 272 in Kawatha Village, Tehsil Saoner, District Nagpur, Maharashtra. No notified forest area falls within the Mine Lease area. The PP also submitted a letter No Desk-11/Conservator of Forest/C.R./1895/17-18 Nagpur dated 02.08.2017 from Deputy Conservator of Forest wherein it has mentioned that Kh No. 251, 253, 255, 259, 27, 268, 269, 271, and 272 in Kawatha Village, Tehsil Saoner, District Nagpur, Maharashtra is not declared as reserve forest. However Kh No. 254 is measuring 1.0 Ha as per revenue record and status is private land and as per list of zudapi jungle received from revenue department the area is admeasuring 1.31 Ha and statutory status is zudapi jungle. It has also mentioned in the letter that Competent Authority of Revenue Department should take proper decision by verifying at its level, the necessary documents with respect to the difference as regard to statutory status/area of the said land. In the same letter it is mentioned that distance of mining lease from boundary of wildlife sanctuary is 12 KM. The PP also submitted a letter No Reader-I/Tha.Saoner/OD-1371/2017 dated 28.08.2017 issued by Thasildar, Saoner wherein it has mentioned that the agricultural land bearing Survey No 254 admeasuring 1.0 Ha , assessment 1.3, Occupant Class-1, situated and Mauza -Kawatha is private agricultural land.
10. The PP also submitted a letter No Desk-11/Conservator of Forest/633/19-20 Nagpur dated 30.07.2019 from Deputy Conservator of Forest wherein list of flora & fauna and rare, threatened and endangered species is provided. As per the list there are 4 schedule-1 species viz. Indian gazelle, Indian Rock Python, Monitor Lizard, and Indian peafowl. PP also submitted the wildlife conservation plan with a budget of Rs 16 Lakh for 5 years for 2 schedule-1 species viz. Indian gazelle & Indian peafowl. The PP also submitted a letter No Desk-1/5/Land/C.R 35/9-20/397 Nagpur dated 9.07.2019 from Chief Conservator of Forest , Nagpur Forest Range thereby submitting the conservation plan to PCCF(Wildlife).

11. Being a Major Mineral there is no requirement of District Survey Report.
12. The Primary baseline data for specific micro-meteorology data, ambient air quality, waste quality, noise level, soil and flora & fauna has been collected during Post Monsoon season i.e. October to December, 2017. The monitoring results of ambient air, surface water, soil, ambient noise and ground water for the month of October 2017-December 2017 have been reported and no major divergence was observed with respect to concentration values of various parameters of collected samples.
13. The Project Proponent reported that the Maharashtra State Pollution Control Board conducted Public consultation/hearing for the proposed Kawatha Manganese Mine (Production capacity - 2732 TPA and ML Area 26.67 Ha) on 19.10.2018 at 12.00 noon at Grampanchayat office, Kawatha, Tal. Saoner, Dist. Nagpur of Maharashtra State. The advertisement for public hearing was published in "The Hitwada & Maharashtra Times" on 18.09.2018. The Public hearing was conducted under the chairmanship of Shri Ravindra Khajanji, Additional District Collector, Nagpur. The issues raised during public hearing were also deliberated during the meeting which includes Effect on agricultural crop production, Road maintenance, Employment to local people, Ownership of land in Mine Lease area and Ground water depletion. During the public hearing PP submitted that i) Capital cost of Rs. 5 lakh & Recurring cost of Rs. 3.10 lakh is allocated for Air pollution control, ii) Road maintenance is included in budgetary provision of Rs. 1.3 Lakhs per year made under CSR for social welfare activities, and the workers will be paid as per prevailing minimum wages act or as per demand supply whichever is higher.
14. PP submitted that budget earmarked under Corporate Environmental Responsibility (CER) is Rs 6.1 Lakhs which includes i) Rs 1.4 Lakh for Rainwater Harvesting in School, ii) Rs 1.3 Lakh for Solar Power System in School, iii) 0.8 Lakh for Running water in Toilet, iv) Rs 1.0 Lakh for RO water System with storage containers, v) Rs 0.6 Lakh Plantation in school open land, vi) Rs 1.0 Lakh for Environmental Awareness Program in School.
15. There is no household in the mine lease area. Hence, there is no R&R required in the proposed manganese mine.

16. The Project Proponent submitted that the budget earmarked for Environmental Management Plan (EMP) shall be ₹ 29.05 Lakh (Capital) & ₹ 10.0 Lakh (recurring/annum) which includes i) Rs 5.0 Lakh (Capital) & Rs 3.10 Lakh (recurring) for Air Pollution Control - Water sprinkling on haul road & plantation, ii) Rs 3.0 Lakh (Capital) & Rs 0.7 Lakh (recurring) for Water Pollution Control (Settling tank, Garland Drains, etc.), iii) Rs 0.05 Lakh (Capital) & Rs 1.0 Lakh (recurring) for Noise Pollution Control (Ear plugs, Machinery maintenance etc.), iv) Rs 1.0 Lakh (recurring) for Environmental Monitoring, v) Rs 2.0 Lakh (Capital) & Rs 0.8 Lakh (recurring) for Green belt Development/ plantation within ML area, vi) Rs 3.0 Lakh (Capital) & Rs 0.6 Lakh (recurring) for Occupational Health & Safety Measures, vii) Rs 3.0 Lakh (Capital) & Rs 0.6 Lakh (recurring) for Socio-economic welfare activities in nearby villages, and viii) Rs 16.0 Lakh (Capital) for Conservation Plan for Schedule-I species.
17. PP submitted that budget earmarked for Occupational Health and Safety Plan is Rs 3.0 Lakh (Capital) & Rs 0.60 Lakh (recurring) which includes adoption of suitable pollution control measures in the mines like periodic water sprinkling to avoid the dust nuisance, Provision of pre-employment and periodic training on health and safety to all the workers in the mine, Adoption of safe working practices, Maintaining proper housekeeping at working places, Provision of necessary personal protective equipments to all mine workers, Periodic maintenance of mine machinery and transport vehicles, and Display of warning signals at strategic locations.
18. PP submitted an undertaking dated 22.01.2019 that all the ToR points have been complied with and information provided in the EIA/EMP Report is factually correct and he take ownership of the same. The Consultant also submitted the list of expert engaged in the study and also submitted a declaration that they shall be fully accountable for any misleading information mentioned in the statement. The Consultant submitted the NABET Accreditation Certificate bearing No NABET/EIA/1619/RA 0059 (Rev 01) dated 29.11.2017 which is valid till 1.10.2019.
19. Project Proponent submitted that the total project cost shall be ₹3.02 Crore and shall give direct employment to 20-30 persons.

20. Based on the discussion held and document submitted by PP, the EAC in its meeting held on 24-25 September, 2019 **returned the proposal in present form** as the complete information is not uploaded online and there are some shortcomings in the proposal. The Committee is of the view that PP should submit the fresh Form-II after addressing the following issue and revising the EIA/EMP accordingly.

- a) PP should upload the clear copy of executed lease deed.

- b) PP needs to provide the maximum total excavation from mines. Dumping of waste outside mining lease area is not permissible thus PP needs to provide location & other details of the dumps (i.e. area, height etc.). Land use at conceptual period needs to be submitted with plan.

- c) PP should provide the details of ground water table and the proposed mining project will intersect the ground water table or not. In addition to this, PP needs to provide the source of water for this project and permission if required for the same if any. In case of the ground water extraction the PP needs to submit the compliance of Ministry's O.M No 21-103/2015-IA.III dated 2.11.2018.

- d) PP needs to provide the photograph of area, area to be covered, density of plantation, geo-location, number of saplings, time line and type of species to be planted under green belt and afforestation program with budgetary allocation.

- e) Ministry first examines the KML file on DSS for involvement of Forest Land if any. In case there is a forest land as per DSS then comments of PCCF needs to be obtained. The PP should submit a certificate from Chief wildlife Warden regarding distance of mining lease from the National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, and Tiger/Elephant Reserves.

- f) The conservation plan submitted is for 2 schedule-1 species viz. Indian gazelle & Indian peafowl. PP needs to submit the wildlife conservation plan for all the 4 schedule-1 species and proof of submission of the same to CWW.
- g) PP needs to submit the GLC values of all the pollutants in control case and worst case scenario. The PP needs to define the transportation route of the mineral and impact due to transportation. PP needs to submit the NABET Accreditation Certificate also for the period during which baseline study was conducted. In addition to this, PP needs to submit the original test report for the air quality data along with the accreditation certificate of the laboratory from where samples were analysed.
- h) PP needs to submit the R&R Plan for the private land involved in ML area.
- i) PP needs to provide the time bound action plan to address the issues raised during PH with budgetary allocation.
- j) CER activities is not aligned with the Commitment made during PH thus PP needs to revise the CER, EMP & Occupational Health Plan to address the issues raised during PH.
- k) Revise the Occupational Health & Safety Plan so as to comply with the Standard EC conditions in this regard. The Occupational health and safety plan should address the issue of manganese posing and preventive and protective measure to be taken for the avoidance of the same.
- l) PP needs to submit i) an undertaking by the way of an affidavit to comply with the Common Cause Order and other statutory requirements in pursuant to O.M. dated 03.05.2018, ii) undertaking that all the data and information given in the application, enclosures, and other documents are true to the best of my knowledge and belief and PP is aware that if any part of the data and information submitted is found

to be false or misleading at any stage the project will be rejected and clearance given if any to the project will be revoked at their risk and cost, iii) Consultant needs to submit an undertaking that EIA/EMP Report is prepared by them and data and information provided in the same is factually correct and they are completely accountable for the same if any part of the data and information submitted is found to be false or misleading at any stage then Ministry may take necessary action through QCI-NABET including cancellation of accreditation.

m) Project cost should also include the cost of land and accordingly, the CER amount should be revised.

2.2. Chandula-Simalgoda Stone Quarry of M/s. Jharkhand State Mineral Development Corporation Limited with production capacity of 9,20,000 TPA (ROM) in the mine lease area of 69.93 ha located at Village-Chandula & Simalgoda, Teshil-Barharwa, District-Sahibganj, Jharkhand-Consideration of EC.

File No: J-11015/20/2018-IA.II (M); Proposal No: IA/JH/MIN/67582/2017; Consultant: Crystal Consultants.

The proposal is considered in the EAC meeting held on 24 – 25 September 2019. The Committee discussed the proposal and informed PP that the current proposal does not attract the general condition of the EIA Notification. The Committee suggested that as per the EIA Notification S. O. 3977 (E) dated 14.08.2018, the proposal is a Category B project (less than 100 ha) and it will be appraised at SEIAA level. Therefore, Committee returned the proposal and suggested the Ministry to transfer the proposal to SEIAA.

2.3. Proposed a Limestone Mine {Block 3B1 (b), Area- 247.8711 ha} of M/s. Emami Cement Ltd with Production Capacity 1.70 Million TPA (ROM) (Limestone production capacity 0.68 Million TPA) and Crusher Capacity of 1500 TPH near Village Deh, Tehsil- Jayal & Village- Sarasni, Tahsil- Nagaur, District: Nagaur (Rajasthan)-EC Amendment Reg.

File No J-11015/23/2017-IA-II(M); Proposal No IA/RJ/MIN/116241/2019; Consultant: J M EnviroNet Pvt. Ltd.

The Proposal of M/s. Emami Cement Ltd is for amendment in Environmental Clearance granted vide letter No. IA-J-11015/23/2017-IA-II (M) dated 1.05.2018. The amendment with respect to change of land classification is sought. The PP submitted that at the time of obtaining the Environmental Clearance the total lease area was 247.8711 ha comprises 160.6034 ha government waste land & 87.2677 ha private agricultural land (As per tender document). Govt. land has been allotted to private land owners which were not updated in the tender document. As per State Govt. grant order land status has been changed wherein Govt. land is 94.2505 ha and private agricultural land is 153.6206 ha but the total land area remains same.

2. The above mentioned proposal is considered in EAC meeting held on 24-25 September, 2019 wherein the Committee observed that there is no change in the physical boundary of mining lease, the mining lease area is same and the only change is in the land classification. The Committee also observed that as the area of private land is now increase to 66.35 Ha and therefore, PP has proposed modification in R&R plan as follows:

S. No	Particular	As per EC	Change	Final/Total
1	ML Area (ha)	247.8711	No Change	247.8711
	A. Govt. Land (ha)	160.6033	-66.3529	94.2505
	B. Pvt. Land (ha)	87.2677	66.3529	153.6206
2	Total Project Affected Families (PAF)	31	30	61
	A. PAF having Land	27	30	57
	B. PAF having Houses	2	No Change	2
	C. PAF having Houses and Land	2	No Change	2
3	Compensation of Land (Rs in Cr.)	26.18	20	46.18
4	Project Cost (Rs in Cr.)	70	20	90
5	CER Cost (Rs in Cr.)	1.75	0.05	1.8

3. The Committee observed that previously project affected families were 31 and amount proposed was 26.18 Cr but now there is an increase of 30 more families and amount proposed is

20 Cr only. The PP submitted that cost of compensation is based on area of land involved and not based on number of families. The present calculation is also on the same rate as approved previously by EAC while granting EC. The Committee also observed from the Khasra map there are some land pockets which are partially inside and partially outside the mining lease. The Committee is of the view that PP should keep a buffer amount in R&R in case complete land of a particular Khasra number is to be purchased. The PP agreed with the suggestion of EAC and proposed an additional amount of Rs 50 Lakh for the same.

4. PP submitted that the Modified Mining Plan along with Progressive Mine Closure has been approved by IBM, Ajmer (Rajasthan) vide letter no. 584(4)(3)(1796)/2019 RCM-AJM/1134 dated 24.07.2019 . The PP submitted that project cost previously was Rs 70 Cr. The EAC is of the view that PP should include the cost of land in total project cost. The PP submitted that due to change in land classification additional Rs 20 Cr will be required for the purchase of land and thus the project cost comes out to be 90 Cr. In addition to this a contingency amount of Rs 50 Lakh will also be kept as suggested by EAC. The PP submitted that previously the amount proposed for CER was Rs 3.05 Crores for both the mines and for this mines Rs 1.75 Crores will be earmarked under CER. The Committee observed that as per Ministry's O.M minimum 2% of project cost shall be kept under CER which comes out to be Rs 1.8 Crores (considering project cost as Rs 90 Crore). The Committee is of the view that amount under CER should be atleast Rs 2.0 Crore. The PP agreed with the same.
5. Based on the discussion held and document submitted the committee **recommended** the following amendment in the EC granted vide letter No IA-J-11015/23/2017-IA-II (M) dated 1.05.2018.

Reference EC Granted 1.05.2018	Previous EC Conditions	Amendment Recommended by EAC

Page No 2 para 4, line 1-3	PP reported that the mine lease block 3 B1(b) with area of 247.8711 ha was electronically auctioned by Department of Mines and Geology, Government of Rajasthan for which LOI was issued by Directorate of Mines & Geology, Khanij Bhawan, Udaipur vide letter No. vide letter no. 3(23) Mines/Group-2/2016 dated on 02.11.2016.	PP reported. that the mine lease block 3 B1(b) with area at 247.8711 ha was electronically auctioned by Department of Mines and Geology, Government of Rajasthan for which LOI was issued by. Directorate of Mines & Geology, Khanij Bhawan, Udaipur vide letter No. vide letter no. 3(23) Mines/Group-2/2016 dated on 02.11.2016. The lease has been executed on 28.12.2018 and registered on 28.01.2019 for the validity of 50 years.
Page No, 2 Para 5, Line 1 & 2	Total ML Area is 247.8711 ha, out of which 160.6034 ha is .Govt. Land and 87.2677 ha is Private Agricultural Land.	Total ML area is 24\8711 Ha; out of which 94.2505 ha is Govt. land and 153.6206 ha is Private Agricultural Land.
Page No. 3 Para 6, Line 13 - 15	The Mining Plan along Progressive Mine Closure Plan has been approved by IBM, Ajmer (Rajasthan) vide letter no. 584(4)(3)(1686)/2017 RCM- AJM dated on 6.04.2017.	The Modified Mining Plan along with Progressive Mine Closure has been approved by IBM, Ajmer (Rajasthan) vide letter no. 584(4)(3)(1796)/2019 RCM- AJM/1134 dated 24.07.2019 .
Page No. 3 & 4 Para 9, Line 13&14	CER Cost for 5 years is Rs 1.75 Crores. It has made a provision of Rs 3.05 Crore for next five years for both the mines	CER Cost for 5 years is Rs 2.0 Crores. It has made a provision of Rs 3.4 Crore for next five years for both the mines

Page No. 4 Para 10, Line 1	Total Project Affected Families are 31.	Total Project Affected Families are 61.
Page No. 5 Para 12, Line 1	The Total Project Cost is Rs. 70 Crores.	The Total Project Cost is Rs. 90 Crores with contingency of Rs 50 Lakhs for any additional part Khasra Land to be purchased on lease boundary.

In addition to above that committee also noted that the Ministry vide its O.M No. 22-34/2018- IA.III, dated 08.01.2019 has issued Standard EC Conditions for the non-coal mining projects and as the mining is yet to be commenced the same should also be made applicable in the instant case. Thus, in addition to above amendment, the committee prescribed the following additional specific condition (keeping the earlier specific conditions same) and replace the earlier standard conditions with standard conditions as per O.M No. 22-34/2018- IA.III, dated 08.01.2019

Additional Specific Conditions:

- a) The revised budget earmarked for R&R activities is Rs 46.18 Crore. In addition to this an additional amount of Rs 50 Lakh kept as contingency for any additional part of Khasra Land to be purchased on lease boundary. The amount proposed in the R&R Plan shall be kept in separate bank account and same needs to be audited annually. The Proponent should annually (before 1st June of every year for proceeding year) submit the detailed report to Regional Office, MoEF&CC on implementation of R&R along with audited report of expenditure incurred and other supporting documents.
- b) The budget earmarked under CER is revised to Rs 2.0 Crore for five years. CER amount shall be managed through a separate bank account and same needs to be audited annually. Proponent should annually (before 1st June of every year for proceeding year) submit progress report to Regional Office, MoEF&CC on implementation of CER along with audited report of expenditure

incurred. Any unspent amount shall be used for development of nearby villages in consultation with local administration.

2.4. Proposal of Deora, Sitapuri & Udiyapura Limestone mine (Auction Block) of M/s UltraTech Cement Limited for production Capacity of 2.0 Million TPA(ROM) Limestone, Top Soil - 0.17 Million TPA, OB & IB - 0.25 Million TPA (Total Excavation - 2.42 Million TPA) from the mine lease area of 344.783 ha located at Manawar, District: Dhar, State: Madhya Pradesh

Proposal No: IA/MP/MIN/115209/2019; File no. J-11015/66/2019-IA.II(M)

The proposal of M/s UltraTech Cement Limited is for Deora, Sitapuri & Udiyapura Limestone mine for production Capacity of 2.0 Million TPA(ROM) Limestone, Top Soil - 0.17 Million TPA, OB & IB - 0.25 Million TPA (Total Excavation - 2.42 Million TPA) from the mine lease area of 344.783 ha. The mine lease area is located at Villages: Deora, Sitapuri, Udiyapura and Muhali, Tehsil: Manawar, District: Dhar, State: Madhya Pradesh. The Latitude and Longitude of the proposed site is 22°19'09" to 22°20'19" N and 75°05'29"E to 75°07'08"E. The mining lease area falls in Survey of India (SOI) Topo sheet no. F43/15, F 43/16, F 43J/3 & F 43J/4. The project is located in Seismic Zone – III.

2. The PP applied online for grant of ToR under Category 1(a) and submitted the Form-1, Pre-feasibility Report, and copy of Letter of Intent. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category "A", Project or Activity 1(a) as the mining lease area is more than 100 Ha.
3. PP reported that the total mine lease area is 344.783 ha which comprises 293.614 ha as private agriculture land, 25.364 ha Government Pasture land and 25.805 ha is other government land. There is no Forest land involved in the Mine lease area. The Letter of Intent (LOI) vide letter no.-3-32/2018/12/1dated20.06.2018 has been granted by Mineral Resources Department of Madhya Pradesh through e-auction over an area of 344.783 ha in favour of M/s UltraTech Cement Limited.

4. PP reported that mining operation will be opencast utilizing Heavy Earth Moving Machines (HEMMs) following conventional drilling & blasting approach. Loading will be done by Hydraulic Excavators. During the mining operations 4.13 Million Tonnes top soil will be generated which will be used for reclamation of the backfilled area and will be simultaneously used for plantation. At conceptual stage, total 24.28 Million Tonnes of OB & IB waste will be generated which will be temporarily dumped at earmarked sites and will be backfilled in 26.21 ha of the mined out area. The total geological reserves is estimated about 61.96 Million TPA and the total Mineable reserves is estimated as 43.68 Million TPA. The life of mine is 26 years with the proposed production capacity. No waste water will be generated during mining operation.
5. PP reported that one village road is passing through the mine lease area. The same will not be disturbed at any stage during the mining operation. Another village road is passing through the lease from NE to SW direction which is excluded from the lease, the same will not be disturbed at any stage of mine operation. Safety barrier of 10 m will be maintained on the either side of the roads and same will be covered under plantation. PP reported that 11 KV transmission line is passing through the mine lease area. To protect this transmission line, a safety barrier of 50m on either side will be left and no mining activity will be carried out in this buffer zone.
6. PP reported that an earthen dam is located in the East direction of mine lease area, through which an overflow passage occurs and merges into the nallah passing through the middle of the lease and the same is excluded from the mine lease area. One small seasonal nallah is flowing in the lease area from North to West direction of the lease area. Also a canal is passing from SE to NW direction and a network of minor canal is there in the SE direction. No water body will be disturbed.
7. The Project Proponent submitted that no National Park, Wild Life Sanctuaries, Tiger Reserves, Wildlife Corridors, etc., are there within 10 km radius of the study area. PP reported that Reserve Forest is located at the distance of 3.5 km in NNE direction, Lawani RF is located at the distance of 5.5 km in ENE direction, Nimkhera RF is located at the distance of 6.5 km in NE direction,

Dhamnod RF is located at the distance of 8.5 km in NNE direction, Balwari RF is located at the distance of 12.5 m in NW direction, Earthen Dam is located at the distance of 50 m from mine lease in East direction, Man River is passing at the distance of 0.5 km in NE direction, Sukkar River is passing at the distance of 1.5 km in NW direction, Left Bank Main Canal is passing at the distance of 4.0 km in WNW direction, Right Bank Main Canal is passing at the distance of 2.5 km in East direction, Zirabad Reservoir (Man Dam) is passing at the distance of 8.0 km in North direction, Gandharva River is passing at the distance of 8.5 km in WNW direction.

8. PP submitted an undertaking by way of affidavit (No. BC 423861) dated 13.09.2019 as required as per Ministry's O.M. No 3-50/2017 -IA. II(M) dated 30.05.2018 to comply 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.
9. Total water requirement will be 100 KLD, out of which 4KLD will be used for drinking & sanitation purpose. The source of 4KLD will be from ground water and remaining requirement of 96 KLD will be obtain from existing mine sump of the adjoining mine lease during initial phase and subsequently from its own mine sump.
10. The total cost of the project is 47.05 Cr. The capital cost for Environment Protection is Rs. 45.0 Lakhs with Recurring Cost is Rs. 18 Lakhs per Annum.
11. 45 people shall be employed. Preferences will be given to the locals as per eligibility criteria.

Based on the information furnished and discussions held, the Committee **deferred** the Proposal and sought the following information

- I. The PP should submit the water budget incorporating the quantity of surface and ground water to be used for this project. The complete water balance cycle need to be submitted. In addition to this PP should submit a detailed plan for rain water harvesting measures to be taken. The PP should submit the year wise target for reduction in consumption of ground water by

developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted.

- II. The detailed land breaks up involved in the mine lease area.
- III. PP is required to submit the revised project cost including the land cost.
- IV. PP need to submit No Objection Certificate(NOC) from the adjacent mine whose it proposed to use the crushing facility for handling of excavated mineral is 2.0 MTPA(ROM).
- V. PP need to submit an undertaking in form of affidavit stating that the mined material will not be stored outside the lease area except the captive cement plant else necessary clearance for all applicable statutory provision will be obtained.
- VI. Detailed conceptual plan along with Map for proposed mining with reclamation plan and also measures for protection of river, nalla in and around the habitats situated in the vicinity of mine lease area needs to be submitted.

2.5. Expansion of Captive "Nawabpet-Talamanchipatnam Limestone Mine" by expanding limestone Production Capacity from 3.819 Million TPA to 8.77 Million TPA, Soil ~1.6 Million TPA and OB/Screen Reject ~2.82 Million TPA (Total Excavation of 13.19 Million TPA) (ML Area 407.05 ha) and installation of an additional Crusher of 2000 TPH Capacity with Wobbler at Villages: Nawabpet & Talmanchipatnam, Taluka: Mylavaram (M) District: YSR Kadapa, Andhra Pradesh by M/s. Dalmia Cement (Bharat) Limited-ToR Regarding

File No.: J-11015/64/2008 IA.II (M); Proposal No: IA/AP/MIN/109558/2019; Consultant : J M EnviroNet Pvt. Ltd.

The Proposal of M/s. Dalmia Cement (Bharat) Limited is for expansion of limestone production capacity from 3.819 Million TPA to 8.77 Million TPA with total excavation of 13.19 Million TPA which includes

[Limestone (ROM) 8.77 MTPA; Soil ~1.6 Million TPA and OB/Screen Reject ~2.82 Million TPA] and installation of an additional Crusher of 2000 TPH Capacity with Wobbler in "Nawabpet-Talamanchipatnam Limestone Mine located at Villages: Nawabpet & Talamanchipatnam, Taluka: Mylavaram (M) District: YSR Kadapa, Andhra Pradesh. The Mining Lease area falls under SOI Toposheet No. Core zone-D44G5 Study area- D44G1, D44G5, D44A4 & D44A8 and lies between Latitude: 14° 56'18.3" N to 14° 57'1.6" N Longitude: 78° 18'53.9" E to 78° 21'27.2" E. The mining lease area falls under S

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category "A", Project or Activity 1(a) as the Mining lease area is more than 100 Ha. The PP applied online vide proposal No. IA/AP/MIN/109558/2019 dated 30.06.2019 in Schedule 1(a) for mining of mineral and 2(b) for beneficiation. The PP submitted the Form-1, Pre-feasibility Report. The proposal was placed in EAC meeting held on 30-31 July, 2019. The PP vide its letter dated 31.07.2019 requested Ministry to consider the proposal in next EAC meeting as they are not able to attend this meeting due to some un-avoidable circumstance. The Committee therefore deferred the proposal. The proposal is now placed in EAC meeting held during 24-25 September, 2019. Based on the discussion held and documents submitted the Committee **deferred** the proposal as PP was not able to present the compliance status of earlier EC Conditions. The Committee is of the view that proposal will be considered once the PP submit the compliance of earlier EC Conditions.

2.6. Thakurani Iron Ore Mines of M/s Kaypee Enterprises with expansion of iron ore production from 5.5 MTPA to 7.99 MTPA (ROM) along with Crusher and Screen Plants in the mine lease area of 228.04 ha, located at village Thakurani, TehsilBarbil, Keonjhar District, Odisha-Consideration of EC.

File No: J-11015/104/2018-IA.II (M); Proposal No: IA/OR/MIN/102001/2018; Consultant: Creative Engineers and Consultants

The proposal of M/s Kaypee Enterprises is for Thakurani Iron Ore Mines for enhancement in production of iron ore from 5.5 MTPA to 7.99 MTPA

along with Crusher and Screen Plants in the mine lease area (MLA) of 228.04 ha. The MLA is located at village Thakurani, Tehsil Barbil, Keonjhar District, Odisha. The MLA is bounded by Latitudes of 22°06'16.72" to 22°07'41.65"N and longitudes 85°25'32.28" to 85°26'40.67"E and falls under the Survey of India Toposheet No.73 G/5 and 73F/8.

2. Project proponent (PP) submitted that the Ministry has granted Environmental Clearance for production capacity of 5.50MTPA capacity vide letter No-J-11015/902/2007-IA.II (M) dated 03.02.2012. Further, PP submitted that ToR proposal for the proposed expansion was considered in EAC meeting held during September 28-29, 2018 and the TOR has been granted by Ministry vide letter No. J-11015/104/2018-IA.II(M) dated 12.10.2018. PP submitted the EIA/EMP report to Ministry for seeking environmental clearance. The project proposal is considered in this EAC meeting.
3. PP submitted that total mine lease area is 228.04 ha which falls within Thakurani Reserve Forest. Out of total forest land, forest clearance was obtained for 146.726 ha vide Ministry letter No 8-154/97-FC (Vol-II) dated 19.07.2005. PP further submitted that the mine lease is valid up to 31.03.2020 and the supplementary lease deed has been executed on 7 May 2015.
4. PP did not present the latest compliance status of the existing EC conditions. Based on the information submitted by PP and deliberation thereof, the Committee **recommended to return the proposal in present form** and asked to resubmit the existing EC compliance status along with following information for further consideration. In addition, the Committee asked the PP to present the complete proposal during next appraisal as the technical information/data are not appraised in this EAC meeting.
 - (i). PP submitted that as part of the existing EC condition, PP made plantation for 6 ha, however, the PP was unable to show/explain the same in KML. PP needs to submit the revised KML file with plantation area and their corresponding coordinates. PP also requires to submit the details of plantation carried out in safety zone and along the lease boundary. In addition, PP needs to submit the photographic images of the same.

- (ii). The Committee observed that the Mining plan for proposed expansion was approved by IBM vide letter dated 04.06.2018 which is before the date of application for TOR and also the date of grant of TOR. PP needs to submit afresh Mining plan in accordance with ToR provisions.
- (iii). PP needs to revise the CER cost as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 and the action plan on the activities proposed under CER along with timeline shall be submitted at the time of appraisal of the project included in the EIA/EMP Report.
- (iv). The Committee observed that the lease expires on 31.03.2020. Therefore, PP needs to submit one-year implementation plans addressing the public concerns and all others plans related to this expansion proposal.
- (v). PP requires to submit month wise production details for proposed 7.99 MTPA productions with drilling, blasting, excavation and machineries details.
- (vi). Site specific wildlife conservation plans was approved on 15.02.2010 and PP mentioned that the all the measures in the site specific wildlife conservation plans is being & will be implemented. The Committee observed that details are unclear with respect to compliance status of the conservation plans. Therefore, PP to submit compliance status of the existing conservation plans and also submit approved revised site specific wildlife conservation plans.
- (vii). The Committee observed that as per the specific condition (iii) of existing EC letter dated 03.02.2012, PP is required to get the NBWL clearance. PP presented the following:

"As per the guideline issued by Ministry vide letter F. No. 6-10/2011 WL dated 19.12.2012 i.e. *".....unless there is a clear legal delineation of elephant habitats and corridors, the implementation of the guidelines with respect to Elephant Reserves and corridors become very difficult. Therefore, the Wildlife Department is to work out a process by which these habitats acquire legal status....."*

It further states that,

"With a view to ensuring conservation of elephants, the national heritage animal, 'Project Elephant' is operational.

Technical and financial assistance is provided by the Central Government for conservation of elephants in the designated elephant habitats in the country. But presently such habitats are not legal entities. Though many existing elephant habitats are part of the existing Protected Areas, a proposal for enabling notification of such important habitats as elephant reserves under appropriate legal provisions is also under consideration of the government in the Ministry of Environment and Forests. It is expected that once the legal provisions for declaration of elephant reserves is in place, such areas will also be included under the regulatory regime under Wild Life (Protection) Act 1972 as proper legal entities”.

So, the PP concluded that as and when the legal provisions for declaration of Singhbhum elephant reserve is in place, we will comply by the guideline.

The Committee is of the view that the PP’s submission needs to be verified with the Wildlife Division for present status and the relief sought thereof. Based on the input, MoEF&CC may examine the violation/non-compliance for the project and accordingly, appropriate action may be initiated against the PP or necessary amendment in existing EC may be applied by PP, as the case may be. In addition, the Committee suggested the Ministry to get comments from the Project Elephant Division of the Ministry also.

- (viii). PP submitted that there is no national park, wild life sanctuary, biosphere reserve or tiger reserve within the study area of 10 km radius. PP submitted that Singhbhum Elephant reserve falls at 3 km distance from the mine lease area, however, the legal provisions for declaration of the same is yet to be in place. The Committee deliberated the same and suggested the Ministry to examine the distance of Singhbhum Elephant reserve in due consultation with the Office of Chief Wildlife Warden. If required, PP needs to get the NBWL clearance for the same and the Committee also mentioned that PP is carrying out the mining activity till date without NBWL clearance.
- (ix). PP needs to submit copy of CGWA approval since inception of mining.

- (x). PP was unable to show the location of Garland drain and check dam as part of compliance of the existing EC. PP needs to show the same with their coordinates.
- (xi). The Committee observed non-compliance of EC specific conditions (xxviii). The specific condition is reiterated here "*No transportation of ore outside the mine lease area shall be carried out after the sunset.*" PP mentioned that as per the instruction of the Local District Collector cum District Magistrate and the Mining Department of the State, the vehicles movement is restricted during 8.00 a.m. to 8.00 p.m. and the transporting is being taken up according to the instruction of the local Government authorities including forest and pollution control department. Thus, the Committee mentioned that PP is carrying out transportation of mineral after the sunset. Furthermore, the Committee observed also non-compliance of other conditions such as plantation, dust suppression, making of parking plaza, construction of cement road and mining outside the lease area etc., which needs to be verified by site visit of the mine lease area.
- (xii). PP needs to submit the year wise complete excavation details (OB/IB/SB, topsoil and other waste material generated and utilized etc.) of the existing EC capacity.
- (xiii). PP submitted inadequate information in Form 2 of the PARIVESH Portal. PP needs to properly fill the Form-2 as per the mining plan, crusher capacity for increased production. In addition, PP needs to recheck the year wise production figures including waste generation in the mining plan and submit the correct details.

Chairman-EAC highlighted the matter related to Mines which are going for auction and which will require fresh EC w.e.f April 2020. In order to have the present status of compliance of mines going for auction by Ministry of Mines in the state of Odisha, it was felt by the committee that the list of such mines and their environmental clearance conditions may be called from Ministry of Mines. It was decided that a committee comprising of officials from EAC, OSPCB, IBM, DMG and MoEF&CC may be formed by Ministry to have present status of environmental parameters and compliance of EC conditions by these mines. This will help in perusing the application of new leases, as and when they apply for EC. The committee also visits the

site of instant proposal and provides its report on EC compliance for further consideration of expansion proposal. Prof. Dr. Gurdeep Singh will represent as member from the EAC. The committee will submit report to Chairman-EAC for furtherance on this project proposal. Furthermore, the committee was of the opinion that such compliance report will be helpful in appraising the upcoming project proposals from Odisha State and for including valuable/necessary precautionary conditions for protecting the Environment. The committee proposed that ministry may consider the proposal of forming committee for the mine leases subjected to auction in the state of Odisha and also for Karnataka.

2.7. Mining of 4.0 Million TPA of Limestone from Chintalayapalle Limestone Mine with ML Area 491.55 Ha located at Village-Chintalayapalle & Itikyala, Tehsil-Kolimigundla, District-Kurnool, State- Andhra Pradesh by M/s. The Ramco Cements Limited-EC Regarding.

Proposal No IA/AP/MIN/62749/2017; File No J-11015/15/2017-IA.II (M); Consultant: B.S. ENVI-TECH (P) Ltd.

The proposal of M/s The Ramco Cements Limited is for production of 4.0 Million TPA of Limestone from Chintalayapalle Limestone Mine [ML Area 491.55 Ha] located at Village-Chintalayapalle & Itikyala, Tehsil-Kolimigundla, District- Kurnool, and State- Andhra Pradesh. The mine lease area falls in the Survey of India Topo-Sheet No. 57/I/4. The latitudes and longitudes of the Mine lease fall between Latitudes 15° 01' 20.5" N to 15° 02' 37.7" N & Longitudes 78° 05' 26.1" E to 78° 07' 06.4" E.

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category-A Project as the mining lease area (491.55 Ha) is more than 100 Ha.
3. The Project Proponent applied online on 23.02.2017 vide proposal no IA/AP/MIN/62749/2017 for prescribing Term of Reference (ToR) and submitted Form-1 and Pre-Feasibility report. The proposal was considered in EAC meeting held on 20-21 March, 2017 and EAC in its meeting held on 18-19 September, 2017 recommended the proposal for prescribing Term of Reference (ToR). The ToR letter was issued on

06.10.2017 to **M/s. The Ramco Cements Limited**. The Project Proponent applied vide proposal No. IA/AP/MIN/62749/2017 for grant of EC online on 14.08.2019 and submitted the EIA Report after conducting the Public Hearing. The proposal is now placed in EAC Meeting held on 24-25 September, 2019, wherein, the PP submitted the following:

4. The proponent submitted that mining lease for limestone was granted over an area of 491.550 Ha on 09.08.2000 in the name of **M/s Madras Cement Limited** which was valid up to 8.08.2030. The validity of Mining lease was extended up to 08.08.2050 vide letter no INC04-14024(44)/7/2018-R. IV Sec dated 3.12.2018.
5. The PP submitted that Mining Plan and Progressive Mine Closure Plan of this proposed mining lease area is approved by Indian Bureau of Mines, Nagpur vide letter no. AP/KNL/MP/LST-51/HYD dated 15.06.2018.
6. The mining operations will be carried by open cast mechanized method in two shifts. PP submitted that the block cotton soil is present as Top Soil and will be removed by dozer/pay loader to be dumped at designated place. The Top soil will be used for plantation purpose. Mineral will be excavated by using heavy earth moving machinery, deep-hole drilling, blasting and deploying hydraulic excavators and dumpers combination. PP submitted there will no re-handling of dump for the purpose of recovery of mineral. PP submitted that over the life of mine 417542 m³ of Top Soil will be generated which will be used for afforestation over 30 Ha area. PP submitted that there will be no waste generation, thus there is no proposal for backfilling. PP submitted that at conceptual stage the area under mining will be 79.01 Ha, 0.10 Ha under Infrastructure (Workshop, Administrative Building etc), 33.0 Ha under Green Belt & Garland Drain, 378.34 Ha Others (undisturbed). PP submitted that at conceptual stage the ultimate depth of mining will be 29 M (270 m RL).
7. The PP submitted that depth of water level during summer (pre-monsoon) Season is 45-50 mbgl and during Post Monsoon Season is 40-45 mbgl. The total water requirement for this project is 150 KLD (8 KLD for dust suppression, 1.0 KLD for Domestic use, 6.0 KLD for plantation). PP submitted that

ultimate pit limit will be 4 m from the lease boundary and UPL depth will be 352 mRL in the northern ore body and 349 mRL in the southeastern ore body. The pit slope will be maintained at 45°. However, the 7.5 m distance (safety zone) from the lease boundary will be maintained.

8. The PP submitted that area covered under plantation at the end of plan period will be 51.69 Ha [during plan period (3.0 Ha), 2020-21 to 2024-25 (6.5 Ha), 2025-26 to 2029-30 (6.3 Ha), 2030-31 to 2034-35 (6.7 Ha), 2035-36 to 2039-40 (7.5 Ha), 2040-41 to 2044-45 (7.5 Ha), 2045-46 to 2049-50 (7.5 Ha), 2050-51 to 2053-54 (6.69 Ha)]. The PP proposed a budget of Rs 26.0 Lakh (Capital) & Rs 3.0 Lakh (recurring) for Green Belt Development.
9. The PP submitted that 42.20 Ha is Government land and 449.35 Ha is private land and total mining lease area is 491.55 Ha. The PP has already acquired 411.271 Ha of private land and remaining 38.079 Ha is yet to be acquired. PP submitted that there is no forest land in the mining lease area. PP submitted that there is no wildlife sanctuary, national park, elephant/tiger reserves within 10 KM of the mining lease area.
10. The PP also submitted letter RC. No. 17041/2017/FCA-2, dated 04.01.2018 issued by Forest Department Govt of Andhra Pradesh wherein the list of flora and fauna in 10 KM study area was provided. In the same letter it has mentioned that there are two schedule-1 species viz. Black Buck & Peafowl is available in the study area. The PP also submitted that wildlife conservation plan for the schedule -1 species was approved by Chief Wildlife Warden vide letter No.9968/2018/WL-2 dated 15.07.2019. The PP has earmarked a budget of Rs 577.5 Lakh (Capital) for the implementation of wildlife conservation plan which includes i) Rs 165 Lakh for conservation plan for the schedule-1 species, ii) Rs 200 Lakh for development of green belt in plant area, iii) Rs 187.5 Lakh development of green belt in the surrounding village of RCL Plant, iv) Rs 10.0 Lakh SMC work in Owk RF and Owl extension RF, v) Rs 40 Lakh for stabilization of nallha bank and SMC work in plant area.
11. Being a Major Mineral there is no requirement of District Survey Report.

12. The Primary baseline data for specific micro-meteorology data, ambient air quality, waste quality, noise level, soil and flora & fauna has been collected during Post Monsoon season i.e. October to December, 2017. The monitoring results of ambient air, surface water, soil, ambient noise and ground water for the month of October 2017-December 2017 have been reported and no major divergence was observed with respect to concentration values of various parameters of collected samples.
13. The Project Proponent reported that the Andhra Pradesh State Pollution Control Board conducted Public consultation/hearing for the proposed project of M/s. The Ramco Cements Limited for Mining of 4.0 Million TPA of Limestone from Chintalayapalle Limestone Mine [ML Area 491.55 Ha] located at Village-Chintalayapalle & Itikyala, Tehsil-Kolimigundla, District- Kurnool, State- Andhra Pradesh on 08.02.2019 at 2.00 P.M. at the mine site Sy. No. 250, Chintalayapalle (V), Kolimigundla (M), Kurnool District of Andhra Pradesh. The advertisement for public hearing was published in "Eenadu" & "The New Indian Express" on 8.01.2019. The Public hearing was conducted under the chairmanship of Shri S. Satyanarayana, Collector & District Magistrate, District- Kurnool. The issues raised during public hearing were also deliberated during the meeting which includes setting up of cement plant, employment, drinking water facility, medical facility, skill development, infrastructure facility in school & village, implementation of pollution control measures, additional compensation, educational facilities, effect on agricultural crop production, road maintenance, employment to local people, etc. The PP inter-alia committed during public hearing that drinking water will be supplied to villages from Owl Reservoir through the pipeline proposed by them for the cement plant, construct hospital in the factory premises and will provide mobile ambulance facility for all surrounding villages, construction of compound wall, providing computers, construction of toilets for all schools existing in the surrounding villages.
14. PP submitted that budget earmarked under Corporate Environmental Responsibility (CER) is Rs 52.0 Lakhs, which includes **Activity-1 Education** [i) provision for library facility in Chintalayapalli village (Rs 3.0 Lakh, timeline 1st year), ii) provision for sport material along with playground in

Chintalayapalli village (Rs 3.0 Lakh, timeline 1st year & Rs 2.0 Lakh for 2nd Year),iii) construction of sport ground in Raghavarajupalli Village (Rs 3.0 Lakh, timeline 1st year), iv) Providing new toilets for school in Chintalayapalli village (Rs 2.0 Lakh, timeline 1st year)], **Activity-2 Roads & Other Infrastructures** [i) Construction of burial ground (Rs 2.0 Lakh, timeline 1st year), ii) Community Hall in Chintalayapalli village (Rs 5.0 Lakh for 2nd Year), iii) Laying of cemented roads in Raghavarajupalli Village (Rs 5.0 Lakh, timeline 1st year & Rs 5.0 Lakh for 2nd Year)], **Activity-3 Drinking Water** [i) Providing RO Plant in Chintalayapalli village (Rs 6.0 Lakh, timeline 1st year), ii) Hand bore to be re-bored along with digging of two additional bore wells in Raghavarajupalli Village (Rs 6.0 Lakh for 1st Year)], **Activity-4 Skill Development** [Providing skill development center in Itikyala Village (Rs 7.5 Lakh, timeline 1st year & Rs 2.5 Lakh for 2nd Year)].

15. PP submitted that R&R Plan is not applicable for this project as there is no habitation inside the mining lease area.
16. The Project Proponent submitted that the budget earmarked for **Environmental Management Plan (EMP)** shall be ₹ 80.0 Lakh (Capital) & ₹ 32.0 Lakh (recurring/annum) which includes i) Rs 30.0 Lakh (Capital) & Rs 10.0 Lakh (recurring) for Dust Suppression Measures, ii) Rs 11.0 Lakh (Capital) & Rs 18.0 Lakh (recurring) for Environment Monitoring iii) Rs 26.0 Lakh (Capital) & Rs 3.0 Lakh (recurring) for Green Belt Development, iv) Rs 10.0 Lakh (capital) for Wildlife Conservation Plan, and v) Rs 2.0 Lakh (Capital) & Rs 0.8 Lakh (recurring) for Rainwater Harvesting Structures.
17. The consultant has submitted an undertaking that all ToR points prescribed by MoEF&CC has complied with in the preparation of EIA/EMP Report. Consultant provided list of expert engaged in the preparation of EIA/EMP and undertake that information provided in the statement is factually correct.

PP also submitted an undertaking that ToR points prescribed by MoEF&CC is addressed in the EIA/EMP Report and the information and data submitted are factually correct and **The Ramco Cements Limited** owns the content of the report.

18. Project Proponent submitted that the total project cost shall be ₹ 10.75 Crore and shall give direct employment to 140 persons.
19. Based on the document submitted and discussion held in EAC meeting held on 24-25 September, 2019 **returned the proposal in present form** as the PP did not upload the complete documents on the PARIVESH Portal. The Committee is of the view that PP should upload all the documents online after addressing the following issues:
- a) PP needs to upload all the documents online including mining plan with all the annexures on PARIVESH Portal.
 - b) PP needs to provide the source of water and if needed provide the copy of application made to concerned authorities for extraction of ground water. PP also needs to submit the compliance of Ministry's O.M No 21-103/2015-IA.III dated 2.11.2018. The PP needs to submit the water balance for mines area through rain water harvesting measures. PP should submit a target for reduction in water consumption for the mines through use of latest water spraying system and rainwater harvesting measures. The budget for the same needs to be provided in EMP. The distance of mineral transportation from mines to crusher is very less and PP needs to optimize the water requirement as stated above. From crusher to cement plant PP has proposed to install conveyor belt. The Committee is of the view that PP should submit an undertaking for installation of conveyor belt with 3 years of the grant of EC.
 - c) PP needs to provide the photograph of proposed area of plantation, area to be covered, density of plantation, geo-location, number of saplings, time line and type of species to be planted under green belt and afforestation program with budgetary allocation. Plantation plan for every 5 years covering all above mentioned points till the life of mine needs to be submitted for future monitoring.
 - d) PP should submit the certificate from the concerned forest department and chief wildlife warden with regard to non-involvement of forest land and distance from any wildlife sanctuary, national park, elephant/tiger reserves are not within 10 KM of the mining lease area. The name of mine should be clearly specified in the certificates and conservation plan.

- e) Cumulative GLC values needs to be checked and particle size analysis of PM₁₀ & PM_{2.5} and its percentage allocation considering the existing cement plant and validation of dispersion model with calculation is to be submitted.
- f) The ToR letter was issued on 06.10.2017 but PP has carried out baseline studies during October to December. The consultant submitted the accreditation certificate for the period from 28.05.2018 to 12.11.2019 but did not submit the NABET Certificate for the period during which baseline study was conducted. Consultant did not provided the original test report of the air quality data and accreditation certificate of the lab from where samples were analysed in the EIA Report the same needs to be provided.
- g) The concerned raised during PH needs to be addressed properly and a proper action plan along with budgetary allocation and implementation timeline needs to be provided for each activity committed during PH. The land in the ML is private land purchased by RCL and R&R is applicable. Land compensation issue was also raised in PH thus PP needs to address the same. In case already complied details of the same needs to be provided.
- h) The cost of land needs to be added in the Project cost and based on the total cost CER needs to be revised.
- i) The capital cost under plantation is high as compared to recurring cost reason for the same needs to be submitted. The wildlife conservation plan is common for cement plant, power plant and mines as reported by PP. In addition to this, PP earmarked Rs 10 Lakh (Capital) in EMP, justification for the same needs to be submitted.
- j) PP needs to submit i) an undertaking by the way of an affidavit to comply with the Common Cause Order and other statutory requirements in pursuant to O.M. dated 03.05.2018, ii) undertaking that all the data and information given in the application, enclosures, and other documents are true to the best of my knowledge and belief and PP is aware that if any part of the data and information submitted is found to be false or

misleading at any stage the project will be rejected and clearance given if any to the project will be revoked at their risk and cost, iii) Consultant needs to submit an undertaking that EIA/EMP Report is prepared by them and data and information provided in the same is factually correct and they are completely accountable for the same if any part of the data and information submitted is found to be false or misleading at any stage then Ministry may take necessary action through QCI-NABET including cancellation of accreditation.

- k) Activity wise time bound Occupation Health Surveillance Plan, EMP, Plantation Plan and CER needs to be submitted with budgetary allocation.
- l) Proposed location of (Air, Water, Noise & Soil Quality) monitoring location with frequency of monitoring needs to be submitted with geo-location.

2.8. Proposed Limestone Mine {Block 3B1 (a), Area- 267.6288 ha} of M/s. Emami Cement Ltd with Production Capacity 1.70 Million TPA (ROM) (Limestone production capacity 0.68 Million TPA) and Crusher Capacity of 1500 TPH at Village- Deh, Tehsil-Jayal, District- Nagaur (Rajasthan) - EC Amendment

File No J-11015/40/2017-IA.II (M); Proposal No IA/RJ/MIN/116264/2019.

The Proposal of M/s. Emami Cement Ltd is for amendment in Environmental Clearance granted vide letter No. J-11015/40/2017-IA.II (M) dated 24.04.2018. The amendment with respect to change of land classification is sought. The PP submitted that at the time of obtaining the Environmental Clearance the total lease area was 267.6288 ha comprises 140.8951 ha government waste land & 126.7337 ha private agricultural land (As per tender document). Govt. land has been allotted to private land owners which were not updated in the tender document. As per State Govt. grant order land status has been changed to Govt. land 108.1156 ha and 159.5122 ha is private agricultural land whereas the total land area remains same.

2. The above mentioned proposal is considered in EAC meeting held on 24-25 September, 2019 wherein the Committee observed that there is no change in the physical boundary of mining lease, the mining lease area is same and the only change is in the land classification. The Committee also observed that area of private land is now increase to 32.779 Ha. PP submitted a revised R&R plan as follows:

S. No	Particular	As per EC	Change	Final/Total
1	ML Area (ha)	267.6288	No Change	247.8711
	A. Govt. Land (ha)	140.8951	-32.7795	108.1156
	B. Pvt. Land (ha)	126.7337	+32.7795	159.5132
2	Total Project Affected Families (PAF)	44	+35	79
	A. PAF having Land	38	+35	73
	B. PAF having Houses and Land	06	No Change	06
3	Compensation of Land (Rs in Cr.)	38.02	+10	48.02
4	Project Cost (Rs in Cr.)	52	+10	62
5	CER Cost (Rs in Cr.)	1.30	No Change	1.30

3. The Committee observed that previously project affected families were 44 and amount proposed was 52 Cr but now there is an increase of 35 more families and amount proposed is 10 Cr only. The PP submitted that cost of compensation is based on area of land involved and not based on number of families. The present calculation is also on the same rate as approved previously by EAC while granting EC. The Committee also observed from the Khasra map, there are some land pockets which are partially inside and partially outside the mining lease. The Committee is of the view that PP should keep a buffer amount in R&R in case complete land of a particular Khasra number is to be purchased. The PP agreed with the suggestion

of EAC and proposed and additional amount of Rs 50 Lakh for the same.

4. PP submitted that the Modified Mining Plan along with Progressive Mine Closure has been approved by IBM, Ajmer (Rajasthan) vide letter no. 584(4)(3)(1795)/2019 RCM-AJM/1130 dated 24.07.2019 . The PP submitted that project cost previously was Rs 52 Cr. The EAC is of the view that PP should include the cost of land in total project cost. The PP submitted that due to change in land classification additional Rs 10 Cr will be required for the purchase of land and thus the project cost comes out to be 62 Cr. In addition to this a contingency amount of Rs 50 Lakh will also be kept as suggested by EAC. The PP submitted that previously the amount propose under CER is Rs 3.05 Crores for both the mines and for this mines Rs 1.3 Crores was earmarked under CER. The Committee observed that as per Ministry's O.M minimum 2% of project cost shall be kept under CER which comes out to be Rs 1.24 Crores (considering project cost as Rs 62 Crore). The Committee is of the view that amount under CER should be atleast Rs 1.4 Crore. The PP agreed with the same.
5. Based on the discussion held and document submitted the committee **recommended** the following amendment in the EC granted vide letter No IA-J-11015/23/2017-IA-II (M) dated 1.05.2018.

Reference EC Granted 1.05.2018	Previous EC	Amendment Recommended by EAC
Page No 2 para 4, line 1-3	PP reported that the mine lease block 3 B1(a) with area of 267.6288 ha was electronically auctioned by Department of Mines and Geology, Government of Rajasthan for which LOI was issued by Directorate of Mines & Geology, Khanij Bhawan, Udaipur vide letter No. vide letter no. 3(23)	PP reported. that the mine lease block 3 B1(a) with area at 267.6288 ha was electronically auctioned by Department of Mines and Geology, Government of Rajasthan for which LOI was issued by. Directorate of Mines & Geology, Khanij Bhawan, Udaipur vide letter No. vide letter no.

	Mines/Group-2/2017 dated on 13.04.2017.	3(23) Mines/Group-2/2017 dated on 13.04.2017. The lease has been executed on 28.12.2018 and registered on 28.01.2019 for the validity of 50 years.
Page No, 2 Para 5, Line 1 & 2	Total ML Area is 267.6288 ha, out of which 140.8951 ha is .Govt. Land and 126.7337 ha is Private Agricultural Land.	Total ML area is 267.6288 Ha; out of which 108.1156 ha is Govt. land and 159.5132 ha is Private Agricultural Land.
Page No. 3 Para 6, Line 137 - 9	The Mining Plan along Progressive Mine Closure Plan has been approved by IBM, Ajmer (Rajasthan) vide letter no. 584(4)(3)(1701)/2017 RCM- AJM dated on 29.08.2017.	The Modified Mining Plan along with Progressive Mine Closure has been approved by IBM, Ajmer (Rajasthan) vide letter no. 584(4)(3)(1795)/2019 RCM- AJM/1130 dated 24.07.2019 .
Page No. 3 & 4 Para 9, Line 13-14	CER Cost for 5 years is Rs 1.3 Crores.	CER Cost for 5 years is Rs 1.4 Crores. It has made a provision of Rs 3.4 Crore for next five years for both the mines.
Page No. 4 Para 9, Line 1	The Total Project Cost is Rs. 52 Crores.	The Total Project Cost is Rs. 62 Crores with contingency of Rs 50 Lakhs for any additional part Khasra Land to be purchased on lease boundary.
Page No. 4 Para 10, Line 1	Total Project Affected Families are 44.	Total Project Affected Families are 79.

6. In addition to above, committee noted that the Ministry vide its O.M No. 22-34/2018- IA.III, dated 08.01.2019 issued Standard EC Conditions for the non-coal mining projects and the present mining is yet to be commenced. The Standard EC conditions should be applicable in the instant case. Thus, in addition to above amendment the committee prescribed the following additional specific condition (keeping the earlier specific conditions same) and replace the earlier standard conditions with standard conditions as per O.M No. 22-34/2018- IA.III, dated 08.01.2019

Additional Specific Conditions:

- a) The revised budget earmarked for R&R activities is Rs 48.02 Crore. In addition to this an additional amount of Rs 50 Lakh kept as contingency for any additional part of Khasra Land to be purchased on lease boundary. The amount proposed in the R&R Plan shall be kept in separate bank account and same needs to be audited annually. The Proponent should annually (before 1st June of every year for proceeding year) submit the detailed report to Regional Office, MoEF&CC on implementation of R&R along with audited report of expenditure incurred and other supporting documents.
- b) The budget earmarked under CER is revised to Rs 1.4 Crore for five years. The amount proposed in the CER shall be kept in separate bank account and same needs to be audited annually. The Proponent should annually (before 1st June of every year for proceeding year) submit the detailed report to Regional Office, MoEF&CC on implementation of CER along with audited report of expenditure incurred and other supporting documents. At the end of life after implementation of all the activities proposed in EMP, Occupational Health Plan, Plantation Plan and CER if any amount left unspent then the same may be spent for the development of nearby villages in consultation with local administration.

2.9. Proposal of Majhgawan Diamond Mine, Supplementary Mining Lease of M/s NMDC Ltd. with 0.72 LTPA over burden removal and processing of Kimberlite ore of 8.0 LTPA for production of 1.00 lakh carats of Diamonds per

annum, located at village Majhgawan, Tehsil & District Panna, Madhya Pradesh in the mine lease area of 162.631 ha-Reconsideration of TOR.

Proposal no. IA/MP/MIN/80115/2018; File no. J-11015/121/2018-IA.II (M) - Proposal under Ministry's Notification vide S.O. (E) 1530, dated 06.04.2018.

The proposal is of M/s NMDC Ltd. for Supplementary Mining Lease area of 162.631 Ha with 0.72 LTPA over burden removal and processing of Kimberlite ore of 8.0 LTPA for production of 1.00 lakh carats of Diamond per annum. The mine is located at Village Majhgawan, District Panna, Madhya Pradesh. The supplementary mine lease consists of 162.631 Ha lease area, out of which 74.018 Ha is Forest land and remaining 88.613 Ha is Non-Forest Land. The mine lease area is covered under SOI Toposheet No: 63D/2 and bounded by Latitude: 24° 38"13.88" to 24° 39"15" N Longitude: 80° 00"40" to 80° 02"43.2" E (Based on WGS-84 Datum).

2. The proposal was appraised by EAC in its meeting held during October 23-24, 2018 wherein based on the discussion held and document submitted, the Committee **deferred** the proposal and sought additional information. Accordingly, Ministry vide letter no J-11015/120/2018-IA.II (M) dated 18th February, 2019 requested to PP to submit the information. PP vide letter no NMDC/PANNA/SML/EC/2019/665 dated 26.08.2019 submitted the information online on 29 Aug 2019, and the proposal was re considered in the EAC held during September 24-25, 2019 wherein the PP submitted the following:
3. PP submitted that the Supplementary Mining Lease of Majhgawan Diamond Mine was initially granted on 30.08.1969 vide letter no: 4/39/609/12 by the Government of M.P. The lease deed was signed on 24.08.1985. Now as per Rule3 (1) of Mineral (Mining by Government Companies) Rule 2015, the lease is deemed to have been granted for a period of 50 years up to 30.06.2020. The lease deed agreement was made on 27.09.2018 valid up to 30.06.2020 and the same was registered on 17.10.2018. PP also reported that the life of the mine is 17 years as per the mining plan vide letter no MP/Panna/Diamond/MPLN/MOD-31/2018-19 dated 14.01.2019 approved by the IBM, Jabalpur.

4. PP submitted the forest clearance letter no 8-93/98-FC dated 10.02.2003 from the Assistant Inspector General Forests, F.C Division, Ministry of Environment & Forests for diversion of 74.018 forest land for renewal of supplementary mining lease outside the Panna National Park in favour of M/s NMDC Ltd for diamond mining in District Panna under Section 2 of the Forest (Conservation) Act, 1980. Further, PP submitted letter no 8-93/1998-FC(pt.) dated 14th June, 2012 of Assistant Inspector General Forests, F.C. Division, Ministry of Environment & Forests granting permission for diversion of 74.018 ha forest land under section 2 of the Forest(Conservation) Act 1980. for renewal of supplementary Mining Lease (having total 162.631 ha area) for a period of five years only for Majhgaon Diamond Mining Project of National Mineral Development Corporation Limited, in Panna (Gangau) Sanctuary in Panna District of Madhya Pradesh. The validity for diversion of 74.018 ha forest land is for a period of five years only, i.e. till 2017 only.
5. PP submitted the order of Hon'ble Supreme Court dated 13.08.2008 in the matter of T.N. Godavaram Vs. Union of India (IA 1485 & 1507 in WP(C) 202 of 1995) wherein inter-alia it has mentioned that, "The project area is falling within the Panna National Park/Wildlife Sanctuary. This project was examined by the CEC and approved subject to fulfilments of the following conditions:
 - I. NPV as per the applicable rate will be deposited by NMDC for the 74.018 ha under its possession and 70.202 ha. of forest land used for Earthen Dam.
 - II. 5% of the capital cost incurred on diamond mining project will be deposited for undertaking conservation and protection in the Panna National Park & Panna (Gangao) Wildlife Sanctuary.
 - III. A proper Mine Closure Plan, which includes reclamation and rehabilitation measure, will be drawn and implemented at the cost of NMDC
 - IV. The notification dated 12.04.2006 issued by the appropriate authority will be withdrawn
 - V. A Monitoring Committee under the Chairmanship of the Chief Wildlife Warden with the Member Secretary, National Tiger Conservation Authority, Field Director, Panna National Park and a non- official Member of National Board for Wildlife (to be nominated by the MoEF) as its member will be responsible for

- (a) Approval of the mine closure Plan; (b) Prescribing and monitoring of various safeguards for operation of the mines; (c) Approval and Monitoring of annual work plan for utilisation of funds received from the NMDC towards the NPV and 5% of the project cost. The above project is approved subject to fulfilment of the above conditions.
6. PP submitted letter no NMDC/PANNA/DMP/MC/2019/653,419 dated 23.08.2019, wherein it is mentioned that the 8th meeting of Hon'ble Supreme Court appointed Committee on NMDC Diamond Mining Project, Panna to monitor diamond mine, visited on 6.7.2019. The minutes of 8th Monitoring committee was communicated vide letter No. DM/5388, Bhopal, dated 29.07.2019 to PCCF (WI)/CWLW, MP.
 7. PP submitted the copy of order dated 13th August, 2008 of Hon'ble Supreme Court in the matter of T.N. Godavarman Thirumulpad Vs Union of India &Ors (Writ Petition (Civil) No. 202 of 1995. In the said order the hon'ble Supreme Court mentioned that *"the mine may be permitted to continue for a period of five years. Further extension may be considered after report of the Monitoring Committee about effectiveness of the remedial measures and impact of mining on the tiger reserve."*
 8. PP submitted the Certified EC Compliance reported of R.O. MoEF&CC, Bhopal issued vide letter no 3-7/2006/(ENV)/448 dated 06.06.2019 for Diamond Mining project of M/s NMDC Ltd wherein inter-alia mentioned that out of 28 conditions, 09 are found being complied, 1 complied, 1 partly complied 13 agreed to comply and some compliance needs improvements which are in progress.
 9. PP submitted the site inspection report carried out by the AIGF(C), R.O. Bhopal wherein it was mentioned that *"it is clear that no action is pending at NMDC level for any compliance. The required funds have been deposited with the state Forest Department, Govt. of Madhya Pradesh. However the utilisation of funds on the approved APO is still awaited from the State Govt. of Madhya Pradesh. Further the AIGF(C) vide letter no 8A/11/2003-FCW/Partfile/293 dated 12.04.2019 communicated to the Chief Wildlife Warden, Govt of Madhya Pradesh, w.r.t. Site Inspection of Majhgawan Diamond Mine project for the implementation of the Condition no.7 of MoEFCC letter no J-*

11015/12/2018-IA.II(M) dated 18.02.2019 requesting to submit the information for compliance of the conditions stipulated by the Hon'ble Supreme Court of India and MoEF&CC".

10. PP submitted the Forth Report of the Task Force constituted by Forest Department, Govt. Of M.P. vide order no. F-5-11/2012/10-3 dated 09.02.2018 to monitor the environmental impacts of Majhgawan Diamond Mining Project, Panna. The Committee visited during 26th to 30th May, 2018 at Majhgawan, Panna. During the visit the committee observed that PP complied all the conditions imposed by the Task force except two conditions.
11. PP obtained the approval from State Wildlife Board, Bhopal vide letter no: 5935/ ma/chi dated 06.12.2005 and recommendations of the Standing Committee of national Wildlife Board vide letter no 6-3/2003 WL-I(pt) dated 10.02.2006.
12. PP submitted the Past Production details vide letter no nil dated 21.08.2018 from 1967-68 to 2017-18 by the Diamond Officer, Panna. However, the past production details submitted by the PP is not authenticated by the Department of Mines and geology, Government of Madhya Pradesh.
13. The committee deliberated on the submission made by PP and based on the deliberation by EAC and presentation made by PP, the Committee **deferred** the proposal and asked the Ministry to examine the proposal in light of Common Cause Judgment dated 02.08.2017 and S.O. 804(E) dated 14.03.2017 and other violations if any, and requested PP to submit the information as per the observations made by the committee as following.
 - I. PP should submit the recommendation of CEC for operation of mines submitted to compliance of conditions imposed by APEX Court.
 - II. PP should submit the Forest Clearance (74.018 ha) and mine lease documents for the proposed mine area.
 - III. Past Production details duly certified by DMG-Bhopal from 1993 on words till date.

2.10. Majhgawan Diamond Mine, Panna of M/s NMDC Ltd. with total excavation of 13.90 LTPA [ROM Kimberlite ore @ 8 LTPA and Overburden removal @ 5.90 LTPA for production of 1.00 lakh carats of Diamonds per annum], located at village Majhgawan, Tehsil & District Panna, Madhya Pradesh-(MLA 113.332ha)- Consideration of Proposal under Ministry's Notification vide S.O. (E) 1530, dated 06.04.2018-Reconsideration of TOR.

File No. J-11015/120/2018-IA.II (M); Proposal No: IA/MP/MIN/79085/2018.

The proposal of M/s NMDC Ltd. is for Supplementary Mining Lease area of 162.631 Ha with 0.72 LTPA over burden removal and processing of Kimberlite ore of 8.0 LTPA for production of 1.00 lakh carats of Diamonds per annum. The mine is located at Village Majhgawan, District Panna, Madhya Pradesh. The supplementary mine lease consists of 162.631 Ha lease area, out of which 74.018 Ha is a Forest land and remaining 88.613 Ha is Non-Forest Land. The mine lease area is covered under SOI Toposheet No: 63D/2 and bounded by Latitude: 24° 38'14.47" to 24° 38'56.479" N Longitude: 80° 00'40" to 80° 02'21.5" E (Based on WGS-84 Datum).

2. The above proposal was appraised by EAC in its meeting held during October 23-24, 2018 wherein, based on the discussion held and document submitted, the Committee **deferred** the proposal and sought additional information. Accordingly Ministry vide letter no J-11015/120/2018-IA.II (M) dated 18th February, 2019 requested PP to submit the information. PP vide letter no NMDC/PANNA/NML/EC/2019/664 dated 26.08.2019 submitted the information online on 29 Aug 2019, and the proposal is re-considered in the EAC held during September 24-25, 2019 wherein the PP submitted the following:
3. The main mining lease of Majhgawan Diamond Mine was initially granted in the year 1965 for a period of 20 years for an area of 116.30 ha of revenue land. The mine lease area was reduced to 113.332 ha and renewed for a period of 10 years w.e.f. 1985 to 1995. The lease was renewed for a period of 20 years from 15.07.2005 to 14.07.2025 vide order no F-19-114/2000/1201 dated 1.08.2014 by the Mineral Resource Department, Government of Madhya Pradesh and the lease deed agreement was made on 21.01.2015. The lease deed was registered on

25.03.2015. Presently, the lease is valid up to 14.07.2025. PP reported that the total main mine lease area is 113.332ha and no Forest land is involved in the main mine lease area. PP also reported that the life of the mine is 17 years as per the mining plan vide letter no. MP/Panna/Diamond/MPLN/MOD-22/2018-19 dated 27.11.2018 approved by the IBM, Jabalpur.

4. PP submitted the order of Hon'ble Supreme Court order dated 13.08.2008 in the matter of T.N. Godavaram Vs. Union of India (IA 1485 & 1507 in WP(C) 202 of 1995) wherein inter-alia it has mentioned that, "The project area is falling within the Panna National Park/Wildlife Sanctuary. This project was examined by CEC and has approval subject to fulfilments of the following conditions:
 - I. NPV as per the applicable rate will be deposited by NMDC for the 74.018ha. under its possession and 70.202ha. of forest land used for Earthen Dam.
 - II. 5% of the capital cost incurred on diamond mining project will be deposited for undertaking conservation and protection in the Panna National Park &Panna (Gangao) Wildlife Sanctuary.
 - III. A proper Mine Closure Plan, which includes reclamation and re-habitation measure, will be drawn and implemented at the cost of the NMDC
 - IV. The notification dated 12.04.2006 issued by the appropriate authority will be withdrawn
 - V. A Monitoring Committee under the Chairmanship of the Chief Wildlife Warden with the Member Secretary, National Tiger Conservation Authority, Field Director, Panna National Park and a non- official Member of their National Board for Wildlife (to be nominated by the MoEF) as its member will be responsible for (a) Approval of the mine closure Plan; (b) Prescribing and monitoring of various safeguards for operation of the mines; (c) Approval and Monitoring of the annual work plan for utilisation of funds received from the NMDC towards the NPV and 5% of the project cost."

5. PP submitted letter no NMDC/PANNA/DMP/MC/2019/653,419 dated 23.08.2019, wherein it is mentioned that the 8th meeting of Hon'ble Supreme Court appointed Committee on NMDC Diamond Mining Project, Panna to monitor diamond mine, visited on 6.7.2019. The minutes of 8th Monitoring committee was communicated vide letter No. DM/5388, Bhopal, dated 29.07.2019 to PCCF (WI)/CWLW, MP.
6. PP submitted the copy of order dated 13th August, 2008 of Hon'ble Supreme Court in the matter of T.N. Godavarman Thirumulpad Vs Union of India &Ors (Writ Petition (Civil) No. 202 of 1995. In the said order the hon'ble Supreme Court mentioned that *"the mine may be permitted to continue for a period of five years. Further extension may be considered after report of the Monitoring Committee about effectiveness of the remedial measures and impact of mining on the tiger reserve."*
7. PP submitted the Certified EC Compliance report of R.O. MoEF&CC, Bhopal vide letter no 3-7/2006/(ENV)/448 dated 06.06.2019, for the Diamond Mining project of M/s NMDC Ltd wherein inter-alia it is mentioned that out of 28 conditions, 09 are found being complied, 1 complied, 1 partly complied 13 agreed to comply and some compliance needs improvements which are in progress.
8. PP submitted the site inspection report carried out by the AIGF(C), R.O. Bhopal wherein it was mentioned that *"it is clear that no action is pending at NMDC level for any compliance. The required funds have been deposited with the state Forest Department, Govt. of Madhya Pradesh. However, the utilisation of funds on the approved APO is still awaited from the State Govt. of Madhya Pradesh. Further the AIGF(C) vide letter no 8A/11/2003-FCW/Partfile/293 dated 12.04.2019 communicated to the Chief Wildlife Warden, Govt of Madhya Pradesh, w.r.t. Site Inspection of Majhgawan Diamond Mine project for the implementation of the Condition no.7 of MoEFCC letter no J-11015/12/2018-IA.II(M) dated 18.02.2019 requesting to submit the information for compliance of the conditions stipulated by the Hon'ble Supreme Court of India and MoEF&CC"*.
9. PP submitted the Forth Report of the Task Force constituted by Forest Department, Govt. Of M.P. vide order no. F-5-11/2012/10-3 dated 09.02.2018 to monitor the environmental

impacts of Majhgawan Diamond Mining Project, Panna. The Committee visited during 26th to 30th May, 2018 at Majhgawan, Panna. During the visit the committee observed that PP complied all conditions imposed by the Task force except two conditions.

10. PP obtained the approval from State Wildlife Board, Bhopal vide letter no: 5935/ ma/chi dated 06.12.2005 and recommendations of the Standing Committee of national Wildlife Board vide letter no 6-3/2003 WL-I(pt) dated 10.02.2006.
11. PP submitted past production details vide letter no nil dated 21.08.2018 from 1967-68 to 2017-18 duly certified by the Diamond Officer, Panna. However, the past production details submitted by the PP is not authenticated by the Department of Mines and geology, Government of Madhya Pradesh and not adequate information.
12. The committee deliberated on the submission made by PP and based on the deliberation by EAC and presentation made by PP, the Committee **deferred** the proposal and asked the Ministry to examine the proposal in light of Common Cause Judgment dated 02.08.2017 and S.O. 804(E) dated 14.03.2017 and other violations if any, and requested PP to submit the information as per the observations made by the committee as following.
 - I. PP should submit the recommendation of CEC for operation of mines submitted to compliance of conditions imposed by APEX Court.
 - II. PP should submit the Forest Clearance (74.018 ha) and mine lease documents for the proposed mine area.
 - III. Past Production details duly certified by DMG-Bhopal from 1993 on words till date.

3.0. Table Agenda with permission of Chair

3.1 Kirari Limestone Mine (ML Area 167.048 ha) with production capacity of Limestone 0.36 Million TPA, Soil 76583 TPA, OB 54249 TPA by M/s. Nuvoco Vistas Corp. Ltd. (Formerly Lafarge India Limited) at Villages Kirari&Chorbhatti, Tehsil Akaltara, District Janjgir-Champa, Chhattisgarh-Applying for EC as per MoEF&CC Notification dated 06.04.2018)

File No: J-11015/45/2019-IA-II (M); Proposal No: IA/CG/MIN/80467/2018-Consideration of TOR.

The proposal is for grant of EC of M/s. Nuvoco Vistas Corp. Ltd. (Formerly Lafarge India Limited) for Kirari Limestone Mine with production of limestone 0.36 million TPA, Soil 76583 TPA and OB 54249 TPA in the mine lease area of 167.048 ha. The mine lease area is located at Villages Kirari&Chorbhatti, Tehsil Akaltara, District Janjgir-Champa, Chhattisgarh. The mine lease area lies between the latitude of 21° 57' 09.8764" N to 21° 58' 22.6330" N and Longitude of 82° 27' 05.6571" E to 82° 28' 12.2246" E and covered in the Toposheet number Core zone: 64 K/5 and Buffer zone: 64 K/5 & 64 J/8.

2. The project proposal was considered in the 5th EAC meeting held during May 29-30, 2019.
3. The project proponent had submitted that the Ministry has accorded EC to M/s. Lafarge India Limited vide letter no. J-11015/23/2002-IA-II(M) dated 09.12.2003 for 0.36 MTPA over an area of 167.048 ha under EIA Notification, 1994. Presently, M/s. Nuvoco Vistas Corp. Ltd. (Formerly Lafarge India Limited) applied for regulation of this EC under Ministry notification dated 06.04.2018. Based on the presentation made by PP and discussion held, the Committee observed the following:
 - (i). The EC dated 9.12.2003 was granted to M/s. Lafarge India Limited. The name change has been occurred on 10 March 2017 from M/s. Lafarge India Limited to M/s. Nuvoco Vistas Corp. Ltd, however, EC was not transferred in the name of M/s. Nuvoco Vistas Corp. Ltd and PP is mining till date without transfer of EC and it may be a case of violation. PP has submitted the application form on 19.03.2019 for transfer of EC.
 - (ii). The lease is transferred from M/s. Lafarge India Limited to M/s. Nuvoco Vistas Corp. Ltd with the validity period of 26.08.2020; however, the extension of lease from 26.08.2020 to 25.08.2050 is still in the name of M/s. Lafarge India Limited.
 - (iii). PP submitted their own compliance report for the EC dated 9.12.2003, however, certified compliance report from Regional Office of the Ministry was not submitted. The committee requested PP needs to submit the copy of all compliance report since the mining started.

- (iv). EC dated 9.12.2003 mentioned that the total mine lease area is 167.048 ha, out of which 97.321 ha is agricultural land and 69.277 ha is grazing land. However, the present application mentioned that 98.288 ha is agriculture land and 68.76 ha is government land. PP needs to submit the clarification on the same.
- (v). In view of the above, the Committee had recommended to **return the proposal in present form** and suggested the Ministry to take necessary action on carrying out the mining activity without transfer of EC. PP was asked to apply fresh application subjected to transfer of EC and extension of mine lease validity in the name of M/s. Nuvoco Vistas Corp. Ltd.
4. Member Secretary informed the Committee that this is a proposal for regularization of EC under Ministry's Notification dated 06.04.2018. The instant proposal was received by the Ministry within the window of this notification. The existing EC was granted to M/s. Lafarge India Limited but M/s. Nuvoco Vistas Corp. Ltd. has applied for regulation of EC under Ministry notification dated 06.04.2018. The existing EC is yet to be transferred to M/s. Nuvoco Vistas Corp. Ltd., however, PP has submitted application for transfer of EC which is under process. Therefore, in the instant case the **decision to return the proposal in present form** will deprive the PP to avail the time period stipulated for making application under the Ministry's Notification dated 06.04.2018 and henceforth the proposal cannot be considered under the provision of the said notification dated 06.04.2018. Therefore, Member Secretary requested the Committee to reconsider the decision/recommendations made on this proposal in earlier EAC meeting. The Committee deliberated the same and decided to revise the recommendation to **defer the case, instead of returning it in present form**. Accordingly, Ministry may issue necessary letter informing the PP to submit the required information and comply with the decisions made by the committee in its 5th meeting held during May 29-30, 2019, before approaching for regularization of EC.

3.2. Bailadila Iron Ore Mine, Deposit-11 Mining Lease of by M/s NMDC Limited with production capacity of 11.30 Million tons per annum ROM Iron Ore and 2.70 MTPA waste excavation {Total excavation:14 MTPA} in the mine lease

area of 874.924 ha located at Village Kirandul, Tehsil Dantewada, South Bastar Dantewada District Chhattisgarh- Reconsideration of TOR for amendment

**File No: J-11015/70/2018-IA-II(M);
Proposal No: IA/CG/MIN/75153/2018**

The proposal is of M/s NMDC Limited for Bailadila Iron Ore Deposit-11 (Deposit 11A, 11B and 11C) mining Lease with production capacity of 11.30 million tonnes per annum (ROM) of Iron ore and 2.70 MTPA waste excavation {Total excavation:14 MTPA} in the mine lease area of 874.924 ha. The mine lease area is located at Village Kirandul, Tehsil Dantewada, South Bastar Dantewada District, Chhattisgarh. The Deposit 11 M.L is located between Latitude 18°37'34.6066" to 18° 41'26.1792" N and Longitude 81° 13' 07.0266" to 81°15'18.0396" E and falls in Survey of India Toposheet E44J2 & J6 (New).

2. The project proposal was considered in the 8th EAC meeting held during Aug 27-28, 2019. The Committee **recommended** for considering grant of TOR for total excavation from combined ML- 11 (i.e 11A, 11B and 11C) i.e. 14 MTPA {11.30 MTPA ROM production (11A-2.8 MTPA+11B-7 MTPA+11C-1.5 MTPA = 11.30 MTPA) and 2.70 MTPA waste excavation} with standard TOR and certain specific conditions. The minutes of meeting was uploaded on 19.09.2019.
3. The project proponent vide letter no. NMDC/ENV/EC/DEP-11ML/KDL/2019/2224 dated 20.09.2019 (received on 21.09.2019 through email) submitted requisition for exemption of public consultation of Bailadila Iron Ore Mine, Deposit-11 Mining Lease.
4. The Member Secretary informed the Committee that the PP's request on exemption of public consultation comes under technical assessment of the project proposal which needs to be appraised by the EAC.
5. PP submitted that the proposal was submitted for regularization of environmental clearance from EIA 1994 to EIA 2006 notification as per Ministry's notification dated 06.04.2018. There is no proposal for increase in capacity expansion of ROM for iron ore production in Deposit-11 ML. PP further submitted that the projects had earlier obtained environmental clearance after undergoing public consultation. In addition, NMDC while submitting the brief summary of the project proposal has also

mentioned that the proposal may be exempted from fresh public consultation as same were conducted while obtaining separate ECs for other deposits/projects contiguous with this mine. Furthermore, while appraising their project proposal in this EAC meeting (9th EAC meeting, Agenda 2.9 and 2.10), NMDC has requested the Committee for issuing Terms of reference (TOR) for preparation of EIA/EMP report with fresh baseline data without public consultation for obtaining EC for Bailadila Iron Ore Mine, Deposit-11 Mining Lease for ROM iron ore production of 11.30 MTPA and waste excavation of 2.70 MTPA (Total excavation 14 MTPA).

6. Member Secretary informed the Committee that the Ministry confirmed PP's claims with their submission. The Committee deliberated the same and reiterated that as reported by PP the public consultation has already been conducted for the same production capacity and the concerns of the general public are duly considered and are under implementation, there is no production expansion from lease mines area for which EC available, therefore, request for exemption from Public hearing has merit. Thus, Committee **recommended to amend the ToR conditions limited to exemption from Public hearing**, but retaining all other conditions as prescribed in 8th EAC. Necessary amendment letter may be issued by Ministry in this regard after approval of competent authority. Additionally, it was also recommended that **PP should ensure that EIA/EMP report is prepared on fresh baseline data collected which should not older than 3 years.**

3.3 Constitution of Committee for Mines undergoing Auction in state of Odisha and Karnataka

Chairman-EAC highlighted the matter related to Mines which are going for auction and which will require fresh EC w.e.f. April 2020. In order to have the present status of compliance of mines going for auction by Ministry of Mines in the state of Odisha, it was felt by the committee that the list of such mines and their environmental clearance conditions may be called from Ministry of Mines. It was decided that a committee comprising of officials from EAC, OSPCB, IBM, DMG and MoEF&CC may be formed by Ministry to have present status of environmental parameters and compliance of EC conditions by these

mines. This will help in perusing the application of new leases, as and when they apply for EC. The committee may also visit the site of proposal considered as Agenda item no. 2.6 in this meeting and provide its report on EC compliance for further consideration of expansion proposal. Prof. Dr. Gurdeep Singh will represent as member from the EAC.

Furthermore, the committee was of the opinion that such compliance report will be helpful in appraising the upcoming project proposals from Odisha State and for including valuable/necessary precautionary conditions for protecting the Environment. The committee proposed that ministry may consider the proposal of forming committee for the mine leases subjected to auction in the state of Odisha and also for Karnataka.

The meeting ended with thanks

Standard Terms of Reference (TOR) for Mining Project

- 1) Year-wise production details since 1993-94 should be given, clearly stating the highest production achieved in any one year prior to 1993-94. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
- 2) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
- 4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 5) Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- 6) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- 7) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.
- 8) Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard

measures in each case should also be provided.

- 9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
- 12) A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- 13) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- 14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.

- 18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
- 19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
- 20) Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- 21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
- 22) One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least

- one monitoring station within 500 m of the mine lease in the predominant downwind direction. The mineralogical composition of PM₁₀, particularly for free silica, should be given.
- 23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
 - 24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
 - 25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
 - 26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
 - 27) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
 - 28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
 - 29) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
 - 30) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
 - 31) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected

for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.

- 32) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
- 33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- 34) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
- 35) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 36) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 37) Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 38) Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
- 39) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- 40) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 41) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- 42) A Disaster Management Plan shall be prepared and included in the

EIA/EMP Report.

- 43) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
 - 44) The activities and budget earmarked for Corporate Environmental Responsibility (CER) shall be as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 and the action plan on the activities proposed under CER shall be submitted at the time of appraisal of the project included in the EIA/EMP Report.
 - 45) The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
 - 46) Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the 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 needs to be submitted and included in the EIA/EMP Report.
- 47) Besides the above, the below mentioned general points are also to be followed: -
- a) All documents to be properly referenced with index and continuous page numbering.
 - b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
 - d) Where the documents provided are in a language other than English, an English translation should be provided.
 - e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
 - f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
 - g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the

draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.

- h) As per the circular no. J-11011/618/2010-IA. II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
- i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) Sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

Annexure-II

Standard TOR for Beneficiation Projects

- 1) The alternate sites considered, the relative merits and demerits and the reasons for selecting the proposed site for the Beneficiation Plant should be indicated.
- 2) Details of the technology and process involved for beneficiation should be given.
- 3) Location of the proposed Plant w.r.t. the source of raw material and mode of transportations of the ore from mines to the beneficiation plant should be justified.
- 4) Treatment of run of mine (ROM) and or of the fines/waste dump should be spelt out.
- 5) Estimation of the fines going into the washings should be made and its management described.
- 6) Details of the equipment, settling pond etc. should be furnished.
- 7) Detailed material balance should be provided.
- 8) Sources of raw material and its transportation should be indicated. Steps proposed to be taken to protect the ore from getting air borne should be brought out.
- 9) Management and disposal of tailings and closure plan of the tailing pond, if any after the project is over, should be detailed in a quantified manner.
- 10) The water requirement for the project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the project should also be indicated.
- 11) A copy of the document in support of the fact that the Proponent is the rightful lessee of the unit should be given.
- 12) All documents including EIA and public hearing should be compatible with one another in terms of the production levels, waste generation and its management and technology and should be in the name of the lessee.
- 13) All corner coordinates of the Unit, superimposed on a High Resolution Imagery/Toposheet should be provided. Such an Imagery of the proposed Unit should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 14) It should be clearly indicated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any

infringement/deviation/violation of the environmental or forest norms/conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.

- 15) Issues relating to Safety should be detailed. The proposed safeguard measures in each case should also be provided. Disaster management plan shall be prepared and included in the EIA/EMP Report.
- 16) The study area will comprise of 10 km zone around the Plant.
- 17) Cumulative impact study of both Beneficiation Plant with suggested mitigation measures as per the study should be described.
- 18) Location of Railway siding with its handling capacity and safety measures should be indicated.
- 19) Option to provide only silo for storage of minerals instead of open stacking to avoid fugitive dust should be explored and arrangements finalized justified.
- 20) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 21) Details of the land for any Over Burden Dumps outside the lease, such as extent of land area, distance from lease, its land use, R&R issues, if any, should be given.
- 22) A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the Project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- 23) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- 24) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.

- 25) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 26) A study shall be got done to ascertain the impact of the Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly detailed mitigative measures required, should be worked out with cost implications and submitted.
- 27) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- 28) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
- 29) Proximity to Areas declared as 'Critically Polluted' shall also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB/CPCB shall be secured and furnished to the effect that the proposed activities could be considered.
- 30) Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the unit w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- 31) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be

clearly brought out whether the village(s) located in the lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects, should be discussed in the report.

- 32) One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season); December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the unit in the pre-dominant downwind direction. The mineralogical composition of PM₁₀, particularly for free silica, should be given.
- 33) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
- 34) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- 35) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be secured and copy furnished.
- 36) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 37) Impact of the project on the water quality, both surface and groundwater should be assessed and necessary safeguard measures, if any required, should be provided.
- 38) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
- 39) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the project. The plant species selected for green belt should have

greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to the pollution.

- 40) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered.
- 41) Details of the onsite shelter and facilities to be provided to the workers should be included in the EIA report.
- 42) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area should be detailed.
- 43) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 44) Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 45) Public hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- 46) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the project should be given.
- 47) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- 48) A brief background of the Project, its financial position, Group Companies and legal issues etc should be provided with past and current important litigations if any.
- 49) Benefits of the Project, if the project is implemented should be outlined. The benefits of the projects shall clearly indicate environmental, social, economic, employment potential, etc.

**Standard EC conditions as per Ministry's OM No. 22-34/2018-
IA.III,
dated 08.01.2019**

I. Statutory compliance

- 1) This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- 2) The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors before commencing the mining operations.
- 3) The State Government concerned shall ensure that mining operation shall not be commenced 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 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors.
- 4) This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
- 5) This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
- 6) Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board/Committee.
- 7) The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by

Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.

- 8) The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
- 9) The Project Proponent shall follow the mitigation measures provided in MoEFCC's 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".
- 10) The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
- 11) A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- 12) State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- 13) The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
- 14) The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

II. Air quality monitoring and preservation

- 15) The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
- 16) Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.

III. Water quality monitoring and preservation

- 1) In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
- 2) 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. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table

should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug well located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

- 3) Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- 4) The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
- 5) Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along

with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.

- 6) Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.
- 7) Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
- 8) The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

IV. Noise and vibration monitoring and prevention

- 9) The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
- 10) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
- 11) The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All

personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

V. Mining plan

- 12) The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.
- 13) The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change for record and verification.
- 14) The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.

VI. Land reclamation

- 15) The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be

kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.

- 16) The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
- 17) The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
- 18) The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
- 19) The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC.
- 20) Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
- 21) Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak

rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.

- 22) The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

VII. Transportation

- 23) No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.
- 24) The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall

take necessary measures to avoid generation of fugitive dust emissions.

VIII. Green Belt

- 25) The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.
- 26) The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
- 27) The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
- 28) The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.
- 29) And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its

implementation status (annual) shall be submitted to the Regional Office of the Ministry.

IX. Public hearing and human health issues

- 30) The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEFCC Regional Office and DGMS on half-yearly basis.
- 31) The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.
- 32) The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than

30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).

- 33) The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEFCC annually along with details of the relief and compensation paid to workers having above indications.
- 34) The Project Proponent shall ensure that 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.
- 35) Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
- 36) The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

X. Corporate Environment Responsibility (CER)

- 37) The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.
- 38) Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEFCC and its concerned Regional Office.

XI. Miscellaneous

- 39) The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
- 40) The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- 41) The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
- 42) A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEFCC.
- 43) The concerned Regional Office of the MoEFCC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEFCC officer(s) by furnishing the requisite data / information / monitoring reports.

List of Expert Appraisal Committee (Non Coal Mining)

Sl. No	Name and Address	Designation	Signature 24.09.2019	Signature 25.09.2019
1	Dr. S.R. Wate, 148/149, Nagar Vikas Society, Narendra Nagar, Nagpur440015, Maharashtra	Chairman		
2	Dr. Ajay Deshpande, Flat A-101, Pristine Privilege Apartments, Opposite Prism, Near RohanNilay, Behind Spicer College, Aundh, Pune 410007, Maharashtra	Member		
3	Shri G.P. Kundargi, Plot No. 32, MOIL Vatika, Chicholi Road, Fetri, Nagpur 441501, Maharashtra	Member		
4	Dr. A.K. Malhotra, C-6, SubhavnaNiketan, Road No. 41, Pitampura, Delhi- 110034	Member		
5	Dr. Gurdeep Singh, Department of Environmental Science & Engg. Indian Institute of Technology (Indian School of Mines), Dhanbad 826004	Member		
6	Shri B Ramesh Kumar, H.No. 6-1-134/6, Balram Compound, Padmarao Nagar, Secunderabad-500025, Andhra Pradesh	Member		
7	Dr. AshaRajvanshi, WII, P.B# 18, chandrabani, Dehradun-248001, Uttarakhand	Member		
8	Prof. S. Ramakrishna Rao, D.No. 50-120-9/1, North Ext., Seethammadhara, Visakhapatnam-530013, Andhra Pradesh	Member		
9	ShriSantosh Gupta, Flat No. 405, Gaur Green Vista, NyayKhand-I, Indrapuram, Ghaziabad, UP-201014	Member		
10	Dr. Parimal Chandra Bhattacharjee, A/3 Asiyana Housing Complex Maligaon, Guwahati- 781011, Assam	Member		
11	Prof. MukeshKhare, Department of Civil Engineering, IIT, Delhi	Member		
12	Representative of DGMS Head Office, Sardar Patel Nagar, Dhanbad, Jharkhand 826001 dg@dgms.gov.in	Member		
13	ShriMantuBiswas, Controller of Mines, IBM Block D, Second Floor, Indra Bhavan, Civil Lines, Nagpur - 440001	Member		
14	Shri V.K. Soni, Scientist 'E', IMD, New Delhi - 110 003	Member		
15	Shri. Sundeep, Director IA-Division (Non-coal Mining sector) Agni-A106, Indira Paryavaran Bhawan, Ministry of Environment, Forest & Climate Change, Jorbagh Road, New Delhi- 110003	Member Secretary		