

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

SUMMARY RECORD OF 33rd MEETING OF THE RECONSTITUTED COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The 33rd meeting of the Reconstituted Expert Appraisal Committee for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during **June 21-22, 2018**. The list of participants is annexed. 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 32nd EAC Meeting:

The Minutes of the 32nd Meeting of EAC held during May 30-31, 2018 were circulated to the members of the Committee. The members made brief deliberations on the proposals placed in the last meeting and approved the same.

Dated: June 21, 2018 [Thursday]

Consideration of Proposals

**(2.1). Bailadila Iron Ore Project, Deposit-14 Mining Lease of M/s. NMDC Limited with proposed capacity expansion of 5.0 MTPA to 10.0 MTPA of Iron Ore, located at Kirandul, South Bastar Dantewada District, Chhattisgarh (MLA 322.368 Ha)(F.No: J-11015/400/2015-IA.II(M); Proposal No. IA/CG/MIN/32238/2015) (Consultant: M/s VIMTA LABS LIMITED)-
Consideration of EC**

The proposal of M/s NMDC Limited is for Iron Ore Mining for capacity expansion from 5 MTPA to 10 MTPA in the mine lease area of 322.368 Ha. The mine lease is located at Kirandul, South Bastar Dantewada District, Chhattisgarh. The iron ore Deposit-14 ML falls in SOI Toposheet no: E44J2 (65F/2). The ML area is located between Latitude 18°36'11.2022"N to 18°37'34.6006"N and Longitude 81°13'15.9460"E to 81°14'44.6788"E. The project site is very well connected to NH/SH and district head quarter Dantewada is about 40 km (by road) away from Kirandul and 390 km away from Raipur Airport.

The Committee noted that earlier, M/s NMDC has obtained integrated Environmental

clearance from Ministry, vide letter no: J-11015/483/2007-IA.II(M) dated 11/9/2007 for Bailadila Iron Ore Project, Deposit-14/11C, Kirandul (comprising of mining leases i.e. Deposit-14, Deposit-14 NMZ & Deposit-11C (part of Deposit-11 ML) over an area of 935.522 Ha for a ROM Iron ore production capacity of 12.00 MTPA.

M/s NMDC propose to enhance the ROM production capacity from existing 12.0 to 20.0 MTPA and accordingly submitted the application to MoEFCC. The proposal of TOR was considered by the EAC (Non-Coal-Mining) in the meeting held on 22nd December 2015. The TOR has been issued by the Ministry vide its letter no. F. No. J-11015/400/2015-IA.II (M), dated 8th January, 2016. Based on the TORs prescribed to the project, baseline environmental monitoring studies were undertaken during winter season 2015-16. The public hearing for the project proposal held on 06/08/2017 at Kirandul, South Bastar Dantewada District.

The proposal of EC was earlier placed before the EAC in its meeting held during March 22-23, 2018 wherein the Committee noted that the total area of the project is 935.522 ha which comprised of three leases (i) Bailadila Deposit-14, MLA 322.368ha, validity of lease upto 31.03.2020; (ii) Bailadila Deposit-14 NMZ, MLA 506.742ha, validity of lease upto 31.03.2020; and (iii) Bailadila Deposit-11C, area 106.412ha (Part of MLA of 874.924ha, validity of lease upto 31.03.2020). PP has got a single TOR for 935.522 ha as per their application in form I and prepared single EIA/EMP Report and conducted the Public Hearing for the 935.522 ha. The Committee deliberated the issue and is of the view that EC may be lease wise and PP has to take the EC lease wise. Further, the Project Proponent reported that the Forest Clearance was issued by MoEF&CC for Deposit 14 vide letter No. 8-41/97-FC dated 18.06.1999, Deposit 14 NMZ vide letter No. 8-40/97-FC dated 18.06.1999 and Deposit 11 NMZ vide letter No. 3-98/97-FC dated 22.12.1999. The forest clearance is valid up to 31.3.2020 in terms of MoEF&CC circular no. 11- 51/2015-FC dated 1.4.2015 and as per the MM (DR) Amendment Act, 2015.

Based on the information furnished and presentation made by the Project Proponent and discussions held before the EAC in its meeting held during March 22-23, 2018, the Committee was of the view that EC may be lease wise and accordingly suggested that there are two options i.e. (i) First PP may amalgamate all three lease areas in to one mine lease and accordingly submit the Proposal for consideration of EC before the EAC; (ii) PP may submit three applications lease wise for consideration of individual EC before the EAC. Therefore, the Committee deferred the proposal. Accordingly, the Ministry vide letter dated 12.04.2108 has communicated the recommendations of the EAC to the PP. In this context, M/s NMDC has chosen option no. (ii) i.e. to submit the lease wise applications for obtaining Environmental Clearance and submitted EIA/EMP report online on 31.05.2018 for Bailadila Deposit-14 ML area (322.368 Ha) for capacity expansion of ROM Iron Ore from existing 5.0 to 10.0 MTPA along with construction of new 10 MTPA crushing plant and downhill conveyor system.

The Committee noted that the PP has prepared the EIA/EMP report for expansion project without preparation and approval of mine plan for proposed enhanced capacity. The public consultation was held on 6/8/2017 without preparation and approval of mine plan. The

lease is valid upto 31.03.2020 as per the "The Mines and Minerals (Development and Regulation) Amendment Act, 2015". PP has also mentioned that as per rule 3(3) of Mineral (Mining by Government Company) Rules 2015, the lease period can be further extended for a period of 20 years at a time. The renewal application has been submitted on 10.9.2013 in Form-J to Mineral Resource Department, Raipur.

The Committee deliberated the proposal and is of the view that **PP has prepared the EIA/EMP report for expansion project without preparation and approval of mine plan/mining scheme for proposed expansion capacity. The public consultation was also conducted without preparation and approval of mine plan/mining scheme.** The lease is valid only upto 31.03.2020 and PP wants to expand the production capacity after getting the extension of validity of lease i.e. PP may or may not have the extension of validity of lease after 31.03.2020. **The Committee deliberated the proposal and based on the information submitted by PP, the Committee instructed NMDC to get the mine plan approved and incorporate it in EIA/EMP and deferred the Proposal. Therefore, the Committee recommended to return the proposal in present form.**

The Committee is of the view that the EIA/EMP report is based on mine plan/mining scheme and how the consultant [M/s VIMTA LABS LIMITED] submits such in-adequate and technically incorrect reports without preparation and approval of mine plan/mining scheme from IBM. The Committee has suggested that the **M/s VIMTA LABS LIMITED has to be warned for not providing such in-adequate and technically incorrect EIA/EMP report to the EAC**; an Action against the Consultant needs to be taken and a letter to be written to QCI-NABET for taking necessary action.

(2.2). Tantra Iron Ore Mining Project with enhancement of Iron Ore production capacity from 0.12 million TPA to 0.24 million TPA (ROM) along with Iron Ore Beneficiation Plant of capacity 1.0 MTPA and a crushing and screening plant by M/s Korp Resources Pvt. Ltd., located at Village Tantra, Dist. Sundargarh, Odisha (MLA: 72.56 ha.) (F. No. J-11015/236/2010-IA.II(M); Proposal No. IA/OR/MIN/20357/2013) – Consideration of EC

The proposal of M/s Korp Resources Pvt. Ltd. is for enhancement of Iron Ore production capacity from 0.12 million TPA to 0.24 million TPA (ROM) along with Iron Ore Beneficiation Plant of capacity 1.0 MTPA and a crushing and screening plant. The mine is located at Village Tantra, Dist. Sundargarh, Odisha in MLA of 72.56 ha. The coordinates of the mine lease area are as 21°52'40" to 21°52'48" E Latitude and 85° 10'14" to 85°11'03" N Longitude in topo-sheet no. 73-G/1.

The Member Secretary informed to the Committee that PP has filed a Court case against the Ministry in the Hon'ble High Court of Orissa at Cuttack vide WP(C) No. 16880 of 2017 & Contc. No. 668 of 2018 in the matter of M/s Korp Resources Pvt. Ltd. Vs. UOI & Ors. The Hon'ble Court vide its Orders dated 17.10.2017 & 18.4.2018. The Hon'ble High Court has disposed this petition and directed that the application of the petitioner be considered and decided by the said opposite party with law within six weeks w.e.f. 18.04.2018; Accordingly, the proposal is considered in this meeting.

The Committee noted that the proposal of EC was earlier considered by the EAC in its meeting held during February 24-25, 2014 wherein the Committee deferred the proposal and sought the following information viz. (i) Certified Compliance report of R.O. shall be submitted; (ii) A detailed study on the traffic density and load shall be submitted.

The Member Secretary has also informed the Committee that the Ministry of Mines, vide Notification No.S.O.2817 (E) dated 22nd November, 2010 had appointed a Commission of Inquiry consisting Justice M.B. Shah, retired Judge of the Supreme Court of India, for the purpose of making an inquiry in to mining of iron ore and manganese ore in contravention of the provision of various Statutes and the rules and regulations issued thereunder, in various States including the State of Odisha. In view of Justice Shah Commission report (2013), the Ministry of Environment, Forest and Climate Change (MoEF&CC) has entrusted the work to CSIR-NEERI to conduct a Carrying Capacity Study with an objective to develop (i) a sustainable development plan for mining activities in the impact area of about 1000 sq.km. in the State of Odisha and (ii) an environmental management plan for current as well as future developmental scenario.

CSIR-NEERI has conducted the study encompassing collection of primary data for various environmental components (viz. air, noise, water, soil/land, biological and socio-economic aspects), collection and analysis of environmental quality data by different mines in the region, modeling for transport scenario and infrastructure need assessment, and meetings/workshops with different stakeholders (like Department of Steel & Mines, Directorate of Mines, IBM-HQ & Regional Office, SPCB, GSI, MoEF&CC, State Forest Dept. etc. as well as senior executives from respective mines). NEERI has submitted the report along with the recommendations. The Committee deliberated the recommendations of the Report (Annexure II) and is of the view that the PP shall also submit the action plan on the recommendation of CSIR-NEERI report on carrying capacity study.

The Committee noted that PP has not submitted the documents/information w.r.t. compliance of agenda details which inter-alia are as below:

- (i) Certified Compliance report of MOEFCC R.O. w.r.t. compliance of earlier EC conditions;
- (ii) Compliance of order dated 2.8.2017 in CWP No. 114/2014 of Hon'ble Supreme Court
- (iii) Details of demand if any raised by Department of Mining and Geology
- (iv) Details of payment, if any made to Department of Mines & Geology
- (v) Validity of mine lease
- (vi) Status of mine whether working or not
- (vii) Details of past production of mine since its inception, duly authenticated by Department of Mines & Geology.
- (viii) Copy of affidavit needs to be submitted by PP in compliance of the Ministry's OM no. 3-50/2017-IA.III (Pt.), dated 30th May 2018.

- (ix) KML/Shape Files of the mine lease area at the time of presentation before EAC and to present on the details of mine lease online to show the present status of mine lease.

The Committee deliberated the recommendations of the NEERI Report and is of the view that the PP shall also submit the action plan and compliance of the recommendation of CSIR-NEERI report on carrying capacity study as enclosed at **Annexure II**.

The PP requested before the Committee that some time may be given so that they will collect the requisite information and submit the same before the EAC for further consideration. The Committee deliberated the proposal and **deferred** the proposal and is of the view that PP has to submit the above mentioned information/report with documentary proof for further appraisal before the EAC.

(2.3). Ball Clay, China Clay, Red & Yellow Ochre mining project of M/s Raw Products Plasters & Fertilizers (Mines) for enhancement of production capacity from 2,415 TPA to 0.125 million TPA, located at village Indo KaBala & Chani, Tehsil-Kolayat, District-Bikaner, Rajasthan (123.80ha)(F. No. J-11015/25/2014-IA.II (M); Proposal No. IA/RJ/MIN/22656/2013)-(Consultant: M/s JM Environet Pvt. Ltd.)– Re-Consideration of EC

The proposal of M/s Raw Products Plasters & Fertilizers (Mines) is for Renewal of Mining lease of Ball clay, China Clay, Red & Yellow Ochre Mining Project with enhancement of production capacity from 2,415 TPA to 1,25,000 TPA (99,774.60 TPA of Ball Clay, China Clay, Red & Yellow Ochre and 25,225.40 TPA of Sub-grade & Rejects). The mine lease area is located at Villages: Indo KaBala & Chani, Tehsil: Kolayat, District: Bikaner Rajasthan in ML Area of 123.80 ha. The mine lease area falls between Latitude of 27° 53'02.31" N to 27° 53' 57.06" N and Longitude of 72° 58' 53.47" E to 72° 59' 59.60" E. Mine lease falls within the Survey of India Toposheet No. 45 A/13. The PP presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

The proposal of EC was earlier considered in EAC meeting held during May 14-15, 2018 wherein the Committee deferred the proposal and sought the following requisite information:-

- (i). Government of Rajasthan may be asked to submit the valid lease documents and current status of lease whether it is valid or not.
- (ii). Two schedule-I faunal species i.e. *Gazellabennettii* (Chinkara) and *Felislybica* (Desert Cat) are found in the study area. Conservation Plan for the same has been prepared. The Committee deliberated the conservation plan and is of the view that budget for conservation plan needs to be adequately increased for its implementation. Proof of submission of conservation plan also needs to be submitted.
- (iii). PP needs to submit the detailed Green Belt Development plan on periphery of the lease along with type of plantation etc. Plant species needs to be revised.

- (iv). PP submitted the details of budget allocation for implementation of commitments made during public hearing which has been included in ESC plan. The Committee noted that the Ministry has recently issued a circular vide no. 22-65/2017-IA.III, dated 1st May 2018 on Corporate Environment Responsibility (CER). Accordingly, PP needs to submit the details of budget and its activities as per the said Circular.

In this context, the PP had submitted information on 31.05.2018 and accordingly the proposal is re-considered by the EAC in this meeting. PP has presented the point wise reply and the gist is as follows: -

- (i). Project Proponent reported that the Mining lease was granted in favor of M/s Raw Products Plasters & Fertilizers (Mines), near villages Indo KaBala&Chani, Tehsil-Kolayat, District- Bikaner, Rajasthan over an area of 123.80 ha by State Govt. of Rajasthan vide their order no F4(2)Khan/Gr.4/74 dated 01.06.1974 for a period of 20 Years from the date of registration. The agreement was executed on 16.01.1979 and registered on 07.04.1979. Thus, the period of lease was from 07.04.1979 to 06.04.1999. Lease validity is extended for 50 years as per Section 8A (6) of Mines and Minerals (Development and Regulation) Amendment Act, 2015. Letter from Mining Engineer, Department of Mines & Geology has been received vide their letter No ME/Bikaner/ML/2/1973/432 dated 31.05.2018.
- (ii). Project Proponent reported that the Budget for conservation plan has been increased from Rs. 10.0 Lacs/- to Rs. 15 Lacs/- for 10 years and same has been submitted to Forest Department vide letter dated 30.05.2018. Proof of submission of conservation plan to State Forest Department has also been submitted. The Committee deliberated the same.
- (iii). Project Proponent reported that the Length of mine lease periphery is about 6.60 km. 7.5 m width on lease periphery will be developed with greenbelt. Thus an area of about 5.0 ha will be covered under green Belt with 10,000 Plants with plant species like Mango (*Mangifera indica*), Khair (*Acacia catechu*), Kaner (*Nerium indicum*), Gum arabic tree (*Acacia Senegal*), Gugal (*Commiphorawightii*), Neem (*Azadirachta indica*), Pipal (*Ficus religiosa*), Ardu (*Ailanthus excelsa*), Babul (*Acacia Nilotica*), Ber (*Ziziphus mauritiana*), Dodha (*Odontanthera virians*). The Committee deliberated the same.
- (iv). With regard to details of budget and its activities as per MoEFCC circular vide no. 22-65/2017-IA.III, dated 1st May, 2018 on Corporate Environment Responsibility (CER); it was submitted that Corporate Environment Responsibility(CER) will be done nearby mine site as per MoEFCC Office Memorandum dated 01.05.2018; according to that project having capital investment \leq 100 Crores have to spend 2% of capital investment under CER. Under CER, issues raised during the public hearing and need of the locals have been covered. Total capital cost of Project is Rs. 50.0 Lakhs. Lessee has earmarked Rs. 12.3 Lakhs under CER. The activities, inter-alia, includes, (a) Rs.

1.5 Lakh for maintenance of religious pond at village Chani; (b) Rs. 1.0 Lakh for development of playground at village Indo ka Bala; (c) Rs. 1.5 Lakh for construction of 2 nos. of toilets in school of Village Indo Ka Bala; (d) Rs. 2.8 lakh for providing Wooden Bench/furniture (Approx no. 100) to nearby schools of Village Chani; and (e) Rs. 5.5 lakh for providing ambulance services. The Committee deliberated the same.

The Committee deliberated the proposal and based on the information submitted by PP, the Committee **recommended** the Proposal for grant of Environmental Clearance for enhancement of production capacity from 2,415 TPA to 1,25,000 TPA of Ball Clay, China Clay, Red & Yellow Ochre.

The Committee also **recommended additional specific conditions** viz. (i) No mining activities will take place until the permission of the State Government as per Law for diversion of land use change as applicable is obtained. (ii) The Proponent shall install online Ambient Air Quality Monitoring System and there should be system for display of digital AAQ data within 03 months at least at three locations as per wind direction. Online provisions of pH and turbidity meters at discharge points of STP and ETP and also at water storage ponds in the mining area may be made. Project Proponent should display the result digitally in front of the main Gate of the mine site. (iii) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of anti-snake venom including all other paramedical safeguards may be ensured before initiating the mining activities. (iv) PP shall run an awareness campaign on sanitation for women and utilization of Sanitary Napkin and also to distribute the Sanitary Napkin/pads to the women and provide the training for proper disposal. (v) 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 'PUC' certificate for all the vehicles from authorized pollution testing centers. (vi) Project Proponent has earmarked Rs. 12.3 Lakhs under CER. The activities, inter-alia, includes, (a) Rs. 1.5 Lakh for maintenance of religious pond at village Chani; (b) Rs. 1.0 Lakh for development of playground at village Indo kaBala; (c) Rs. 1.5 Lakh for construction of 2 nos. of toilets in school of Village Indo KaBala; (d) Rs. 2.8 lakh for providing Wooden Bench/furniture (Approx no. 100) to nearby schools of Village Chani; and (e) Rs. 5.5 lakh for providing ambulance services. PP shall implement the CER and the compliance may be sent to Regional Office of the MoEFCC.

(2.4). Pathrai Bauxite Mine of M/s Chhattisgarh Mineral Development Corporation Ltd. (CMDCL) with production capacity of 2,00,000 TPA of Bauxite, located at Village-Pathrai, Tehsil Mainpat, District-Suguja, Chhattisgarh (MLA: 99.350 ha) (F. No. J-11015/46/2015-IA-II(M);

Proposal No. IA/CG/MIN/26649/2015)- (Consultant: M/s Greencindia Consulting Private Limited) – Re-Consideration of EC

The Proposal of M/s Chhattisgarh Mineral Development Corporation Ltd. (CMDRC) is for is Pathrai Bauxite Mine with production capacity of 2,00,000 TPA of Bauxite in MLA of 99.350 ha. The mine lease area is located at Village-Pathrai, Tehsil Mainpat, District-Suguja, Chhattisgarh. The coordinates of mine lease are Latitude 22°48'01.5"N to 22°47'25.3"N & Longitudes 83°15'06.9"E to 83°15'37.4"E on survey of toposheet number 64N/5. The project is located in Seismic Zone –II.

The proposal of EC was earlier considered by the Expert Appraisal Committee in its meeting held during 22-23rd June, 2016 wherein the EAC deferred the proposal and was of the view that PP has to submit the following documents for further decision on the matter by the Committee:-

- (i) Revised EIA report incorporating the corrections, missing pages with proper indexing and page numbering.
- (ii) 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, 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 Schedule-I fauna found in the study area, the necessary plan 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.
- (iii) The Species selected for green belt should be revised as per the CPCB guidelines.
- (iv) A detailed report on measures to be taken for protection of water stream passing through the mine lease area.

In this context, the PP had submitted information on 07.05.2018 and accordingly the proposal is re-considered by the EAC in this meeting. PP has presented the point wise reply and the gist is as follows: -

- (i) The revised EIA report incorporating the corrections, missing pages with proper indexing and pagenumbers has been uploaded and circulated to the Committee members. The Committee deliberated the issues.
- (ii) PP has submitted Biodiversity Management Plan (including Wildlife Conservation Plan) duly approved by PCCF(Wild Life), Chhattisgarh, vide its letter dated 05/04/2018. This plan is prepared by Indian Institute of Bio-social Research and Development (IBRAD) which includes detailed list of flora and fauna found in core and buffer zone. Based on the study conducted IBRAD with Forest Department and in consultation with the local villagers only one Schedule-I species that i.e. Sloth

Bear is occasionally found in the area. Accordingly, the Conservation Plan was prepared for Sloth Bear Conservation and finally it was approved by the PCCF (Wildlife), Chhattisgarh. PP has earmarked Rs. 45.65 lakh for implementation of conservation plan and the same was deposited with State Government. The DFO, vide letter dated 21.06.2018 has certified that the Plan included entire list of fauna that were reported in the working plan meant for the entire forest division. The Committee deliberated the issues.

- (iii) The Project Proponent has submitted the list of species for green belt development as per the CPCB guidelines. The Committee deliberated the issues.
- (iv) A detailed report for protection of water stream passing through the mine lease area has been prepared. The mitigation measures for the protection of the seasonal water stream are suggested as (a) A 7.5 m barrier zone will be maintained along both sides of the seasonal water stream where no mining work will be taking place. (b) Permanent embankments will be made using OB and top soil of 2 m height approximately will be made at the barrier zone. (c) The seasonal water stream will be further pitched along the edges with stones and boulders to prevent erosion and (d) The embankments will be strengthened by planting grasses and native plant species to minimize any chances of collapsing due to mining activities. The Committee deliberated the issues.

PP has also reported that lease deed has been executed for Pathrai Bauxite Mines, Area 99.35 ha. on 09/01/2017. The Stage-I forest clearance has also been obtained by the MoEF&CC vide Letter No. F.No.8-25/2017-FC, dated 28.08.2017. The Stage-I forest Clearance compliance report has been forwarded to MoEF&CC on 11/04/2018, which is presently under process at MoEF&CC, New Delhi.

The Committee deliberated the proposal and based on the information submitted by PP, the Committee **recommended** the Proposal for grant of Environmental Clearance for production capacity of 2,00,000 TPA of Bauxite.

The Committee also **recommended additional specific conditions** viz. (i) The Proponent shall do the mining activities itself and not to auction/tender to a Mine Development Organization (MDO); (ii) The Proponent shall install online Ambient Air Quality Monitoring System and there should be system for display of digital AAQ data within 03 months at least at three locations as per wind direction. Online provisions of pH and turbidity meters at discharge points of STP and ETP and also at water storage ponds in the mining area may be made. Project Proponent should display the result digitally in front of the main Gate of the mine site; (iii) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of anti-snake venom including all other

paramedical safeguards may be ensured before initiating the mining activities; (iv) PP shall run an awareness campaign on sanitation for women and utilization of Sanitary Napkin and also to distribute the Sanitary Napkin/pads to the women and provide the training for proper disposal; and (v) Project Proponent shall implement the mitigation measures for the protection of the seasonal water stream which inter-alia includes, (a) A 7.5 m barrier zone will be maintained along both sides of the seasonal water stream where no mining work will be taking place; (b) Permanent embankments shall be made using OB and top soil of 2 m height approximately at the barrier zone; (c) The seasonal water stream will be pitched along the edges with stones and boulders to prevent erosion; and (d) The embankments will be strengthened by planting grasses and native plant species to minimize the chances of collapsing due to mining activities.

(2.5). Enhancement of production capacity of Iron ore from 5.0 million TPA (ROM) to 8.35 million TPA (7.35 million TPA of Iron Ore (ROM) + dry screening & crushing of 1.0 million TPA of low grade iron ore from old dumps within the lease area) and wet beneficiation plant with a throughput capacity of 1.5 million TPA by M/s Rungta Sons Pvt. Ltd., located at Villages-Oraghat & Sanindpur, Tehsil-Koira, District-Sundargarh, Odisha (MLA 82.961 ha) (F. No. J-11015/237/2016-IA.II(M); Proposal No. IA/OR/MIN/60609/2016)(Consultant: M/s Ecomen Laboratories Pvt. Ltd.)- Consideration of TOR

The Proposal of M/s Rungta Sons Pvt. Ltd. is forenhancement of production capacity of Iron ore from 5.0 million TPA (ROM) to 8.35 million TPA (7.35 million TPA of Iron Ore (ROM) + dry screening & crushing of 1.0 million TPA of low grade iron ore from old dumps within the lease area) and wet beneficiation plant with a throughput capacity of 1.5 million TPA. The mine is located at Villages –Oraghat & Sanindpur, Tehsil – Koira, District-Sundargarh, Odisha in the MLA 82.961 ha. The site is at a distance of 28 km from Barbil and is well connected by an all-weather metal road. The area is bounded by Latitude 21° 55' 21.46872" to 21° 55' 21.24408" Longitude 85° 19' 13.96820" to 85° 18' 25.78464" in Survey of India Toposheet no. 73 G/5 (F45N5). The PP presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

The lease area of 82.961 ha comprises of 74.933 ha of forest land and 8.028 ha of non-forest land. Stage-II Forest clearance for an area of 10.80 ha of revenue forest (K.F.) has been accorded by MoEF, Govt. of India vide letter no. 8(21)5/2006-FCE dated 04/05/2006. Further, Stage II Forest Clearance has been accorded by Ministry of Environment, Forest & Climate Change, vide letter no. 8-18/2011-FC dt. 14.02.2014 over 64.133 ha. (74.933-10.80 ha) balance forest land (including 4.929 ha for safety zone). Total forest area diverted is 74.933 ha. PP reported that in pursuance of the MMDR Amendment Act, 2015, the mining lease period has been extended up to 09.12.2032 by execution of a Supplementary Lease Deed on 14.07.2016.

The mine has been accorded environmental clearance by the Ministry vide letter no. J-11015/165/2011-IA.II (M), dated 10.09.2013 for mining of 5.0 million TPA (ROM) iron ore and setting up a Wet Beneficiation Plant with a throughput capacity of 1.5 million TPA. At

present, the production of the mine is restricted to excavation of Iron ore (ROM) from mine. This ROM has been crushed and screened to produce processed ore of +55% and -55% Fe. Project Proponent reported that the breakup of land use category is 56.312ha for mining, 9.53 ha for over burden/ dump, 2.04 ha for mineral storage, infrastructure (0.22 ha), roads (1.819ha), green belt/plantation (6.735 ha), mine camp (0.951 ha) and unutilized (5.354 ha). Now, PP is proposed to increase the production of ROM from 5.0 MTPA to total handling of 8.35 MTPA which include 7.35 MTPA ROM excavations from mine & dry screening and crushing of low grade iron ore of 1.0 MTPA. Wet beneficiation plant with throughput capacity of 1.5 MTPA capacity has already been accorded in the environment clearance by the Ministry vide letter no. J-11015/165/2011-IA.II(M), dated 10.09.2013 and the same will continue.

The Mining Plan along with Progressive Mine Closure Plan is approved by Indian Bureau of Mines vide letter no. MS/FM/13-ORI/BHU/2017-18/1696, dated 10.10.2017. The working will be open cast fully mechanized. Total Mineable Reserve is 35.188 million tonnes (Total resources is 43.74 million tonnes). The life of the mine is 6 years from 01.08.2017. The conventional opencast mining with mechanized drilling with 110mm dia drill machine, deep hole blasting, excavation by excavator, rock breaker for breaking of iron ore boulder to avoid blasting, stacking by loader shall be adopted. The ROM iron ore will be processed through dry crushing and screening mobile units. The low grade ore obtained during the process as well as from reworking of old dumps/stacks will be processed through the wet beneficiation plant to improve the quality of ore.

Project Proponent reported that the ROM Iron ore of Oraghat Iron Ore Mines will be hauled through trucks/dumpers to dry as well as wet processing plants. After processing, the finished iron ore will be carried through trucks directly to the ports as well as to the Railway siding and loaded into Rail wagons and dispatched mainly to the steel, pelletisation, sponge, sinter plants throughout India and also to the ports for export. The waste materials of Oraghat Mines are mainly laterite, lateritic Iron ore (Fe<45%), BHQ, BHJ, shale, lateritic soil etc. Total 3387386 m³ of waste material is available in the existing dumps. It is anticipated that 5398864 m³ of waste material (waste from mine excavation + dry slime as waste) will be generated up to the end of the life of the mine. Part of the waste material (880705 m³) of this mine will be dumped on the existing dump yard and balance quantity of the waste material (4518159 m³) will be used for backfilling of exhausted quarry. Previously, the grade of waste material was considered as below 58% Fe content whereas presently the grade of waste material is fixed at Fe content below 45% Fe. So, the old waste of Oraghat mines at present are considered as iron ore resource of low grade non-saleable ore.

The project proponent has applied to the Department of Water Resources (DOWR), Govt. of Odisha for allocation of 2275.1 KLD of surface water from SunaNadi for industrial use/environmental maintenance and 202 KLD of ground water for drinking and domestic use only in phased manner. At present, the permission from DOWR, Govt. of Odisha for drawl of 1255 KLD of surface water from SunaNadi and 152 KLD of ground water in 1st phase is available with the lessee. The permission for balance quantity is under process with Govt. of Odisha. The requirement of water after proposed expansion will be 3430.7 KLD (3128.7 KLD of surface water for industrial use/environmental maintenance + 302 KLD of ground water for drinking and domestic use only). The project proponent has already received NOC from

Central Ground Water Authority, Ministry of Water resources, River Development and Ganga Rejuvenation, Govt. of India for withdrawal of 302 KLD of ground water

Project Proponent reported that presently 469 nos. of people are directly employed in the mine. This will increase to 531 after expansion and indirect employment of 500 people as contract jobs, which will mainly be extended to the local people. So, 1031 people will get engagement in total. At present 6.735 hectare of lease area is under green belt. This will increase to 7.665 hectares at the conceptual period. Further at the end of life of the mine approximately 41.016 hectare of exhausted quarry will be back filled and afforested and 13.331 ha will be covered under bench plantation. The mine has a Primary health centre for medical aid of the workers and villagers. Blacktop/concrete roads are constructed in villages as per public requirement. Deep bore well with submersible pumps have been installed in different villages for safe drinking water supply. The estimated project cost is Rs.400 Crores. PP reported that there is no wild life sanctuary/tiger Reserves/National Park is located within 10 km radius of the mine.

Project Proponent reported that the mine is in operation since 1982. Presently the mine is in operation with due compliance of the Hon'ble Supreme Court Order dated 02.08.2017 in W.P.(C) No-114/2014. The details are as follows:

S. No.	Issue	PP's submission
1.	Compliance of Order dated 02.08.2017 in CWP no. 114/2014 of Hon'ble Supreme Court.	The DDM, Koiravide Memo No. 1554/Mines, dated 09.04.2018 has issued a certificate that presently the mine is working with all the valid statutory clearances and compliance of the Hon'ble Supreme Court Order dated 02.08.2017 in CWP no. 114/2014.
2.	Details of demand if any raised by Dept. of Mining and Geology, Govt. of Odisha.	<p>(a) Demand note of Rs. 252,05,83,158.34 (Rupees two hundred fifty two cores five lakh Eighty three thousand one hundred fifty eight & thirty four paise) was issued by Dept. of Mines, Govt. of Odisha vide letter no. 5058/Mines, dated 02.09.2017 toward compensation under Section 21 (5) of MMDR Act, 1957 for production without/in excess of the EC.</p> <p>(b) Demand note of Rs. 51,08,346/- (Rupees Fifty one lakh Eight thousand Three hundred forty six) was issued by Dept. of Mines, Govt. of Odisha vide letter no. 5927/Mines, dated 24.10.2017 toward compensation under Section 21 (5) of MMDR Act, 1957 for production made in excess of the lower of</p>

		the approved limit under Mining Plan and Consent to Operate.
3.	Details of payment, if any made to Dept. of Mines and Geology, Govt. of Odisha.	<p>(a) With regard to Demand No. 5058/Mines, dated 02.09.2017, the Proponent has made the payment of Rs. 252,05,83,159 (Rupees two hundred fifty two cores five lakh Eighty three thousand one hundred fifty nine) vide e-challan reference ID: 27DE007D6, Challan No. 8443/95, dated 27.12.2017 toward compensation under Section 21 (5) of MMDR Act, 1957 for production without/in excess of the EC.</p> <p>(b) With regard to Demand No. 5927/Mines, dated 24.10.2017, the Proponent has not made the payment as demand raised by the Govt. of Odisha based on the Hon'ble Supreme Court order dated 02.08.2017. PP reported that they had filed a Revision Application No. 22/(54)/2017/RC-I before the Ministry of Mines against the demand note of State Govt. of Odisha. The aforesaid demand has been stayed by the RA, Ministry of Mines on dated 28.12.2017.</p>
4.	Validity of mine lease.	As per the MMDR Amendment Act, 2015 mining lease of Oraghat Iron Ore Mine has been extended and valid up to 09.12.2032.
5.	Status of Mine whether working or not	The mine is in operation.
6.	Details of the past production of mines since its inception, duly authenticated by Dept. of Mines and Geology, Govt. of Odisha.	The details of past production of iron ore since 1984 which is duly authenticated by Deputy Director of Mines, Koirahas been submitted by PP.

Project proponent reported that there are three cases which are at various level viz. (a) A court case 2(C) C No.37/2013 has been filed in the court of SDJM, Bonai, Sundargarh, for violation under the Environment (Protection) Act, 1986. The said case has been stayed on 12.07.2013 by the Hon'ble High Court of Orissa in W.P. (CRL) NO.837/2013 in Misc. Case No. 328/2013. (b) Revision Application bearing No. 22/(64)/2012/RC-I filed by the lessee before the Mines Tribunal, Ministry of Mines, Govt. of India, New Delhi against the demand notice dated 20.10.2012 U/s 21(5) of the MMDR Act, 1957, which has been disposed of by Mines Tribunal, Ministry of Mines, Govt. of India, New Delhi on 16.08.2017, (c) Revision Application No. 22/(54)/2017/RC-I is Pending before Ministry of Mines, Government of India, New Delhi

against the demand of State Govt. of Odisha vide letter no. 5927/Mines dated 24.10.2017 U/s.21(5) of MMDR Act, 1957 for mineral produced in excess of the lower of the approved limits under Mining Plan and Consent to Operate. The aforesaid demand has been stayed by the Ministry of Mines on dated 28.12.2017.

The Member Secretary has informed the Committee that the Ministry of Mines, vide Notification No.S.O.2817 (E) dated 22nd November, 2010 had appointed a Commission of Inquiry consisting Justice M.B. Shah, retired Judge of the Supreme Court of India, for the purpose of making an inquiry in to mining of iron ore and manganese ore in contravention of the provision of various Statues and the rules and regulations issued there under, in various States including the State of Odisha. In view of Justice Shah Commission report (2013), the Ministry of Environment, Forest and Climate Change (MoEF&CC) has entrusted the work to CSIR-NEERI to conduct a Carrying Capacity Study with an objective to develop (i) a sustainable development plan for mining activities in the impact area of about 1000 sq.km. in the State of Odisha and (ii) an environmental management plan for current as well as future developmental scenario.

CSIR-NEERI has conducted the study encompassing collection of primary data for various environmental components (viz. air, noise, water, soil/land, biological and socio-economic aspects), collection and analysis of environmental quality data by different mines in the region, modeling for transport scenario and infrastructure need assessment, and meetings/workshops with different stakeholders (like Department of Steel & Mines, Directorate of Mines, IBM-HQ & Regional Office, SPCB, GSI, MoEF&CC, State Forest Dept. etc. as well as senior executives from respective mines). NEERI has submitted the report along with the recommendations. **The Committee deliberated the recommendations and is of the view that the recommendation of CSIR-NEERI report on carrying capacity study may be included in the TOR condition w.r.t. mining proposal of Iron Ore and/or manganese in the State of Odisha.**

Based on the information submitted and presentation made by PP, the proposal was **recommended for Standard TOR subject to submission** of compliances as per the MoEF&CC OM No.3-50/2017-IA.III(Pt.), dated 30.05.2018 w.r.t. 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. Further, the TOR may have the specific conditions as recommended by CSIR-NEERI on carrying capacity study as per **Annexure II**. PP shall also submit the details of final mine closure plan in the EIA/EMP Report.

(2.6). Expansion of Limestone (minor mineral) Production Capacity from 9,165 TPA to 5,00,000 TPA of Limestone and installation of Crusher with 400 TPH Capacity, located at Village: Sinla, Tehsil: Jaitaran, District: Pali, Rajasthan by M/s Ramgopal Cement Company Private Ltd. (MLA: 100ha ; ML No. 96/95) (F. No. J-11015/53/2018-IA.II(M); Proposal No. IA/RJ/MIN/72380/2018)- (Consultant: M/s J.M. EnviroNet Pvt. Ltd.)- Consideration of TOR

The proposal of M/s. Ramgopal Cement Company Private Limited is for Expansion of Limestone (minor mineral) production capacity from 9,165 TPA to 5,00,000 TPA of Limestone

and installation of Crusher with 400 TPH Capacity. The M L Area is 100 ha and ML No. 96/95. The mine lease area is located at Near Village: Sinla, Tehsil: Jaitaran, District: Pali, Rajasthan. The Mining Lease area is bounded between latitudes of 26°20'32.9" N to 26°21'11.9" N and longitudes of 73°49'19.4" E to 73°50'02.9" E. The area is located on Survey of India Toposheet no. G43H11 & G43H15. The Project is located in Seismic Zone –II. The PP presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

Total Mine Lease area is 100 ha, out of which 71.66 ha is Govt. land, 28.34 ha is private land. There is no Forest land involved in the Mine lease area. Department of Mines & Geology, Government of Rajasthan has granted Mining Lease over an area of 100 hectares near Village: Sinla, Tehsil: Jaitaran, District: Pali on dated 30.06.1986 for 10 years in favour of Sh. Kishore Kumar Mali S/o Sh. Ghevar Chand Mali. The Mining Lease has been transferred to Sh. Mishri Lal Mali s/o Sh. Pukhraj Mali through office order dated 05.05.1995. First renewal of Mining Lease was executed on dated 28.06.1996 for 20 years. Later on Mining Lease area was transferred to M/s Shri Nath Minerals and Chemicals, Jodhpur on 19.11.2008 and same has been executed on dated 21.11.2008. Mining Lease was further transferred to M/s Ramgopal Cement Company Private Limited by M/s Shri Nath Minerals and Chemicals, Jodhpur vide Order no. AA NI KHA/JOD/CC/MINOR/SOJAT/ML 96/95/778 dated 07.03.2011 and same has been executed on dated 31.03.2011. The Mining Lease period was extended from 20 year period to 30 year period vide Mining Engineer, Sojat order dated 20.02.2015. Later, the ME, Sojat extended the lease period from 20 years to 30 years vide letter no. KHA A/ Sojat/ML 96/95/161 dated 23.04.2015. Later, after notification of RMMCR-2017, the lease period was further extended from 30 years to 50 years vide Mining Engineer, Sojat order No. KHA A/SOJAT/MINOR/2017/1998 dated 13.04.2017.

Modified Mining Plan with Progressive Mine Closure Plan has been approved by Mining Engineer, Department of Mines & Geology, Jodhpur vide letter no. ME/JO/CC/SOJAT/MINOR/ML/96/1995/6932 dated 08.01.2018. Mining will be carried out by Fully Mechanized Opencast Conventional Mining Method, by a combination of shovel and dumper with drilling and blasting. One Crusher of 400 TPH crusher capacity is proposed to be installed within the Mine Lease area. The crushed limestone will be transported from the mine site to the different Limestone consuming industries by road. Total Mineable reserves are 21.66 Million Tonnes and Life of mine will be approximately 44 years. Total water requirement for the proposed Expansion in Limestone Mining project will be 50 KLD which will be sourced from the Ground water and mine pit. Mine working ultimate depth is proposed to 111 m bgl will intersect the ground water table at 42 to 52 m bgl. Necessary permission from CGWA will be taken for intersection of ground water and dewatering. Total Manpower for the project will be 42 Persons. The total cost of project is Rs. 9.86 Crores/- The Capital Cost for Environment Protection is Rs. 100 Lakhs/- with Recurring cost of Rs. 10 Lakhs per annum/.

The Committee noted that limestone mined out from Sinla Limestone mine will be used in different Lime stone consumer industries as glass, cement, abrasive etc. of the nearby areas; however, the Mine plan was approved by the Department of Mines and Geology, Govt. of Rajasthan as 'Minor Mineral'. PP needs to clarify **whether the instant limestone mining proposal is for major mineral or minor mineral**. The Committee also suggested that the

PP shall **revise the Form-I and PFR** w.r.t. production capacity of Limestone, details of total excavation overburden/top soil/waste/inert-burden etc., so that the EIA/EMP report can reflect the impact of total excavation of mineral/ OB/Top soil etc.

Based on the information submitted and presentation made by PP, the instant **proposal is returned in present form and PP to apply afresh**. The Committee suggested that the PP needs to submit the afresh proposal including the above mentioned deficiencies in the documents for further consideration before the EAC.

(2.7). Mahaprabat (Unchabali) Iron Ore Mine of M/s Odisha Mining Corporation Pvt. Ltd. for enhancement of iron ore production capacity from 0.07 MTPA to 1.0 MTPA, located at villages- Unchabali & Balda, Joda block, sub-division-Champua, District-Keonjhar, Odisha (MLA: 68 ha) (F. No. J-11015/55/2018-IA.II.(M); Proposal No. IA/OR/MIN/74030/2018)-(Consultant: MECON, Ranchi)-Consideration of TOR

The Proposal of M/s Odisha Mining Corporation Pvt. Ltd. is for enhancement of Iron Ore from 0.07 Million TPA to 1.0 Million TPA the mine lease area of 68ha. The mine is located at villages of Unchabali&Balda, Joda Block, Barbil Tehsil, Champua Sub-division District-Keonjhar, Odisha. The lease area fall in Latitude: 21°52'42.54705"-21°53'23.54719" North, Longitude: 85°25' 5.66779" to 85°25' 36.49480" East and covered in Survey of India Topo Sheet No. 73G/5. The area is marked by undulating hills with altitudes varying from 525 mRL to 608.5 m RL. Lease area is accessible from Joda via Jururhi through 18 km long road consisting of 17 km long metal and 1 km long all weather road. The nearest railhead Banspani is at a distance of 14 Km from the lease area via Jururhi.

The total lease area is 68 ha which is forest land. Forest clearance proposal for 68 ha has already been applied and is under consideration by Ministry for Stage-I Forest Clearance. The Environmental Clearance has been obtained vide letter no. J-11015/779/2007-IA.II (M), dated 16th January 2009 from MoEF for production of 0.07 million TPA of Iron ore.Consent to Establish obtained from SPCB, Odisha vide letter No. 9413/Ind-II-NOC-5984, dated 07.06.2016.The lease deed was executed on 09th June, 2008 for a period of 20 years and the Lease validity is up to 8thJune 2028. Review of Mining Plan was approved by IBM vide letter No-MS/FM/34-ORI/BHU/2017-18, dated 27.12.2017.

Project Proponent reported that the mine is a new mine and not commenced operation since the date of grant of mining lease. The details are as follows:

Sl.No.	Issues	PP's submission
1	Compliance of Order dated 02.08.2017 in CWP no. 114/2014 of Hon'ble Supreme Court.	Not applicable, as the mine has not commenced operation since the date of grant of mining lease.
2	Details of demand if any raised by Dept. of Mining and Geology, Govt. of Odisha.	No demand has been raised by Department of Mining and Geology, Govt. of Odisha.

3	Details of payment, if any made to Dept. of Mines and Geology, Govt. of Odisha	Not applicable as the demand has not been raised by Department of Mining and Geology, Govt. of Odisha.
4	Validity of mine lease.	The lease is valid upto 10.06.2028.
5	Status of Mine whether working or not.	Not working.
6	Details of the past production of mines since its inception, duly authenticated by Dept. of Mines and Geology, Govt. of Odisha.	Not applicable as the mine has not commenced operation since the date of grant of mining lease.

The PP reported that the mining operations will be through mechanized opencast mining system, involving shovel-dumper combinations, deep hole drilling and blasting. The total water requirement will be 60 m³/day comprising 15 m³/day for domestic use and 45 m³/day for industrial use. The water required will be sourced from the bore well for domestic purpose and from nearby by nalla for industrial purpose. The proposed mine expansion is expected to generate about 270 no of direct employment. The total project cost for the mine expansion for plant and machinery and pre-operative expenses are expected to be Rs. 20 crores. The Project proponent reported that there is no ecologically sensitive features like national parks, biospheres, sanctuaries, elephant corridors, Tiger reserves, etc. within 10 km radius of the mine site. Four Reserve Forests namely Naibuga RF, Pedipokhari RF, Baitarani RF and Chamakpur RF are located in the buffer zone of the mine at a distance of 5.5 Km, 7 Km, 7 Km and 7.5 Km respectively from the mine lease boundary. In addition Balda forest, Dandahui Forest and unclassed forests are also in the buffer zone of the mine. Baitarani river flows at a distance of 3Km from eastern part of the Mining lease. The total geological reserve as on 31.03.2016 for iron is 10.56 million tonnes and the mineable reserve is 7.652 million tonnes. The total waste generated till the end of approved mining plan period will be 26, 49,980 m³ of waste. The life of the iron ore mine is estimated to be 8 years @ 1 million TPA production of Iron ore. An area over 43.436 ha will be mined out at the end of scheme period. Areas under excavation and OB dumps will be fully reclaimed/rehabilitated after cessation of mining operations.

The Member Secretary has informed the Committee that the Ministry of Mines, vide Notification No.S.O.2817 (E) dated 22nd November, 2010 had appointed a Commission of Inquiry consisting Justice M.B. Shah, retired Judge of the Supreme Court of India, for the purpose of making an inquiry in to mining of iron ore and manganese ore in contravention of the provision of various Statues and the rules and regulations issued there under, in various States including the State of Odisha. In view of Justice Shah Commission report (2013), the Ministry of Environment, Forest and Climate Change (MoEF&CC) has entrusted the work to CSIR-NEERI to conduct a Carrying Capacity Study with an objective to develop (i) a sustainable development plan for mining activities in the impact area of about 1000 sq.km. in the State of Odisha and (ii) an environmental management plan for current as well as future developmental scenario.

CSIR-NEERI has conducted the study encompassing collection of primary data for various environmental components (viz. air, noise, water, soil/land, biological and socio-economic aspects), collection and analysis of environmental quality data by different mines in the region, modeling for transport scenario and infrastructure need assessment, and meetings/workshops with different stakeholders (like Department of Steel & Mines, Directorate of Mines, IBM-HQ & Regional Office, SPCB, GSI, MoEF&CC, State Forest Dept. etc. as well as senior executives from respective mines). NEERI has submitted the report along with the recommendations. **The Committee deliberated the recommendations and is of the view that the recommendation of CSIR-NEERI report on carrying capacity study may be included in the TOR condition w.r.t. mining proposal of Iron Ore and/or manganese in the State of Odisha.**

Based on the information submitted and presentation made by PP, the proposal was **recommended for Standard TOR subject to submission** of compliances as per the MoEFCC OM No.3-50/2017-IA.III(Pt.), dated 30.05.2018 w.r.t. 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. Further, the TOR may have the specific conditions as recommended by CSIR-NEERI on carrying capacity study as per **Annexure II**. PP shall also submit the details of final mine closure plan in the EIA/EMP Report.

(2.8). Karunda Limestone Mine (ML No. 03/ 2003) of M/s J. K. Cement Works with enhancement of production capacity from 2.0 Million TPA to 3.6 Million TPA of Mineral, located at Village – Karunda, Tehsil – Nimbahera, District – Chittorgarh, Rajasthan (MLA 240.86 Ha.) (File No.:- J-11015/56/2018-IA-II (M); Proposal No.:IA/RJ/MIN/73111/2018)- Consideration of TOR Proposal

The proposal of M/s J. K. Cement Works is for Karunda Limestone Mine (ML No. – 03/ 2003) with enhancement of production capacity from 2.0 Million TPA to 3.6 Million TPA of Limestone in the mine lease area of 240.86 Ha. The mine lease area is located at Village – Karunda, Tehsil – Nimbahera, District – Chittorgarh, Rajasthan. The Mining lease area is covered by Toposheet No. 45 L/ 10.

PP reported that the mining lease was originally sanctioned in favor of J. K. Cement Works by State Govt. vide letter no. P5 (32) KHAN/ Group – 03/ 80 dated 25.07.1984 for an area of 336.70 Ha. The company has surrendered an area of 95.84 ha. out of 336.70 ha. and was accepted by Superintending Mining Engineer, Bhilwara vide letter no. SME/ BHIL CIRCLE/ CC1/ ML 3/ 03/ 1509 dated 16.07.2008 and retained only an area of 240.86 Ha. The Mining Plan for retained M.L. area due to partial surrender has been approved vide letter No. 682(23)(619)/2018-UDAI dated 03.03.2009 under rule 22(6) of MCR, 1960 and 23(B)(1) of MCDR 1988 for the period 2009 – 10 to 2013 – 14. The Scheme of Mining has been approved vide letter No. 682(23)(MS-373)/2006-MCCM(N) UDP dated 06.05.2014 under rule 12(3) & 23(B) of MCDR 1988 for the period 2014 – 15 to 2018 – 19. The Modified Mining Plan along with Progressive Mine Closure Plan has been approved from the Office of Regional Controller of Mines, IBM, Ajmer vide letter no. 584(4) (3) (1693)/ 2017 – RCOM – AJM/ 976 dated 19/26.07.2017 for an area of 240.86 Ha. for a period of 2017–2018 to 2018-19 due to

installation of new clinkerisation (cement) plant of capacity 2.2 MMTPA with production capacity from 2.0 to 3.6 MMTPA. The Mining lease has been first time renewed vide State Govt. order no. Aa. Kha. A. /Bhil Vrat/ CC1/Kha. P. 3/ 03/ 1509 dated 16.07.2008 for a period of 20 years for an area of 240.86 ha. Lease agreement signed on 05.08.2014 and registered on 06.08.2014. As per provision of MMDR Amendment Act' 2015, the validity of lease period has been extended upto 12.12.2034 vide State Government order no. AME/ Nimba/ CC – 1/ MI 3/ 2003/ 2046 dated 27.02.2015.

PP has got first Environmental Clearance under EIA Notification' 1994, vide letter no. J-11015/ 3/ 2004/-IA.II (Vol. I) dated 04.10.2004 for 1.09 MTPA of limestone. Second EC under EIA Notification' 2006, was issued by the Ministry, vide letter no. J-11015/ 428/ 2008/-IA.II. dated 06.08.2010 for expansion of the capacity from 1.09 MTPA to 2.0 MTPA of limestone and has mined out the mineral within the EC Capacity. The highest production was 16,22,931.89 TPA in 2011 – 2012 which was well within the EC capacity. Consent to Operate from RSPCB, Jaipur vide letter no. F (Mines)/ Chittorgarh (Nimbahera)/1869 (1)/ 2017 – 2018/ 2141-2145 dated 20.06.2017 which is valid up to 31.05.2022 for an area of 240.86 ha.

Method of Mining is opencast mechanized. Water requirement is 125 KLD after expansion including domestic, dust suppression, plantation & washing of machineries. NOC from CGWA for ground water abstraction has been obtained for cement plant & mines from CGWA vide letter no. 21-4(34)/WR/CGWA/2005-1675 dated 28.10.2015 and applied for renewal vide letter no. NBH/ PC/ 23/ 3463 on dated 16.10.2017. Mine may intersect ground water table as ultimate depth of mining will be 384 MSL. Life of mine is about 30 Years. Total project cost is Rs. 29.25 Crore after expansion (Existing: Rs. 10.53 Crore; Proposed: Rs. 18.72 Crore). PP reported that there is no National Park, Sanctuaries, Biosphere Reserves, Wildlife Corridors and Tiger/ Elephant Reserves located within 10km of the lease area. PP reported that there is no litigation is pending against the mine lease area.

The Committee observed that the **production capacity of limestone is mentioned as 3.6 Million TPA in Form-I; However, the details of total excavation overburden/Top soil/waste etc. are not mentioned adequately. The Committee suggested that the PP shall revise the Form-I and PFR w.r.t. production capacity of Limestone, details of total excavation/overburden/Top soil/waste, so that the EIA/EMP report can reflect the impact of total excavation of mineral/ OB/Top soil/waste etc.** Accordingly, the PP needs to submit the proposal with all the details as mentioned above for further consideration. The Committee **rejected the proposal in present form and returned to PP.**

(2.9). Roida-II Iron Ore Mine of M/s Khatau Narbheram and Company for enhancement of production capacity from 2.2 Million TPA to 3.5 Million TPA of Iron ore, located at Village Roida and Tanto, Tehsil. Barbil, District-Keonjhar, Odisha (MLA: 74.867ha) (F. No. J-11015/196/2015-IA-II (M); Proposal No. IA/OR/MIN/27953/2015)- (Consultant: M/s Perfect Enviro Solutions Pvt. Ltd., New Delhi)–Consideration of TOR

The proposal of M/s Khatau Narbheram and Company is for enhancement of production capacity from 2.2 Million TPA to 3.5 Million TPA of Iron ore in the mine lease area of 74.867ha. The mine is located at Khata No.67,9,18,31,25,65 Village Roida and Tanto, Tehsil. Barbil, District-Keonjhar, Odisha. The latitude is 22°01'51.88"N to 22°02'35.78" N, and longitude 85°21'34.86" E to 85°22'24.14" E. The area falls in the Survey of India Topo sheet 73-F/8(OSM Sheet no.F45H8). The PP presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

The mining lease area is 74.867 ha. Out of total area, 71.035 ha is forest land (including 7.606 ha safety zone) & rest 3.832 ha is Non- forest land comprising of 2.379 ha Government waste land and 1.453 ha private land. Forest clearance for 63.429 ha (excluding 7.606 ha. safety zone) was obtained from Ministry of Environment and Forest vide letter no. 8-112/1996-FC dated 8th November 2010. Environmental Clearance was obtained for production of 2.2 Million TPA of Iron Ore vide letter No. J-11015/633/2007-IA.II.(M) Dated 5th March 2008. CTO was also obtained from SPCB, Odisha vide letter no. 4161/IND-I-CON-6019 dated 08.03.2016 and is valid upto 31.03.2020.

Project Proponent reported that the lease was executed by State Govt. of Odisha in the name of company M/s Khatau Narbheram & Co.(Partnership firm) on 3rd September, 1957 valid upto 02.09.1987. Timely renewal applications were submitted as per rule from time to time. The lease is now valid up to 31.03.2020 as per MMDR amendment Act, 2015. The approval has been communicated by State Government vide letter no- 3293 / S&M, Bhubaneswar, dated 18.04.2015 and supplementary lease deed has been executed on 13th May 2015.

The Mining plan was approved on 31.1.2008 vide letter No. 314(3) /2007-MCCM (CZ) /MP-35, -Scheme of mining for the period from 2012-13 to 2016-17 was approved by IBM vide letter No 314(3)/2011/MCCM (CZ)/MS-53 dated 28th March 2012. For Proposed Expansion in Production Rate from 2.2MTPA to 3.5MTPA from 5th year 2016-17 till 2019-20 a Modified in Scheme of Mining was approved by IBM vide letter no. MSM/FM/22-ORI/BHU/2014-15 dated 25.06.2015. Present Review of Mining Plan for 2017-18 to 2019-20 has been approved by IBM vide F.no. MPM/FM/11-ORI/BHU/2016-17/1701 dated 23.09.2016 for production upto 3.5 MTPA.

PP reported that the mine is in operation with due compliance of the Hon'ble Supreme Court Order dated 02.08.2017 in W.P. (C) no-114/2014. The details are as follows:

S. No.	Issues	PP's submission
1.	Compliance of order dated 02.08.2017 in CWP no. 114/2014 of Hon'ble Supreme Court	Project proponent has made the compensation amount as per the compliance of the order of Hon'ble Supreme Court dated 02.08.2017 in W.P. (Civil) No. 114 of 2014.

2.	Details of demand if any raised by Department of Mining and Geology, Govt. of Odisha	Demand of Rs. 236,36,05,258/- was raised by Department of Mining & Geology, vide Demand Notice No. 4054 dated 02.09.2017.
3.	Details of payment if any raised by Department of Mining and Geology, Govt. of Odisha	Payment of Rs. 236,36,05,258/- was deposited in two tranches vide Treasury Challan Numbers 27DDEF511D and 27DEODFDBO dated 27.12.2017 and 29.12.2017 for Rs. 1,00,000/- and Rs. 236,35,05,259/- respectively.
4.	Validity of Mining Lease	As per Section 8 A (6) of MMDR (Amendment) Act, 2015, validity of the mine has been extended upto 31.03.2020.
5.	Status of mine whether working or not	The mine is in working condition as per existing EC J-11015/633/2007-IA.II (M) dated 5 th March 2008 for 2.2 Million TPA.

PP reported that as per exploration done in the lease area the geological reserves as on date is estimated at 36.504 Million T, Mineable reserves at 30.737035 Million T as per Approved Review of Mining Plan. Considering the production achieved during the period from 2017 till date the balance geological resource & mineable reserve as on 01.04.2018 are 32.857 Million Tonnes & 27.090 million tonnes respectively. At proposed production rate the life of the mine has been estimated to be 8 years including the rest of the Review of Mine plan period from 2017-18 to 2019-2020 and beyond. However, the validity of the M.L. area is till 31st March 2020 as per MMDR Act 2015.

Project proponent reported that mining has been carried out by fully Mechanized opencast method with drilling and blasting which will be continued. 3nos. of mobile crushing units and 5 nos. of screening units have been deployed for processing of ROM within ML area and there is proposal to add 2 nos. of Mobile Screening plant of 350TPH capacity and 1 Mobile Crushing plant of 500TPA capacity. After processing of the mineral, the finished product will be transported to consumer Industries by means of rail/trucks. Explosive requirement will be 521kg/day. Ordinary detonator and Nonel system will be used for ignition. Power is drawn from 11KV transmission line of NESCO (North Eastern Electricity Supply of Odisha Limited). There are two diesel generators of 160 KVA and 82.5 KVA capacities respectively. About 135KLD water will be required which will be sourced from bore well drilled within the mine for which permission has been obtained from Central Ground Water Board. About 50 KLD will be required for sprinkling accumulated pit water will also be utilized for sprinkling, 30KLD will be needed for green belt development, 40 KLD will be required at Crushing, screening plant & allied activities and 15KLD for drinking. The maximum strength of direct workers will be 205 including managerial, Technical, skilled, semi skilled and unskilled workers majority of which will local people. Besides there will be indirect employment on account of transportation, canteen, repair shop, security etc. The project cost is about Rs.330 Crore. It was reported by PP that there are no litigations against the project. The PP has submitted an affidavit dated 21.06.2018 that it has already complied with the order of Hon'ble of Supreme Court dated 2.8.2017 and has deposited the amount demanded by Department of Mines to the tune of

Rs236,36,05,258/-. PP has also stated in affidavit that it will further comply with any legal and admissible demand that may be raised by Central/State Government in future.

The Member Secretary has informed the Committee that the Ministry of Mines, vide Notification No.S.O.2817 (E) dated 22nd November, 2010 had appointed a Commission of Inquiry consisting Justice M.B. Shah, retired Judge of the Supreme Court of India, for the purpose of making an inquiry in to mining of iron ore and manganese ore in contravention of the provision of various Statutes and the rules and regulations issued there under, in various States including the State of Odisha. In view of Justice Shah Commission report (2013), the Ministry of Environment, Forest and Climate Change (MoEF&CC) has entrusted the work to CSIR-NEERI to conduct a Carrying Capacity Study with an objective to develop (i) a sustainable development plan for mining activities in the impact area of about 1000 sq.km. in the State of Odisha and (ii) an environmental management plan for current as well as future developmental scenario.

CSIR-NEERI has conducted the study encompassing collection of primary data for various environmental components (viz. air, noise, water, soil/land, biological and socio-economic aspects), collection and analysis of environmental quality data by different mines in the region, modeling for transport scenario and infrastructure need assessment, and meetings/workshops with different stakeholders (like Department of Steel & Mines, Directorate of Mines, IBM-HQ & Regional Office, SPCB, GSI, MoEF&CC, State Forest Dept. etc. as well as senior executives from respective mines). NEERI has submitted the report along with the recommendations. **The Committee deliberated the recommendations and is of the view that the recommendation of CSIR-NEERI report on carrying capacity study may be included in the TOR condition w.r.t. mining proposal of Iron Ore and/or manganese in the State of Odisha.**

Based on the information submitted and presentation made by PP, the proposal was **recommended for Standard TOR**. Further, the TOR may have the specific conditions as recommended by CSIR-NEERI on carrying capacity study as per **Annexure II**. PP shall also submit the details of final mine closure plan in the EIA/EMP Report.

(2.10). Nadidih Iron & Manganese Mine of M/s Feegrade & Co. (P) Ltd. for enhancement of production capacity of ROM Iron Ore from 2.88 million TPA to 6.0 million TPA and reduction in dry processing (crushing/screening) of low grade iron ore from old stack/dumps from 4.571 million TPA to 1.451 million TPA (Total handling 7.451 million TPA), located at villages Nadikasira & Rengalbeda, Tehsil-Koira, District- Sundargarh, Odisha (MLA 121.405ha)(F. No. J-11015/249/2016-IA.II(M); Proposal No. IA/OR/MIN/60756/2016)-(Consultant: M/s Ecomen Laboratories Pvt. Ltd.)-Consideration of TOR

The Proposal of M/s Feegrade & Co. (P) Ltd. is for enhancement of production capacity of ROM Iron Ore from 2.88 million TPA to 6.0 million TPA and reduction in dry processing (crushing/screening) of low grade iron ore from old stack/dumps from 4.571 million TPA to 1.451 million TPA (Total handling is 7.451 million TPA) in Nadidih Iron & Manganese Mine of

MLA of 121.405 ha. The mine is at a distance of 25 km from Barbil and is well connected by an all-weather metal road. The area is bounded by Latitude and Longitude of 21° 58' 20.15" to 21° 57' 23.35"N & 85° 14' 58.34" to 85° 15' 34.84"E in Survey of India Topo sheet No. 73 G/5 (F45N5).

Project proponent reported that the total lease area is of 121.405 ha which comprises of 89.870 ha of forest land (RF+KF+DLC) and 31.535 ha of non-forest land. Stage-II Forest clearance for an area of 39.309 ha has been accorded by MoEF, Govt. of India, vide letter no. 8(21)26/2003-FCE, dated 16/03/2006 and 45.118 ha of additional forest & deemed DLC forest land for mining and allied activities (including 8.036 ha of forest land for safety zone), vide F. No. 8-68/2011-FC dt. 30/10/2013 (Total forest area is diverted is 84.427 ha). An area of 5.443 ha is applied for surrender and Forest department has directed to maintain the same as per aforesaid letter of Stage II clearance. PP reported that in pursuance to the MMDR Amendment Act, 2015, the mining lease period has been extended up to 31/03/2020 by execution of a Supplementary Lease Deed on 02.05.2015 over an area of 121.405 ha.

The mine was accorded Environmental Clearance by the Ministry, vide letter no. J-11015/136/2012-IA.II (M), dated 10.04.2015 for 2.88 million TPA ROM Iron ore and dry processing of 4.571 million TPA of low grade iron ore by reworking of old dumps thus total handling of 7.451 million TPA and installation of wet beneficiation plant of 1.142 million TPA capacity and production of 0.0036 million TPA of Manganese ore. Further, the installation of wet beneficiation plant of 1.142 million TPA capacity has been amended by deleting by the Ministry, vide letter no. J-11015/136/2012-IA.II (M), dated 09.11.2015. At present, the production of the mine is restricted to excavation of Iron ore (ROM) from mine and dry screening & crushing of iron ore. Manganese ore is also excavated from the mine. Project proponent reported that the breakup of mine lease w.r.t. land use category at present is for Mining (42.7 ha), Over burden/ dump (20.394 ha), Mineral Storage (7.421 ha), Infrastructure (1.783 ha), Roads (5.246 ha), Green belt & Plantation (7.54 ha), Mineral separation (3.75 ha), Mine camp (1.522 ha) & unutilized (31.049 ha).

Mining Plan for the proposed production has been approved by the Indian Bureau of Mines, vide letter no. MPM/FM/24-ORI/BHU/2016-17 dated 30.12.2016. As on 01.11.2016, total Mineable Reserves of Iron ore is 28.02 million tones and Mineable Reserves of Manganese ore is 11561.5 MT. Life of the mine is 5 years for iron ore & 3 years for manganese ore as per the targeted production. The mining method will be open cast fully mechanized. Drilling will be done in the quarries for both overburden & ore removal. Drill holes will be done by using drilling machines with drill bits of diameter 115 mm. The maximum drilling depth will be 6-8 m including sub-grade drilling. The spacing & burden will be 2.5x3.0 m. The ROM & low grade ore accumulated from Nadidih Iron & Manganese Mines will be hauled through trucks/dumpers to dry processing plants. After processing, the finished iron ore will be carried to the Railway siding and loaded into Rail wagons and dispatched mainly to the steel, pelletisation, sponge, sinter plants throughout India and also to port for export. The waste materials of Nadidih Mines are mainly laterite, lateritic Iron ore, BHQ, BHJ, shale, alluvial soil etc. Total 8300748 m³ of waste material exists at present. It is expected that 2671588 m³ of waste will be generated up to the end of the life of the mine in which 309248 m³ waste

materials of this mine will be dumped at earmarked site and balance 2362340m³ of the waste material will be used for backfilling of exhausted quarry.

PP reported that the water requirement as per EC accorded on 10.04.2015 is 2566.6 KLPD (Surface water 2340.38KLPD, Ground water 226.22 KLPD) including 1599 KLPD for Wet Beneficiation plant. The water is sourced from Karo River. Since as per the amendment in EC order vide F. No. J-11015/136/2012-IA.II (M) dated 09.11.2015 installation of Wet Beneficiation plant is deleted so the water requirement will be 993.5 KLPD only (surface water 767.5 KLPD, ground water 226 KLPD). The mine has obtained permission to draw 520 KLPD of surface water & 175 KLPD ground water from Dept. of Water Resources, Govt. of Odisha. The permission for balance quantity is under process with Govt. of Odisha which will meet the requirement for expansion of the project also. Presently 346 nos. of people are directly employed in the mine. This will increase to 426 after expansion and indirect employment of 400 people as contract jobs, which will mainly be extended to the local people. So, 826 people will get engagement in total. PP reported that at present 7.540 hectares of area is covered with green belt and plantation. At the end of life of the mine approximately 41.789 hectare of exhausted quarry will be back filled and covered with plantation and 16.824 ha area will be covered under bench plantation. The estimated project cost is Rs.200 Crores. There is no elephant corridor/national park/ sanctuary is located within 10 km. radius of the ML area.

Project Proponent reported that the mine is in operation since 1961. Presently the mine is in operation with due compliance of the Hon'ble Supreme Court Order dated 02.08.2017 in W.P.(C) No-114/2014. The details are as follows:

S. No.	Issue	PP's submission
1.	Compliance of Order dated 02.08.2017 in CWP no. 114/2014 of Hon'ble Supreme Court.	The DDM, Koira vide Memo No. 1552/Mines, dated 09.04.2018 has issued a certificate that presently the mine is working with all the valid statutory clearances and compliance of the Hon'ble Supreme Court Order dated 02.08.2017 in CWP no. 114/2014.
2.	Details of demand if any raised by Dept. of Mining and Geology, Govt. of Odisha.	<p>(a) Demand note of Rs. 424,39,35,412 (Rupees Four hundred twenty four cores Thirty nine lakhs Thirty five thousands Four hundred twelve) was issued by Dept. of Mines, Govt. of Odisha vide letter no. 5056/Mines, dated 02.09.2017 toward compensation under Section 21 (5) of MMDR Act, 1957 for production without/in excess of the EC.</p> <p>(b) Demand note of Rs.28,98,723.89 (Rupees Twenty eight lakh Ninety eight thousand Seven hundred twenty four) was issued by Dept. of Mines, Govt. of Odisha, vide letter no. 5909/Mines, dated 24.10.2017 toward</p>

		compensation under Section 21 (5) of MMDR Act, 1957 for production made without obtaining Forest Clearance under FC Act, 1980.
3.	Details of payment, if any made to Dept. of Mines and Geology, Govt. of Odisha.	<p>(a) With regard to Demand No. 5056/Mines, dated 02.09.2017, the Proponent has made the payment of Rs. 424,39,35,412 (Rupees Four hundred twenty-four cores Thirty nine lakhs Thirty five thousands Four hundred twelve) vide e-challan reference ID: 27DDE0080D, Challan No. 8443/96, dated 27.12.2017 toward compensation under Section 21 (5) of MMDR Act, 1957 for production without/in excess of the EC.</p> <p>(b) With regard to Demand No. 5909/Mines, dated 24.10.2017, the Proponent has made the payment of Rs.28,98,723.89 (Rupees Twenty eight lakh Ninety eight thousand Seven hundred twenty four) vide e-challan reference ID: 27DDEFAC07, Challan No. 8443/194, dated 29.12.2017 toward compensation under Section 21 (5) of MMDR Act, 1957 for production made without obtaining Forest Clearance under FC Act, 1980.</p>
4.	Validity of mine lease.	As per the MMDR Amendment Act, 2015 mining lease of Nadidih Iron & Manganese Mine has been extended and valid up to 31.03.2020.
5.	Status of Mine whether working or not	The mine is in operation.
6.	Details of the past production of mines since its inception, duly authenticated by Dept. of Mines and Geology, Govt. of Odisha.	The details of past production of iron ore since 1980 which is duly authenticated by Deputy Director of Mines, Koira has been submitted by PP.

Project proponent reported that there are three cases which are at various level viz. (a) A court case no. 2(C) C 51/2013 has been filed in the court of SDJM, Bonai, Sundargarh for violation of of the Environment (Protection) Act, 1986. The said case has been stayed on 28.01.2014 by the Hon'ble High Court of Orissa in CRLMP NO. 47/2014 in Misc. Case No. 25/2014. (b) Revision Application bearing No. 22/(67)/2012/RC-I has been filed by the lessee before the Mines Tribunal, Ministry of Mines, Govt. of India, New Delhi against the demand

notice dated 20.10.2012 U/s 21(5) of the MMDR Act, 1957, which has been disposed of by Mines Tribunal, Ministry of Mines, Govt. of India, New Delhi on 16.08.2017.

The Member Secretary has informed the Committee that the Ministry of Mines, vide Notification No.S.O.2817 (E) dated 22nd November, 2010 had appointed a Commission of Inquiry consisting Justice M.B. Shah, retired Judge of the Supreme Court of India, for the purpose of making an inquiry in to mining of iron ore and manganese ore in contravention of the provision of various Statutes and the rules and regulations issued there under, in various States including the State of Odisha. In view of Justice Shah Commission report (2013), the Ministry of Environment, Forest and Climate Change (MoEF&CC) has entrusted the work to CSIR-NEERI to conduct a Carrying Capacity Study with an objective to develop (i) a sustainable development plan for mining activities in the impact area of about 1000 sq.km. in the State of Odisha and (ii) an environmental management plan for current as well as future developmental scenario.

CSIR-NEERI has conducted the study encompassing collection of primary data for various environmental components (viz. air, noise, water, soil/land, biological and socio-economic aspects), collection and analysis of environmental quality data by different mines in the region, modeling for transport scenario and infrastructure need assessment, and meetings/workshops with different stakeholders (like Department of Steel & Mines, Directorate of Mines, IBM-HQ & Regional Office, SPCB, GSI, MoEF&CC, State Forest Dept. etc. as well as senior executives from respective mines). NEERI has submitted the report along with the recommendations. **The Committee deliberated the recommendations and is of the view that the recommendation of CSIR-NEERI report on carrying capacity study may be included in the TOR condition w.r.t. mining proposal of Iron Ore and/or manganese in the State of Odisha.**

Based on the information submitted and presentation made by PP, the proposal was **recommended for Standard TOR subject to submission** of compliances as per the MoEF&CC OM No.3-50/2017-IA.III(Pt.), dated 30.05.2018 w.r.t. 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. Further, the TOR may have the specific conditions as recommended by CSIR-NEERI on carrying capacity study as per **Annexure II**. PP shall also submit the details of final mine closure plan in the EIA/EMP Report.

(2.11). Proposed Limestone Mine of M/s ACC Ltd. with production capacity of 3.9 Million TPA and waste/topsoil 2,25,000 CuM per Annum (Maximum) with installation of Crusher with 1000 TPH, located at Villages – Bidiyadih, Bohardih, Bhurkunda & Godadih, Tehsil – Masturi, District – Bilaspur, Chhattisgarh (MLA 582.962 ha)(File No. J-11015/45/2018-IA.II(M); Proposal No. IA/CG/MIN/74798/2018)(Consultant: JM Enviro Net Pvt. Ltd.)-Re-Consideration of TOR

The proposal of M/s ACC Limited is for Limestone Mine with Production Capacity of 3.9 Million TPA of limestone and topsoil/waste @ 2,25,000 Cu.M. per annum (Maximum) with installation of Crusher 1000 TPH. The mine lease is located at Villages – Bidiyadih, Bohardih,

Bhurkunda&Godadih, Tehsil – Masturi, District – Bilaspur, Chhattisgarh in the ML Area 582.962 ha. The mine lease area falls between Latitude of 21° 45' 30.50" to 21° 54' 8.67" N and Longitude of 82° 14' 2.99" to 82° 21' 38.95" E Mine lease falls within the Survey of India Toposheet No.64 K/5 in core zone.

The proposal of ToR was earlier considered by the Expert Appraisal Committee in its Meeting held during May 14-15, 2018 wherein the Committee deferred the proposal and sought following requisite information:

- (i). Details of mitigation measures to prevent the impact on seasonal nallah may be provided.
- (ii). The proposed area is agricultural land and having one seasonal crop growing paddy crop.
- (iii). Committee noted that the proposed mine lease having isolated patches and has about 1730 corners and has the concern that How the PP will ensure the movement of minerals, access to the villagers, transport plan etc? Details need to be submitted.

The PP, vide letter dated 31.05.2018, has submitted the information and accordingly the proposal is placed in the present meeting. The details are as follows:

- (i) With Regards to mitigation measures to prevent the impact on seasonal nallah; it was submitted that Seasonal nallahs are not the part of mine lease area. The State Government granted the lease after excluding that part along with a safety barrier along both the sides of water channels. However, some of the measures will be adopted for protection of Nallah like construction of Protective bunds (1.5-2.0 m height), Check dams, surface run off from mine lease area will be channelized to a suitable location etc.
- (ii) With Regards to agricultural land and one seasonal crop in proposed area; it was submitted that predominantly grown crop in the area is Dhaan (Paddy) during Kharif season. Also few Kharif Crops like Dhaan, Tuar and vegetables as well as Rabi Crops like Wheat, Rai and vegetables are grown at small scale level in some parts of the area. The villages-wise details of Cropping pattern of the area has been obtained from Gram Pattwari, No. 47, Ra. Ni. Man. Tehsil- Masturi, Bilaspur (CG) and the same is annexed in the reply uploaded.
- (iii) With regards to movement of minerals, access to the villagers, transport plan; it was submitted that Total Mining Lease Area is 582.962 ha out of which 320 ha area will be under mining activity and remaining 262.962 ha area will be used in non-mining activities like greenbelt development, plantation, safety zone, workshop, office, haul roads etc. There are no villages within the lease area and public roads will not be disturbed. Block-wise mining has been planned and 320 ha of mining area have been divided into 11 working pits. A Mobile crusher of 1000 TPH is proposed considering ease of mining. The crushed material will be transported through tippers / dumpers through access within the mining lease and wherever it crosses the mining lease required access will be obtained with appropriate permissions including pit passes. The

route of mineral transportation from block to block and cement plant has been marked in map and submitted.

Based on the information submitted and presentation made by PP, the proposal was **recommended for Standard TOR** along with condition that PP needs to submit the mitigation measures on Impact of mining activities on Habitations as per Ministry's OM No. Z-11013/57/2014-IA.II(M) dated 29.10.2014.

(2.12). Environment Clearance for Proposed 0.45 MTPA Limestone Mining Project over 190.326 Ha located at Village Badhreta, Tehsil Kailaras, Distt. Morena, Madhya Pradesh by M/s Abhijeet Cement Limited. F. No.J-11015/98/2017-IA-II(M); Proposal No. IA/MP/MIN/70014/2017)–Re-Consideration of TOR

PP did not attend the meeting. The Committee noted that the proposal was earlier placed before the EAC wherein the committee deferred the proposal and sought the certain information. The Committee is of the view that the project may be **deferred and delisted**.

(2.13). Environment Clearance for Proposed 1 MTPA Limestone Mining project over 268.520 ha. located at Villages Mahawa-Saipura-Bhilampur-Badhreta, Tehsil Kailaras ,Distt Morena ,Madhya Pradesh by M/s Abhijeet Cement Limited. (F. No. J-11015/99/2017-IA-II(M); Proposal No. IA/MP/MIN/70015/2017)–Re-Consideration of TOR

PP did not attend the meeting. The Committee noted that the proposal was earlier placed before the EAC wherein the committee deferred the proposal and sought the certain information. The Committee is of the view that the project may be **deferred and delisted**.

(2.14). Environment Clearance for proposed 1.80 MTPA Limestone Mining Project over 186.79 ha located at Villages Sehampur&ItouraTahasil :Kailaras District : Morena, Madhya Pradesh M/s Abhijeet Cement Limited. (F. No. J-11015/100/2017-IA-II(M); Proposal No. IA/MP/MIN/70017/2017)–Re-Consideration of TOR

PP did not attend the meeting. The Committee noted that the proposal was earlier placed before the EAC wherein the committee deferred the proposal and sought the certain information. The Committee is of the view that the project may be **deferred and delisted**.

(2.15). Sheopura-Kesarpura Limestone Mine of M/s Shree Cement Ltd., located in villages -Sheopura and Kesarpura, Tehsil – Masuda, District – Ajmer, Rajasthan -(MLA: 856.8Ha) (F. No. J-11015/170/2004-IA.II(M); Proposal No. IA/RJ/MIN/65474/2005)- Amendment in EC w.r.t. mention the existing crushers (800 TPH & 350 TPH)

The proposal of M/s Shree Cement Ltd. is for amendment inEnvironmental

Clearance No. J-11015/170/2004-IA.II (M) dated 31/3/2005., w.r.t. mentioning the existing crushers. The mine is located near villages – Sheopura and Kesarpura, Tehsil – Masuda, District – Ajmer, Rajasthan.

The Committee observed that EC vide letter no J-11015/170/2004-IA.II(M) dated 31st March, 2005 was granted by the Ministry under the provisions of the EIA Notification, 1994. As per the recent judgement of Hon'ble Supreme Court dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors., it was interpreted that the ECs which were accorded under EIA Notification, 1994 are valid only for 5 years. Therefore, PP is requested to apply as fresh application for grant of EC as per the provision of the EIA Notification, 2006 and Ministry's notification which was issued vide S.O.1530 (E), dated 6th April, 2018.

Based on the information submitted and presentation made by PP, the Committee **rejected the proposal in present form**. The Committee suggested that PP has to apply the fresh application for grant of EC as per the provisions of the EIA Notification, 2006 and Ministry's notification issued vide S.O.1530 (E), dated 6th April, 2018.

(2.16). Amendment in EC of M/s Shree Cement Ltd. w.r.t. mention the crusher (800 TPH) & ML No. (08/99) in EC granted for limestone production capacity @ 2.00 MTPA (MLA: 448.5 ha, ML No. 08/99), located near villages- Shyamgarh- Neemgarh, Tehsil- Masuda, District – Ajmer, Rajasthan (F. No. J-11011/195/2009-IA.II(I)); Proposal No. IA/RJ/MIN/75077/2010)– Amendment in EC

The proposal of M/s Shree Cement Ltd. is for amendment in Environmental Clearance No. J-11011/195/2009-IA.II (I), dated 04.11.2010 w.r.t. mentioning of the crusher (800 TPH) and ML No. 08/99. The mine is located near Villages – Shyamgarh-Neemgarh, Tehsil – Masuda, District – Ajmer, Rajasthan. The latitude and longitude of the ML area is 26°07'30" to 27°06'04"N and 74°25'04" to 74°26'54"E respectively.

Project Proponent informed that as per Rajasthan State Pollution Control Board's communication No. CD & SCMG (Gen-03)/RSPCB/1235 to 1271, dated 24.01.2017, the amendment in Environmental Clearance is required for inclusion of crusher activities.; hence the proposal is submitted for amendment in EC.

The Committee noted that the Ministry has granted the Environmental Clearance, vide letter no J-11011/195/2009-IA.II (I), dated 04.11.2010 under the provisions of the EIA Notification, 2006 for expansion of Cement Plant (Clinker from 1.6 MTPA to 4.4 MTPA) and Limestone mine with production capacity of 2.0 MTPA in MLA of 448.5ha.

PP mentioned that in EC only drilling and blasting activities are mentioned whereas in all documents including modified mining scheme, complete mining activities such as drilling, blasting, hauling, crushing has been mentioned at page no 47,62,63,78 & 122 of modified mining scheme and page no. 30,41,43,109,131 & 175 of EIA/EMP report which were

submitted at the time of grant of EC. Detailed Environment Management Plan for all activities of mining including crusher has been mentioned in the EIA/EMP report at page no. 166-190. As per the EIA / EMP report and Mining scheme the type of proposed crusher is "Single Rotary Impact Crusher without screening". The material will be unloaded in covered unloading hopper provided with water sprinkling arrangement for suppression of dust generated during unloading of material. Water sprinkling arrangement will also be provided inside the crusher to make the crushed material sufficient moist so that there is no dust emission during the transportation of crushed limestone up to plant site by belt conveyor.

Based on the information submitted and presentation made by PP, the Committee **recommended** the proposal for mentioning the crusher (800 TPH) and ML No. 08/99 in the EC No. J-11011/195/2009-IA.II (I), dated 04.11.2010. **The Ministry shall also examine the proposal w.r.t. judgement of Hon'ble Supreme Court dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.**

(2.17). Limestone Mine of M/s UltraTech Cement Limited with Production Capacity of 3.3 Million TPA (ROM), located at Villages- Moharai, Dagla, Asarlai, Tunkara, NimberaKhurd in Tehsil- Jaitaran and Village - Meshia in Tehsil- Raipur, District – Pali, Rajasthan (ML Area 689.76 ha, ML No. 29/99) (F. No. J-11015/281/2011-IA-II(M); Proposal No. IA/RJ/MIN/19184/2013)–Amendment in Environmental Clearance for utilization of waste in Ready Mix Concrete plant for captive purpose for construction of Integrated Cement Plant

The proposal is of M/s UltraTech Cement Ltd Amendment in Environmental Clearance granted for Limestone Mine (ML Area 689.76 ha, ML No. 29/99) with Production Capacity of 3.3 Million TPA (ROM) for utilization of waste in Ready Mix Concrete plant for captive purpose for construction of Integrated Cement Plant. The mine lease is located Near Villages Moharai, Dagla, Asarlai, Tunkara, NimberaKhurd in Tehsil- Jaitaran and Village - Meshia in Tehsil- Raipur, District - Pali (Rajasthan). The mine lease area falls between Latitude of 21° 30' 46" to 21° 31' 20" N & Longitude of 81° 47' 15" to 81° 48' 15" E. Mine lease falls within the Survey of India Toposheet No. 64 G/14. The Project is located in Seismic zone-II.

PP reported that earlier Environment Clearance for Limestone Mine (ML Area 689.76 ha, ML No. 29/99) with Production Capacity of 3.3 Million TPA (ROM) was obtained from MoEFCC vide letter no J-11015/281/2011-IA.II (M) dated 2nd January, 2014. Amendment in Environment Clearance regarding reduction in ML area from 755.10 ha to 689.76 ha was accorded by MoEFCC vide their letter dated 24th February, 2016. Consent to Establish has been obtained from SPCB for production capacity 3.3 Million TPA (ML Area 689.76 ha, ML No. 29/99) vide letter no. F (Mines)/ Pali (Jaitaran) /79(1)/2015-2016/2722-2726 dated 06.10.2015. After that, Consent to Operate under Air and Water Act, was obtained for production capacity of 3.3 Million TPA (ML Area 689.76 ha, ML No. 29/99) vide letter no. F (Mines) / Pali (Jaitaran) /85(1)/2016-2017/8702-8706 dated 06.12.2016 which is valid upto 30.11.2021. The mining lease deed was granted in favor of M/s UTCL and Mining Lease deed

was executed for 50 years on 17.03.2015. Ground water withdrawal permission was obtained from CGWA vide letter no. 21-4(600)/WR/CGWA/2014-1675 dated 15.10.2014. The same has been renewed vide letter No.21-4(600)/WR/CGWA/2014-531 Dated 08.03.2017.

M/s UTCL has proposed Integrated Cement Plant (Clinker 2.2 Million TPA, Cement 3.3 Million TPA) along with installation of Captive Power Plant (30 MW) at Tehsil- Jaitaran, District - Pali (Rajasthan), Environmental Clearance of which was obtained vide letter no J-11011/569/2011-IA-II-(I) dated 27.02.2015. The limestone requirement for manufacturing of cement will be met from Captive Limestone Mine located at district – Pali Rajasthan. Now, M/s UTCL is planning to start the construction of Integrated Cement Plant for which part of waste generated from Mines will be taken in Ready Mix Concrete plant for captive purpose. Therefore, in the earlier EC, out of total 14.53 Million m³ of waste generation from Captive mine was proposed to be backfilled but now the company proposes to utilize 0.72 Million m³ of waste in the form of Gitti and Bajri for the construction of Plant and remaining quantity of the waste i.e. 13.81 Million m³ will be backfilled. The quantity of waste utilization will be 2000 TPD hence a crusher of capacity 2000 TPD will be installed at the Plant site. No change is proposed in the production quantity and ML area only potential use of waste is proposed.

Therefore, the PP requested to amend the EC for utilization of waste in construction of Integrated Cement Plant in the form of Gitti and Bajri. In view of the above facts, it is requested to grant us the permission for Amendment in existing EC with the following changes:-

S. No	REFERENCE IN EC	PARTICULARS	AMENDMENT REQUIRED
1.	S.No 3, Para 4, line 13 of EC letter dated 24.02.2016	The Para 4, line 13, may be read as Proponent informed that at the end of life of mine 14.53 million m ³ waste will be generated, out of which 0.76 million m ³ is OB and 13.77 million m ³ is waste rejects. The same will be utilized for back filling of mined out area.	End of life of mine 14.53 million m ³ waste will be generated, out of which 0.72 million m ³ will be used in construction of Cement Plant and remaining quantity will be backfilled in the mined out area.
2.	B. General Conditions, point vii, line 10	The entire excavated area shall be backfilled and afforested.	Some part of area will be converted into water reservoir and remaining area will be backfilled. Hence, there will be reduction in backfilled area due to utilization of waste.

Based on the information submitted and presentation made by PP, the Committee **deferred** the proposal and suggested **that the PP shall first revise the mine plan and take approval from the State Govt. w.r.t. utilization of waste and thereafter submit the proposal for further consideration before the EAC.**

(2.18). Kondbond Iron Ore and Manganese Ore Mining Project along with Beneficiation Plant of M/s Tata Steel Limited, located at village-Khondbandh, Tehsil-Barbil, District-Keonjhar, Odisha (MLA: 978ha) (F. No. J-11015/888/2007-I.A II (M); Proposal No. IA/OR/MIN/9648/2007)-Consideration of Amendment in EC w.r.t. Run of Mine (ROM)

The Proposal of M/s Tata Steel Limited is for amendments in Environmental Clearance vide no. J-11015/888/2007-I.A. II (M), dated 21.12.2011 w.r.t. Run of Mine (ROM). The mine is located at village-Khondbandh, Tehsil-Barbil, District-Keonjhar, Odisha in Mine lease area of 978ha.

The Committee noted that the Ministry has granted the Environmental Clearance vide letter no. J-11015/888/2007-I.A. II (M), dated 21.12.2011 for production capacity of 8.0 Million TPA of Iron Ore (ROM) and 0.1 Million TPA of Manganese Ore (ROM) along with setting of Iron ore beneficiation plant with a capacity of 8.0 million TPA throughput in the mine lease area of 978ha.

The Project Proponent, vide letter dated 30.08.2017, has submitted the application for amendments in the EC. Project proponent mentioned that Ministry of Mines vide GSR No. 279(E) dated 04.03.2016 has notified the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 wherein the 'run-of-mine' has been defined which means that the raw unprocessed or uncrushed material in its natural state obtained after blasting or digging, from the mineralized zone of lease area. Project proponent mentioned that as per this definition of ROM, all material excavated out of the mineralized zone of the lease area, becomes ROM which includes the plant feed, subgrade, mineral rejects, waste etc. Therefore, the ambit of the term ROM, as per this new definition is wider than the understanding with which it was referred in the Mine Plan and the EIA documents. Hence, the capacity mentioned in the EC in terms of ROM also needs to be corrected in order to enable to operate at the same level.

Project Proponent has also mentioned that the environmental clearance dated 21.12.2011 has been granted on the basis of EIA/EMP Report and approved mine plan/mining scheme by Indian Bureau of Mines on 31.03.2009. The details of finished products, ROM, reject, waste and total excavation are provided year-wise and as below in tables:-

Table: Year-wise ROM and development (Iron part) (in Million Tonnes)

Year	Finished Products	ROM	Reject	Waste	Total Excavation
2008-09	5.20	7.06	0.52	4.73	12.32
2009-10	5.20	7.08	0.51	2.56	10.15

2010-11	6.00	8.03	0.73	3.11	11.88
2011-12	6.00	8.01	0.37	3.80	12.18
2012-13	6.00	8.02	0.29	2.42	10.73

Table: Year-wise ROM and development (Mn part) (in Metric Tonnes)

Year	Production	Mineral Rejects	ROM	Sub grade Minerals	OB	Total Excavation
2008-09	36000	2160	38160	7920	130972	177052
2009-10	50000	3000	53000	11000	119722	183722
2010-11	75000	4500	79500	16500	107316	203316
2011-12	80000	4800	84800	17600	107316	209716
2012-13	100000	6000	106000	22000	107316	235316

The project proponent submitted the mining plan including total excavation. The amended environmental clearance would be in line with the excavation plan given for approval. Project Proponent also mentioned that there would be no increase in area, no change in technology, no increase of production capacity, and no increase in the Pollution Load due to the requested amendments as there would be no deviation from the excavation plan and the Environment Protection and mitigations are in place for the Total Excavation of 12.18 MTPA (Iron Ore) and 2,35,316 TPA (Mn Ore) which was duly considered by the EAC while granting the Environmental Clearance.

Project Proponent reported that the Consent to Operate has been granted by the SPCB, vide Order No. 16275/IND-I-CON-1127, dated 09.11.2016. Mining Plan/Scheme of Mining has been approved by Regional Controller of Mines, IBM, Bhubaneswar, vide letter No. MS/FM/17-ORI/BHU/2017-18/2010, dated 09.11.2017. Stage-II Forest Clearance over 453.150 ha has been granted by the Ministry vide letter no. F.No.8-98/2004-FC, dated 09.08.2006.

Project Proponent reported that the mine is in operation since 1972 and mentioned that presently the mine is in operation with due compliance of the Hon'ble Supreme Court Order dated 02.08.2017 in W.P.(C) No-114/2014. The details are as follows:

S. No.	Issue	PP's submission
1.	Compliance of Order dated 02.08.2017 in CWP no. 114/2014 of Hon'ble Supreme Court.	In compliance to the order of the Hon'ble Supreme Court on dated 02.08.2017 in WPC No. 114/2014, the project proponent has paid the compensation amount of Rs.84,01,49,601/- (Rupees Eighty Four crores one lakhs forty nine thousand six hundred one only) on date 22.12.2017 being the price thereof as compensation under Section 21(5) of MMDR Act, 1957 for alleged production without/in excess of the Environmental clearance as rationalised by the CEC as per the demand Notice No. 4136/Mines dated

		02.09.2017 issued by the Deputy Director of Mines, Joda Circle, Dist. -Keonjhar.
2.	Details of demand if any raised by Dept. of Mining and Geology, Govt. of Odisha.	Demand was raised by the Deputy Director of Mines, Joda Circle, Dist.-Keonjhar, vide letter No. 4136/ Mines dated 02.09.2017 amounting Rs.84,01,49,601/- (Rupees Eighty-Four crores one lakhs forty-nine thousand six hundred one only) on or before 31.12.2017 in pursuance to the para 225 of the Order dated 02.08.2017 of Hon'ble Supreme Court in WPC No. 114/2014.
3.	Details of payment, if any made to Dept. of Mines and Geology, Govt. of Odisha.	Payment has been done by the project proponent with an amount of Rs.84,01,49,601/- (Rupees Eighty-Four crores one lakhs forty-nine thousand six hundred one only) on date 22.12.2017 through net banking vide transaction reference number 425514255 paid through HDFC Bank.
4.	Validity of mine lease.	Lease period has been extended upto 31.03.2030 vide letter No. III (A) SM-01/2004/3315/S&M, Bhubaneshwar dated 18.04.2015 issued by department of Steel & Mines, Govt. of Odisha in compliance with MMDR Amendment Act 2015
5.	Status of Mine whether working or not	This is a working mine.
6.	Details of the past production of mines since its inception, duly authenticated by Dept. of Mines and Geology, Govt. of Odisha.	The year wise production figures from 1993-94 has been provided by the PP.

The Committee noted that such proposals of M/s TATA were earlier considered before the EAC in its meeting held during October 23-24, 2017. The gist of discussions are as follows:

The Committee deliberated on the proposal and sought the opinion of the representative of Ministry of Mines (an EAC Member) on the issues of change in ROM definition. The Expert Member (representative of Ministry of Mines) apprised the Committee that the term 'Run of Mines (ROM)' is a basic terminology in mining and invariably used in mining plans prepared for various mines. However, this term has been recently defined under Mineral (Other than Atomic and Hydrocarbon Energy Minerals) Concession Rules 2016 (MCR, 2016) and as such there is no change in the essence of ROM being used earlier (before defining it in MCR 2016) in Mining Plans and the definition incorporated recently in MCR 2016. Hence, there is no Modified Definition of ROM introduced in MCR 2016. The application made by the applicant, requesting MoEFCC to issue Corrigendum to ECs issued to it in the instant as well as earlier proposals in view of Modified Definition of ROM introduced in Mineral (Other than Atomic and Hydrocarbon Energy Minerals) Concession Rules 2016, is not tenable. In

view of the above, the Committee made detailed deliberations on the proposal and noted that the matter related to definition of ROM is a basic issue related to a mining statute viz. MCR, 2016 which is notified by Ministry of Mines. Hence, the applicant should have obtained clarification on the issue from the administering Ministry viz. Ministry of Mines or its technical body namely, Indian Bureau of Mines, as the case may be, before applying for EC amendment or corrigendum. In view of the above, the Committee suggested that the earlier proposal may also be kept on hold till clarity emerges on the issue. The instant proposals (3) along with earlier proposal of Joda East Mine lease, Odisha of M/s Tata Steel Limited were **deferred**.

The Ministry, vide letter dated 14.12.2017, has requested the Ministry of Mines and IBM to provide the clarifications/comments as sought by the EAC. In this regard PP vide letter dated 18.04.2018 has requested to expedite the amendment proposal of EC and also submitted the comments of IBM vide their letter dated 07.02.2018. The IBM had endorsed the letter to Ministry of Mines. The IBM has submitted the following comments: -

- (i). It is to clarify that it is incorrect to conclude that the definition of Run of Mine (ROM) has been changed consequent to its definition in Mineral (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016.
- (ii). The Run of Mine (ROM) is a general term used in Mining field adopted to indicate the material handling from the mineralized zone.
- (iii). ROM is defined in Mineral (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016 as under:- "Run-of-Mine (ROM) means the raw un processed or uncrushed material in its natural state obtained after blasting or digging from the mineralized zone of lease area", this includes the saleable ore mined after processing, intercalated waste (the gangue minerals within the mineralized zone) and mineral rejects/subgrade mineral.
- (iv). However, it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than the production of saleable fraction of ore or the ROM (the blasted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
- (v). It is also clarified that total rock excavation may differ to generate same amount of ROM on year to year bases.
- (vi). During the approval of Mining Plan the total excavation including ROM ore from which saleable fraction is produced are taken into consideration.
- (vii). IBM has concluded that it will be appropriate to accord Environmental Clearance based on the maximum total volume/tonnage of excavation or rock handling for the period under consideration.

Based on the information submitted and presentation made by PP, the Committee is of the view that the EC was granted based on the EIA/EMP Report and approved mining plan

wherein the details of production of ore, mineral rejects, ROM, Sub-grade minerals, overburden and total excavation were mentioned. EAC noted that there would be no increase in area, no change in technology, and no increase of production capacity envisaged as reported by the Project Proponent, accordingly the Committee **recommended** the proposal for inclusion of following para in the EC letter,

“The Committee clarified that there is no change in the definition of ROM and the Environmental Clearance was granted for 8.0 Million TPA of Iron Ore (ROM) and 0.1 Million TPA of Manganese Ore (ROM) as mentioned in EIA/EMP Report and approved mining plan. The PP shall handle the material other than ROM as per approved mining plan and EIA/EMP report submitted to the Ministry”.

The Committee also noted that the project proponent has submitted the details of the past production of mines which is not duly authenticated by Dept. of Mines and Geology, Govt. of Odisha. In this regard **the Project Proponent shall submit the details of the past production since inception of mines duly authenticated by Dept. of Mines and Geology, Govt. of Odisha and compliance of Ministry’s OM dated 30.05.2018.**

(2.19). Joda East Iron Mine of M/s Tata Steel Limited, located at village-Joda, Kamarjoda, Banspani, Khutpani&Baitarini, Tehsil-Barbil, District-Keonjhar, Odisha (MLA: 671.093 ha) (J-11015/215/2008-IA.II.(M) Proposal No. IA/OR/MIN/61373/2013 Consideration of Amendment in EC w.r.t. Run of Mine (ROM)

The Proposal of M/s Tata Steel Limited is for amendments in Environmental Clearance vide no. (J-11015/215/2008-IA.II(M) dated 11.03.2013 w.r.t. Run of Mine (ROM). The mine is located at village-Joda, Kamarjoda, Banspani, Khutpani&Baitarini, Tehsil-Barbil, District-Keonjhar, Odisha in Mine lease area of 671.093ha.

The Committee noted that the Ministry has granted the Environmental Clearance vide letter no. J-11015/215/2008-IA.II(M) dated 11.03.2013 for production capacity of 12.0 Million TPA of Iron Ore (ROM) and beneficiation plant of 12 MTPA of throughput in the mine lease area of 671.093 ha.

The Project Proponent, vide letter dated 27.12.2016, has submitted the application for amendments in the EC. Project proponent mentioned that Ministry of Mines vide GSR No. 279(E) dated 04.03.2016 has notified the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 wherein the ‘run-of-mine’ has been defined which means that the raw unprocessed or uncrushed material in its natural state obtained after blasting or digging, from the mineralized zone of lease area. Project proponent mentioned that as per this definition of ROM, all material excavated out of the mineralized zone of the lease area, becomes ROM which includes the plant feed, subgrade, mineral rejects, waste etc. Therefore, the ambit of the term ROM, as per this new definition is wider than the understanding with which it was referred in the Mine Plan and the EIA documents. Hence, the capacity mentioned in the EC in terms of ROM also needs to be corrected in order to enable to operate at the same level.

Project Proponent has also mentioned that the environmental clearance dated 11.06.2013 has been granted on the basis of EIA/EMP Report and approved mine plan/mining scheme by Indian Bureau of Mines on 02.07.2010. The details of ROM, waste and total excavation are provided year-wise and as below in tables:-

Table: Year-wise ROM and development (in Million Tonnes)

Year	ROM	Subgrade	Waste	Old Dump Rehandling	Total Excavation
2010 -11	6	0.58	0.22	0.86	7.66
2011-12	10.6	1.44	0.42	1.22	13.68
2012-13	12	2.66	0.52	0.45	15.63
2013-14	12	0.60	0.49	0.71	13.80
2014-15	12	0.86	0.68	0.36	13.90

The project proponent submitted mining plan including total excavation. The amended environmental clearance would be in line with the excavation plan given for approval. Project Proponent also mentioned that there would be no increase in area, no change in technology, no increase of production capacity, and no increase in the Pollution Load due to the requested amendments as there would be no deviation from the excavation plan and the Environment Protection and mitigations are in place for the Total Excavation 13.90 MTPA which was duly considered by the EAC while granting the Environmental Clearance.

Project Proponent reported that the Consent to Operate has been granted by the SPCB, vide Order No. 2523/IND-I-CON-184, dated 22.02.2017. Mining Plan/Scheme of Mining has been approved by Regional Controller of Mines, IBM, Bhubaneswar, vide letter No. MS/FM/41-ORI/BHU/2017-18/2890, dated 21.02.2018. Stage-II Forest Clearance over 567.087 ha has been granted by the Ministry vide letter no. F.No.8-32/1993-FC (vol. II), dated 24.09.2007.

Project Proponent reported that the mine is in operation since 1956 and mentioned that presently the mine is in operation with due compliance of the Hon'ble Supreme Court Order dated 02.08.2017 in W.P.(C) No-114/2014. The details are as follows:

S. No.	Issue	PP's submission
1.	Compliance of Order dated 02.08.2017 in W.P. no. 114/2014 of Hon'ble Supreme Court.	In compliance to the order of the Hon'ble Supreme Court on dated 02.08.2017 in W.P. No. 114/2014, the project proponent has paid the compensation amount of Rs. 243, 64,11,380/- (Rupees Two Hundred and forty-three crores sixty-four lakhs eleven thousand three hundred eighty only) on date 22.12.2017 being the price thereof as compensation under Section 21(5) of MMDR Act, 1957 for alleged production without/in excess of the Environment clearance as rationalised by the CEC as per the demand Notice No. 4138/ Mines dated 02.09.2017 issued by the Deputy Director of Mines, Joda Circle, Dist. – Keonjhar

2.	Details of demand if any raised by Dept. of Mining and Geology, Govt. of Odisha.	Demand was raised by the Deputy Director of Mines, Joda Circle, Dist.-Keonjhar, vide letter No. 4138/Mines dated 02.09.2017 amounting of Rs. 243,64,11,380/- (Rupees Two Hundred and forty-three crores sixty-four lakhs eleven thousand three hundred eighty only) on or before 31.12.2017 in pursuance to the para 225 of the Order dated 02.08.2017 of Hon'ble Supreme Court in WPC No. 114/2014.
3.	Details of payment, if any made to Dept. of Mines and Geology, Govt. of Odisha.	Payment has been done by project proponent with an amount of Rs. 243, 64,11,380/- (Rupees Two Hundred and forty-three crores sixty-four lakhs eleven thousand three hundred eighty only) on date 22.12.2017 through net banking vide transaction reference number 425530481, 425534469,425537844 paid through HDFC Bank.
4.	Validity of mine lease.	Lease period has been extended upto 31.03.2030 vide letter No. III (A) SM-13/2012/3283/S&M, Bhubaneshwar dated 18.04.2015 issued by department of Steel & Mines, Govt. of Odisha in compliance with MMDR Amendment Act 2015.
5.	Status of Mine whether working or not	This is a working mine.
6.	Details of the past production of mines since its inception, duly authenticated by Dept. of Mines and Geology, Govt. of Odisha.	The year wise production figures from 1993-94 is submitted by the PP.

The Committee noted that such proposals of M/s TATA were earlier considered before the EAC in its meeting held during October 23-24, 2017. The gist of discussions are as follows:

The Committee deliberated on the proposal and sought the opinion of the representative of Ministry of Mines (an EAC Member) on the issues of change in ROM definition. The Expert Member (representative of Ministry of Mines) apprised the Committee that the term 'Run of Mines (ROM)' is a basic terminology in mining and invariably used in mining plans prepared for various mines. However, this term has been recently defined under Mineral (Other than Atomic and Hydrocarbon Energy Minerals) Concession Rules 2016 (MCR, 2016) and as such there is no change in the essence of ROM being used earlier (before defining it in MCR 2016) in Mining Plans and the definition incorporated recently in MCR 2016. Hence, there is no Modified Definition of ROM introduced in MCR 2016. The application made by the applicant, requesting MoEFCC to issue Corrigendum to ECs issued to it in the instant as well as earlier proposals in view of Modified Definition of ROM introduced in Mineral (Other than Atomic and Hydrocarbon Energy Minerals) Concession Rules 2016, is not tenable. In view of the above, the Committee made detailed deliberations on the proposal and noted that

the matter related to definition of ROM is a basic issue related to a mining statute viz. MCR, 2016 which is notified by Ministry of Mines. Hence, the applicant should have obtained clarification on the issue from the administering Ministry viz. Ministry of Mines or its technical body namely, Indian Bureau of Mines, as the case may be, before applying for EC amendment or corrigendum. In view of the above, the Committee suggested that the earlier proposal may also be kept on hold till clarity emerges on the issue. The instant proposals (3) along with earlier proposal of Joda East Mine lease, Odisha of M/s Tata Steel Limited were **deferred**.

The Ministry, vide letter dated 14.12.2017, has requested the Ministry of Mines and IBM to provide the clarifications/comments as sought by the EAC. In this regard PP vide letter dated 18.04.2018 has requested to expedite the amendment proposal of EC and also submitted the comments of IBM vide their letter dated 07.02.2018. The IBM had endorsed the letter to Ministry of Mines. The IBM has submitted the following comments: -

- (i). It is to clarify that it is incorrect to conclude that the definition of Run of Mine (ROM) has been changed consequent to its definition in Mineral (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016.
- (ii). The Run of Mine (ROM) is a general term used in Mining field adopted to indicate the material handling from the mineralized zone.
- (iii). ROM is defined in Mineral (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016 as under:- "Run-of-Mine (ROM) means the raw un processed or uncrushed material in its natural state obtained after blasting or digging from the mineralized zone of lease area", this includes the saleable ore mined after processing, intercalated waste (the gangue minerals within the mineralized zone) and mineral rejects/subgrade mineral.
- (iv). However, it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than the production of saleable fraction of ore or the ROM (the blasted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
- (v). It is also clarified that total rock excavation may differ to generate same amount of ROM on year to year bases.
- (vi). During the approval of Mining Plan the total excavation including ROM ore from which saleable fraction is produced are taken into consideration.
- (vii). IBM has concluded that it will be appropriate to accord Environmental Clearance based on the maximum total volume/tonnage of excavation or rock handling for the period under consideration.

Based on the information submitted and presentation made by PP, the Committee is of the view that the EC was granted based on the EIA/EMP Report and approved mining plan wherein the details of production of ore, mineral rejects, ROM, Sub-grade minerals, overburden

and total excavation were mentioned. EAC noted that there would be no increase in area, no change in technology, and no increase of production capacity envisaged as reported by the Project Proponent, accordingly the committee **recommended** the proposal for inclusion of following para in the EC letter,

“The Committee clarified that there is no change in the definition of ROM and the Environmental Clearance was granted for 12.0 Million TPA of Iron Ore (ROM) as mentioned in EIA/EMP Report and approved mining plan. The PP shall handle the material other than ROM as per approved mining plan and EIA/EMP report submitted to the Ministry”.

The Committee also noted that the project proponent has submitted the details of the past production of mines which is not duly authenticated by Dept. of Mines and Geology, Govt. of Odisha. In this regard **the Project Proponent shall submit the details of the past production since inception of mines duly authenticated by Dept. of Mines and Geology, Govt. of Odisha and compliance of Ministry’s OM dated 30.05.2018.**

(2.20). Katamati Iron Mine of M/s Tata Steel Limited, located at village-Deojhar Tehsil-Barbil, District-Keonjhar, Odisha (MLA: 403.3238 ha) (J-11015/63/2008-IA.II(M) Proposal No. IA/OR/MIN/9352/2008 Consideration of Amendment in EC w.r.t. Run of Mine (ROM)

The Proposal of M/s Tata Steel Limited is for amendments in Environmental Clearance vide no. (J-11015/63/2008-IA.II(M) dated 26.11.2010 w.r.t. Run of Mine (ROM). The mine is located at village-Deojhar, Tehsil-Barbil, District-Keonjhar, Odisha in Mine lease area of 403.3238 ha.

The Committee noted that the Ministry has granted the Environmental Clearance vide letter no. J-11015/63/2008-IA.II(M) dated 26.11.2010 for production capacity of 8.0 Million TPA of Iron Ore (ROM) in the mine lease area of 403.3238 ha.

The Project Proponent, vide letter dated 30.08.2017, has submitted the application for amendments in the EC. Project proponent mentioned that Ministry of Mines vide GSR No. 279(E) dated 04.03.2016 has notified the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 wherein the ‘run-of-mine’ has been defined which means that the raw unprocessed or uncrushed material in its natural state obtained after blasting or digging, from the mineralized zone of lease area. Project proponent mentioned that as per this definition of ROM, all material excavated out of the mineralized zone of the lease area, becomes ROM which includes the plant feed, subgrade, mineral rejects, waste etc. Therefore, the ambit of the term ROM, as per this new definition is wider than the understanding with which it was referred in the Mine Plan and the EIA documents. Hence, the capacity mentioned in the EC in terms of ROM also needs to be corrected in order to enable to operate at the same level.

Project Proponent has also mentioned that the environmental clearance dated 26.11.2010 has been granted on the basis of EIA/EMP Report and approved mine plan/mining

scheme by Indian Bureau of Mines on 29.09.2009. The details of ROM, waste and total excavation are provided year-wise and as below in tables:-

Table: Year-wise ROM and development (in Million Tonnes)

Year	ROM	Waste	Total Excavation
2008-09	2.27	0.30	2.57
2009-10	3.10	0.96	4.06
2010-11	4.78	1.11	5.89
2011-12	7.02	0.89	7.91
2012-13	8.04	1.04	9.08

The project proponent submitted mining plan including total excavation. The amended environmental clearance would be in line with the excavation plan given for approval. Project Proponent also mentioned that there would be no increase in area, no change in technology, no increase of production capacity, and no increase in the Pollution Load due to the requested amendments as there would be no deviation from the excavation plan and the Environment Protection and mitigations are in place for the Total Excavation 9.08 MTPA which was duly considered by the EAC while granting the Environmental Clearance.

Project Proponent reported that the Consent to Operate has been granted by the SPCB, vide Order No. 4811/IND-I-CON-184, dated 18.03.2016 Mining Plan/Scheme of Mining has been approved by Regional Controller of Mines, IBM, Bhubaneswar, vide letter No. MS/FM/16-ORI/BHU/2017-18/2012, dated 09.11.2017

Project Proponent reported that the mine is in operation since 1934 and mentioned that presently the mine is in operation with due compliance of the Hon'ble Supreme Court Order dated 02.08.2017 in W.P.(C) No-114/2014. The details are as follows:

S. No.	Issue	PP's submission
1.	Compliance of Order dated 02.08.2017 in CWP no. 114/2014 of Hon'ble Supreme Court.	In compliance to the order of the Hon'ble Supreme Court on dated 02.08.2017 in WPC No. 114/2014, the project proponent has paid the compensation amount of Rs. 82, 70, 48, 782.00/- (Rupees Eighty Two crores seventy lakhs forty eight thousand seven hundred eighty two only) on date 22.12.2017 being the price thereof as compensation under Section 21(5) of MMDR Act, 1957 for alleged production without/in excess of the Environment clearance as rationalised by the CEC as per the demand Notice No. 4140/ Mines dated 02.09.2017 issued by the Deputy Director of Mines, Joda Circle, Dist. – Keonjhar
2.	Details of demand if any raised by Dept. of Mining and Geology, Govt. of	Demand was raised by the Deputy Director of Mines, Joda Circle, Dist. – Keonjhar. vide letter No. 4140/ Mines dated 02.09.2017 amounting of Rs. 82, 70, 48,

	Odisha.	782.00/- (Rupees Eighty Two crores seventy lakhs forty eight thousand seven hundred eighty two only) on or before 31.12.2017 in pursuance to the para 225 of the Order dated 02.08.2017 of Hon'ble Supreme Court in WPC No. 114/2014.
3.	Details of payment, if any made to Dept. of Mines and Geology, Govt. of Odisha.	Payment been done by the project proponent with an amount of ofRs. 82, 70, 48, 782.00/- (Rupees Eighty Two crores seventy lakhs forty eight thousand seven hundred eighty two only) on date 22.12.2017 through net banking vide transaction reference number 425515962 paid through HDFC Bank.
4.	Validity of mine lease.	Lease period has been extended upto 31.03.2030 vide letter No. III (A) SM -02/2004/ 3303/S&M, Bhubaneswar dated 18.04.2015 issued by department of Steel & Mines, Govt. of Odisha in compliance with MMDR Amendment Act 2015.
5.	Status of Mine whether working or not	This is a working mine.
6.	Details of the past production of mines since its inception, duly authenticated by Dept. of Mines and Geology, Govt. of Odisha.	The year wise production figures from 1993-94 submitted by PP.

The Committee noted that such proposals of M/s TATA were earlier considered before the EAC in its meeting held during October 23-24, 2017. The gist of discussions are as follows:

The Committee deliberated on the proposal and sought the opinion of the representative of Ministry of Mines (an EAC Member) on the issues of change in ROM definition. The Expert Member (representative of Ministry of Mines) apprised the Committee that the term 'Run of Mines (ROM)' is a basic terminology in mining and invariably used in mining plans prepared for various mines. However, this term has been recently defined under Mineral (Other than Atomic and Hydrocarbon Energy Minerals) Concession Rules 2016 (MCR, 2016) and as such there is no change in the essence of ROM being used earlier (before defining it in MCR 2016) in Mining Plans and the definition incorporated recently in MCR 2016. Hence, there is no Modified Definition of ROM introduced in MCR 2016. The application made by the applicant, requesting MoEFCC to issue Corrigendum to ECs issued to it in the instant as well as earlier proposals in view of Modified Definition of ROM introduced in Mineral (Other than Atomic and Hydrocarbon Energy Minerals) Concession Rules 2016, is not tenable. In view of the above, the Committee made detailed deliberations on the proposal and noted that the matter related to definition of ROM is a basic issue related to a mining statute viz. MCR, 2016 which is notified by Ministry of Mines. Hence, the applicant should have obtained clarification on the issue from the administering Ministry viz. Ministry of Mines or its technical

body namely, Indian Bureau of Mines, as the case may be, before applying for EC amendment or corrigendum. In view of the above, the Committee suggested that the earlier proposal may also be kept on hold till clarity emerges on the issue. The instant proposals (3) along with earlier proposal of Joda East Mine lease, Odisha of M/s Tata Steel Limited were **deferred**.

The Ministry, vide letter dated 14.12.2017, has requested the Ministry of Mines and IBM to provide the clarifications/comments as sought by the EAC. In this regard PP vide letter dated 18.04.2018 has requested to expedite the amendment proposal of EC and also submitted the comments of IBM vide their letter dated 07.02.2018. The IBM had endorsed the letter to Ministry of Mines. The IBM has submitted the following comments: -

- (i). It is to clarify that it is incorrect to conclude that the definition of Run of Mine (ROM) has been changed consequent to its definition in Mineral (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016.
- (ii). The Run of Mine (ROM) is a general term used in Mining field adopted to indicate the material handling from the mineralized zone.
- (iii). ROM is defined in Mineral (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016 as under:- "Run-of-Mine (ROM) means the raw un processed or uncrushed material in its natural state obtained after blasting or digging from the mineralized zone of lease area", this includes the saleable ore mined after processing, intercalated waste (the gangue minerals within the mineralized zone) and mineral rejects/subgrade mineral.
- (iv). However, it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than the production of saleable fraction of ore or the ROM (the blasted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
- (v). It is also clarified that total rock excavation may differ to generate same amount of ROM on year to year bases.
- (vi). During the approval of Mining Plan the total excavation including ROM ore from which saleable fraction is produced are taken into consideration.
- (vii). IBM has concluded that it will be appropriate to accord Environmental Clearance based on the maximum total volume/tonnage of excavation or rock handling for the period under consideration.

Based on the information submitted and presentation made by PP, the Committee is of the view that the EC was granted based on the EIA/EMP Report and approved mining plan wherein the details of production of ore, mineral rejects, ROM, Sub-grade minerals, overburden and total excavation were mentioned. EAC noted that there would be no increase in area, no change in technology, and no increase of production capacity envisaged as reported by the

Project Proponent, accordingly the committee **recommended** the proposal for inclusion of following para in the EC letter.

“The Committee clarified that there is no change in the definition of ROM and the Environmental Clearance was granted for 8.0 Million TPA of Iron Ore (ROM) as mentioned in EIA/EMP Report and approved mining plan. The PP shall handle the material other than ROM as per approved mining plan and EIA/EMP report submitted to the Ministry”.

The Committee also noted that the project proponent has submitted the details of the past production of mines which is not duly authenticated by Dept. of Mines and Geology, Govt. of Odisha. In this regard **the Project Proponent shall submit the details of the past production since inception of mines duly authenticated by Dept. of Mines and Geology, Govt. of Odisha and compliance of Ministry’s OM dated 30.05.2018.**

(2.21). Noamundi Iron Mine of M/s Tata Steel Limited, located at village-Mahudi, Balijor, Korta, Noamundi, Sarbil Tehsil-Noamundi, District- West Singhbhum, Jharkhand (MLA: 1160.06 ha). J-11015/104/2011-IA.II(M) Proposal No. IA/JH/MIN/7094/2011)-Consideration of Amendment in EC w.r.t. Run of Mine (ROM)

The Proposal of M/s Tata Steel Limited is for amendments in Environmental Clearance vide no. J-11015/104/2011-IA.II(M) dated 10.06.2013 w.r.t. Run of Mine (ROM). The mine is located at village-Mahudi, Balijor, Korta, Noamundi, Sarbil Tehsil-Noamundi, District-West Singhbhum, Jharkhand in Mine lease area of 1160.06ha.

The Committee noted that the Ministry has granted the Environmental Clearance vide letter no. J-11015/104/2011-IA.II(M) dated 10.06.2013 for production of 10.0 Million TPA of Iron Ore (ROM) and beneficiation plant capacity of 18MTPA throughput in the mine lease area of 1160.06 ha.

The Project Proponent, vide letter dated 30.08.2017, has submitted the application for amendments in the EC. Project proponent mentioned that Ministry of Mines vide GSR No. 279(E) dated 04.03.2016 has notified the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 wherein the ‘run-of-mine’ has been defined which means that the raw unprocessed or uncrushed material in its natural state obtained after blasting or digging, from the mineralized zone of lease area. Project proponent mentioned that as per this definition of ROM, all material excavated out of the mineralized zone of the lease area, becomes ROM which includes the plant feed, subgrade, mineral rejects, waste etc. Therefore, the ambit of the term ROM, as per this new definition is wider than the understanding with which it was referred in the Mine Plan and the EIA documents. Hence, the capacity mentioned in the EC in terms of ROM also needs to be corrected in order to enable to operate at the same level.

Project Proponent has also mentioned that the environmental clearance dated 10.06.2013 has been granted on the basis of EIA/EMP Report and approved mine plan/mining

scheme by Indian Bureau of Mines on 31.01.2011. The details of ROM, waste and total excavation are provided year-wise and as below in tables:-

Table: Year-wise ROM and development (in Million Tonnes)

Year	ROM (Feed to plant)	OB	Subgrade	Total Excavation
2011-12	8	0.70	1.23	9.93
2012-13	7	0.72	0.87	8.59
2013-14	10	0.85	1.20	12.05
2014-15	10	1.2	1.05	12.25
2015-16	10	0.9	1.45	12.35
2016-17	10	1.4	0.75	12.15

The project proponent submitted mining plan including total excavation. The amended environmental clearance would be in line with the excavation plan given for approval. Project Proponent also mentioned that there would be no increase in area, no change in technology, no increase of production capacity, and no increase in the Pollution Load due to the requested amendments as there would be no deviation from the excavation plan and the Environment Protection and mitigations are in place for the Total Excavation 12.35 MTPA which was duly considered by the EAC while granting the Environmental Clearance.

Project Proponent reported that the Consent to Operate has been granted by the SPCB, vide Order No. JSPCP/HO/RNC/CTO-1162982/2017/779 dated 13.06.2017 Mining Plan/Scheme of Mining has been approved by Regional Controller of Mines, IBM, Ranchi, vide letter No. KOL/SB(W)/Fe/MP-188, Vol-VI dated 07.02.2017. Stage-II Forest Clearance over 370.92 ha has been granted and renewed by the Ministry vide letter no. F.No.8-279/195-FC(Pt), dated 04.09.2014.

Project Proponent reported that the mine is in operation since 1925 and mentioned that presently the mine is in operation with due compliance of the Hon'ble Supreme Court Order dated 02.08.2017 in W.P.(C) No-114/2014. The details are as follows:

S. No.	Issue	PP's submission
1.	Compliance of Order dated 02.08.2017 in CWP no. 114/2014 of Hon'ble Supreme Court.	In compliance to the order of the Hon'ble Supreme Court on dated 02.08.2017 in WPC No. 114/2014, the project proponent has paid the compensation amount of Rs. 56,96,51,093.00/- (Rupees Fifty six crores ninety six lakhs fifty one thousand and ninety three only) on date 28.12.2017 being the price thereof as compensation under Section 21(5) of MMDR Act, 1957 for alleged production without/in excess of the Environment clearance as rationalised by the CEC as per the demand Notice No. 1986M/ Mines dated

		12.09.2017 issued by the District Mining officer, Chaibasa.
2.	Details of demand if any raised by Dept. of Mining and Geology, Govt. of Jharkhand.	Demand was raised by the District Mining office, Chaibasa. vide letter No. 1986M dated 12.09.2017 amounting of Rs. 56,96,51,093.00/- (Rupees Fifty-six crores ninety-six lakhs fifty one thousand and ninety three only) on or before 31.12.2017 in pursuance of the Order dated 02.08.2017 of Hon'ble Supreme Court in WPC No. 114/2014.
3.	Details of payment, if any made to Dept. of Mines and Geology, Govt. of Jharkhand.	Payment has been done by the project proponent with an amount of Rs. 56,96,51,093.00/- (Rupees Fifty-six crores ninety-six lakhs fifty-one thousand and ninety three only) on date 28.12.2017 through net banking.
4.	Validity of mine lease.	In view of the Mines and Minerals (Development & Regulation) Amendment Act, 2015 the lease period has been extended upto 31.03.2030.
5.	Status of Mine whether working or not	This is a working mine.
6.	Details of the past production of mines since its inception, duly authenticated by Dept. of Mines and Geology, Govt. of Jharkhand.	The year wise production figures from 1993-94 submitted by PP.

The Committee noted that such proposals of M/s TATA were earlier considered before the EAC in its meeting held during October 23-24, 2017. The gist of discussions are as follows:

The Committee deliberated on the proposal and sought the opinion of the representative of Ministry of Mines (an EAC Member) on the issues of change in ROM definition. The Expert Member (representative of Ministry of Mines) apprised the Committee that the term 'Run of Mines (ROM)' is a basic terminology in mining and invariably used in mining plans prepared for various mines. However, this term has been recently defined under Mineral (Other than Atomic and Hydrocarbon Energy Minerals) Concession Rules 2016 (MCR, 2016) and as such there is no change in the essence of ROM being used earlier (before defining it in MCR 2016) in Mining Plans and the definition incorporated recently in MCR 2016. Hence, there is no Modified Definition of ROM introduced in MCR 2016. The application made by the applicant, requesting MoEFCC to issue Corrigendum to ECs issued to it in the instant as well as earlier proposals in view of Modified Definition of ROM introduced in Mineral (Other than Atomic and Hydrocarbon Energy Minerals) Concession Rules 2016, is not tenable. In view of the above, the Committee made detailed deliberations on the proposal and noted that the matter related to definition of ROM is a basic issue related to a mining statute viz. MCR, 2016 which is notified by Ministry of Mines. Hence, the applicant should have obtained clarification on the issue from the administering Ministry viz. Ministry of Mines or its technical

body namely, Indian Bureau of Mines, as the case may be, before applying for EC amendment or corrigendum. In view of the above, the Committee suggested that the earlier proposal may also be kept on hold till clarity emerges on the issue. The instant proposals (3) along with earlier proposal of Joda East Mine lease, Odisha of M/s Tata Steel Limited were **deferred**.

The Ministry, vide letter dated 14.12.2017, has requested the Ministry of Mines and IBM to provide the clarifications/comments as sought by the EAC. In this regard PP vide letter dated 18.04.2018 has requested to expedite the amendment proposal of EC and also submitted the comments of IBM vide their letter dated 07.02.2018. The IBM had endorsed the letter to Ministry of Mines. The IBM has submitted the following comments: -

- (i). It is to clarify that it is incorrect to conclude that the definition of Run of Mine (ROM) has been changed consequent to its definition in Mineral (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016.
- (ii). The Run of Mine (ROM) is a general term used in Mining field adopted to indicate the material handling from the mineralized zone.
- (iii). ROM is defined in Mineral (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016 as under:- "Run-of-Mine (ROM) means the raw un processed or uncrushed material in its natural state obtained after blasting or digging from the mineralized zone of lease area", this includes the saleable ore mined after processing, intercalated waste (the gangue minerals within the mineralized zone) and mineral rejects/subgrade mineral.
- (iv). However, it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than the production of saleable fraction of ore or the ROM (the blasted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
- (v). It is also clarified that total rock excavation may differ to generate same amount of ROM on year to year bases.
- (vi). During the approval of Mining Plan the total excavation including ROM ore from which saleable fraction is produced are taken into consideration.
- (vii). IBM has concluded that it will be appropriate to accord Environmental Clearance based on the maximum total volume/tonnage of excavation or rock handling for the period under consideration.

Based on the information submitted and presentation made by PP, the Committee is of the view that the EC was granted based on the EIA/EMP Report and approved mining plan wherein the details of production of ore, mineral rejects, ROM, Sub-grade minerals, overburden and total excavation were mentioned. EAC noted that there would be no increase in area, no change in technology, and no increase of production capacity envisaged as reported by the

Project Proponent, accordingly the committee **recommended** the proposal for inclusion of following para in the EC letter.

“The Committee clarified that there is no change in the definition of ROM and the Environmental Clearance was granted for 10.0 Million TPA of Iron Ore (ROM) as mentioned in EIA/EMP Report and approved mining plan. The PP shall handle the material other than ROM as per approved mining plan and EIA/EMP report submitted to the Ministry”.

The Committee also noted that the project proponent has submitted the details of the past production of mines which is not duly authenticated by Dept. of Mines and Geology, Govt. of Odisha. In this regard **the Project Proponent shall submit the details of the past production since inception of mines duly authenticated by Dept. of Mines and Geology, Govt. of Odisha and compliance of Ministry’s OM dated 30.05.2018.**

(2.22). Lampiya Iron Ore, Copper and Associated Minerals Mining Project of M/s Jindal Saw Limited, located in Village(s) Lampiya, Devpura, Chamanpura, Kamalpura, MahuaKhurd and Jaliyan, Tehsil Banera, District-Bhilwara, Rajasthan (Production capacity 30,00,000 tonnes per annum of iron ore) (ML No. 627/05) (F. No. J-11015/460/2008-IA.II(M); Proposal No. IA/RJ/MIN/62541/2011)-Re-Consideration of Amendment in EC w.r.t. reduction of MLA from 451 ha to 433.1033 ha.

The proposal of M/s Jindal Saw Limited is for amendment in EC w.r.t. reduction of MLA from 451 ha to 433.1033 ha for Lampiya Iron Ore, Copper and Associated Minerals Mine (ML No. – 627/ 05) with production capacity of 30.0 Lac Tonnes/Annum. The mine lease area is located at Village(s) – Lampiya, Devpura, Jaliyan, Chamanpura, Kamalpura and MahuwaKhurd, Tehsil – Banera, District – Bhilwara, Rajasthan. The Mining lease area is covered by Toposheet No. 45 K/ 11.

Project Proponent has been obtained Environmental Clearance under EIA Notification’ 2006, vide letter no. J-11015/ 460/ 2008/ -IA.II (M) dated 31.05.2011 for 30.0 Lac TPA.. The PP informed that the present request for correction in Mining Lease area from 451 Ha to 433.1033 Ha is made in view of the fact the DMG, Rajasthan (after grant of EC) noted that out of 451.0 Ha an area of 17.8967 Ha is overlapping to the area applied by earlier applicant. Therefore, the overlapped area was deducted from the earlier sanctioned lease area and new mine lease area is sanctioned with 433.1033 Ha with lease deed has already been executed on dated 05.04.2012. The PP has obtained the Consent to Operate from Rajasthan State Pollution Control Board, Jaipur vide no. F(Mines)/Bhilwara(Banera)/27(1)/ 2012-2013/ 8729-8733 dated 24.02.2014. The RSPCB, while processing the application for renewal of consent, has asked for amendment in EC to change the area from 451.0 Ha. to 433.1033 Ha.

The Proposal was earlier considered by the EAC in its meeting held during March 20-21, 2017 wherein the Committee deliberated on the proposal and noted that the PP has not submitted requisite documents viz. letter of DMG, Rajasthan; Modified approved mining plan and

Certified Compliance Report of earlier EC conditions from Regional Office, MoEFCC and hence, the proposal was deferred.

Based on the information submitted by the PP, the proposal is placed in this meeting. The PP has submitted the following information which were deliberated by the Committee.

- (i) PP reported that the mining lease was originally sanctioned in favour of M/s Jindal Saw Limited by State Govt. of Rajasthan, vide letter no. F.17 (158) Mines/Group-2/05 Jaipur, 10.10.2011. Letter of DMG, Rajasthan regarding change in mine lease area from 451 Ha to 433.1033 ha has been obtained from the Office of Directorate of Mines & Geology, Udaipur vide letter no. Nikhabu/ Bhil/ CC.3/ P.1 (1)/ 627/ 05/ 2358 dated 12.07.2011. As per Section 8A(3) of MMDR (amended) Act, 2015, the lease period has been extended vide letter of Govt. of Rajasthan, vide no. ME/Bhl/CC-I/ML-627/05/1182 dated 27.02.2015 from 09.05.2012 to 08.05.2062.
- (ii) Modified Mining Plan along with Progressive Mine Closure Plan has been approved by IBM for 433.1033 ha, vide their letter no. 584(4) (3)/(1633)/2015 – RCM – AJM, dated 04.04.2016 under Rule 17(3) of MCR 1960.
- (iii) Certified Compliance report of earlier Environmental Clearance conditions has been obtained from the Office of MoEF&CC, Regional Office (Central Region), Lucknow vide letter no. IV/ ENV/ R/ Mine – 488/ 801/ 2010/ 176 dated 12.09.2017. The Committee deliberated the compliance status of earlier EC.
- (iv) Consent to Operate has been obtained from Rajasthan State Pollution Control Board, Jaipur vide letter no. F (Mines)/Bhilwara (Banera)/24(1)/2012-2013/8729-8733 Order No. 2013-14/Mines/2045 dated 24.02.2014. PP reported that there is no litigation is pending against the mine lease area.
- (v) Authenticated past production details from the Department of Mines and Geology, Govt. of Rajasthan. The PP informed that that the mine is working since 2014 - 15 onwards and the production is well within the EC capacity. The Committee noted that there is no violation w.r.t. enhanced of production capacity.

Based on the information submitted and presentation made by PP, the Committee **recommended** the proposal of amendments of EC w.r.t. reduction of mine lease area of from 451 ha to 433.1033 ha.

(2.23). Baidyanathpur, Mangratoli & Kusumtoli Dolomite Mines of M/s Radha Raman Minerals, located at Sundargarh District, Odisha (F. No.J-11015/46/2015-IA-II(M); Proposal No. IA/OR/MIN/26107/2014)– Extension of the validity of ToR

The proposal of M/s Radha Raman Minerals is for extension of validity of TOR for one year. The ToR was issued by MoEF& CC, vide letter no. J-11015/46/2015-IA-II(M) dated 05.03.2015 and the validity of ToR was upto 05.03.2018.

PP reported that the Department of Steel & Mines, Govt. of Odisha has issued an order for lapsation of the lease on 30.09.2015. Against this order PP has filed a revision application before the Revisional Authority, Ministry of Mines. The revisionary authority of the Ministry of mines, in their final order no. 28/2017 dated 20.01.2017 has set aside the lapsation order of the State Government and remanded back; due to these issues the preparation of EIA/EMP report has been delayed.

The PP reported that this is a case of violation as the mine was operated from September-November 2010 without obtaining prior EC. The prosecution report has been filed in the Court of SDJM vide case no. 223/2014 dated 13.10.2014.

Based on the information submitted and presentation made by PP, the Committee **deferred** the proposal and is of the view that PP first need to submit the **detailed updated status of court cases, and validity of mine lease from the State Govt. of Odisha**. The Committee noted that PP has not submitted the documents/information w.r.t. compliance of agenda details which inter-alia are as below:

- (i) Compliance of order dated 2.8.2017 in CWP No. 114/2014 of Hon'ble Supreme Court
- (ii) Details of demand if any raised by Department of Mining and Geology
- (iii) Details of payment, if any made to Department of Mines & Geology
- (iv) Validity of mine lease
- (v) Status of mine whether working or not
- (vi) Details of past production of mine since its inception, duly authenticated by Department of Mines & Geology.
- (vii) Copy of affidavit needs to be submitted by PP in compliance of the Ministry's OM no. 3-50/2017-IA.III (Pt.), dated 30th May 2018.

Day 2 : 22.06.2018 (Friday)

Consideration of Proposal

(2.24) Limestone Mining Project with lease area of 4.48 Ha for production of 86,894 Tons/annum at Mauja & Mohal Bharli, Tehsil Paonta Sahib, Distt. Sirmour, Himachal Pradesh by M/s Sh. Karamvir Pal Singh as Category 'B2'. (File no.J-11015/58/2018-IA.II(M) & Online no. IA/HP/MIN/75023/2018, EIA Consultant: Chandigarh Pollution Testing Laboratory, Mohali)

Project Proponent submitted application for grant of Environmental Clearance by considering the Limestone as minor mineral (Category-B2 project) since the intended use of limestone is for cock feed and not for cement manufacturing. Project proponent along with EIA consultants have made the presentation.

Committee noted that Project Proponent has applied the proposal by considering the Limestone as minor mineral in the 'B2' category. However, during the presentation, it was

found that the limestone will also be used in cement manufacturing and various other uses. Accordingly, the mineral is to be categorised as 'major mineral' in the instant proposal. Mining lease was originally issued on 19.8.1964 for 106 Ha and has been transferred to the project proponent with reduced area of 4.48 Ha which is valid till 31.3.2020. However, project proponent could not show the documentary evidence how the lease has been transferred to them along with past production details. The mining plan which was shown during the presentation has been approved by the IBM vide letter dated 10.8.2016. Further, kml file which was presented during the meeting contains only one demarcation point in the proposed mining area. Project Proponent could not show boundary file.

EAC after deliberations, rejected the proposal with a recommendation that PP may submit in the Category 'A' project for obtaining ToR along with valid mining lease grant & deed, approved mining plan and past production details certified by District Mines and Geology.

(2.25) Bata Mandi-IV Sand, Boulder and Gravel Mining Project with lease area of 5.0507 ha for total production of 69,750 Tonnes/annum in Khasra no.1093 along Yamuna River at Village Upsampada Batamandi, Tehsil Paonta Sahib, District Sirmaur, Himachal Pradesh by M/s Sunil Kumar as Category 'B2'. (File no.J-11015/59/2018-IA.II(M); Online no.IA/HP/MIN/75207/2018; Consultant: M/s ENVIRTA Sustainable Solutions India Pvt. Ltd.)

Project Proponent submitted the proposal as Category 'B2' as the mining lease 5.0507 ha is falling in cluster with other two mining leases having an area of 3.5378 Ha and 5.0620 Ha within 500 m radius of the proposed mine lease. Total mine lease area of the cluster is 13.6505 Ha. Project Proponent along with the consultant have made the presentation.

Committee noted that as per the EIA Notification amendment vide S.O.141(E) dated 15.1.2016, individual leases having area between 5-20 ha are to be treated as Category 'B2' project and to be dealt by SEIAA/SEAC. However, if the total lease area of the cluster is between 5-25 ha, it is to be considered as Category 'B2' project and to be dealt by DEIAA/DEAC. Further, it is mentioned in the table that that no individual lease area should be more than 5 ha. In the present case, though the proposed mining lease is in the cluster with total area of 13.6505 Ha (between 5-25 Ha) which can be dealt by DEIAA/DEAC, two mining leases viz. proposed lease (5.0507 Ha) and other lease having area of 5.0620 Ha are more than 5 ha which does not fit in to the category of 5-25 Ha cluster. Member Secretary may seek a clarification from the Policy Wing of the IA division regarding this ambiguity in the EIA Notification.

Committee further noted that the proposed area is part of Kabja Forest Land for which Forest Department certification is required to decide whether diversion of forest land under FC Act, 1980 is applicable or not. Further, the proposed mine lease is located at 1.5 km from the Simbalbara Wildlife Sanctuary. Authenticated map by Chief Wildlife Warden showing distance between the mine lease vis-à-vis sanctuary and its eco-sensitive zone (draft/final) could not be made available. As per the Hon'ble Supreme Court Orders, mining in 1km radius of the protected area is prohibited. The mining in the ESZ is also prohibited. Since, the ESZ is not finalised, whether the proposed mining

activity is to be permitted or prohibited cannot be decided at present. Further, PP has not submitted PFR and Form-I online which are mandatory documents. Cluster EMP is to be prepared whereas PP submitted EMP for single mine lease. Further, traffic management plan needs to be submitted. Committee suggested that an action may be initiated against the consultant for not submitting mandatory documents online with an intimation to NABET.

EAC after deliberations, returned the proposal in original form as mandatory documents are not submitted. Further, Member Secretary may obtain the clarification from the Policy Wing of IA division for appraising the proposals involving cluster area between 5-25 ha and with some of the individual leases more than 5 ha.

(2.26) Bata Mandi-II Sand, Boulder and Gravel Mining Project with lease area of 6.8974 ha for total production of 1,33,425 Tonnes/annum in Khasra no.1091 along Yamuna River at Village Upsampada Batamandi, Tehsil Paonta Sahib, District Sirmaur, Himachal Pradesh by M/s Sunil Kumar as Category 'B2'. (File no. J-11015/60/2018-IA. II(M); Online no. IA/HP/MIN/75206/2018; Consultant: M/s ENVIRTA Sustainable Solutions India Pvt. Ltd.)

Project Proponent submitted the proposal as Category 'B2' as the mining lease 6.8974 ha is falling in cluster with other mining lease having an area of 3.5378 Ha within 500 m radius of the proposed mine lease. Total mine lease area of the cluster is 10.4352 Ha. Project Proponent along with the consultant have made the presentation.

Committee noted that as per the EIA Notification amendment vide S.O.141(E) dated 15.1.2016, individual leases having area between 5-20 ha are to be treated as Category 'B2' project and to be dealt by SEIAA/SEAC. However, if the total lease area of the cluster is between 5-25 ha, it is to be considered as Category 'B2' project and to be dealt by DEIAA/DEAC. Further, it is mentioned in the table that that no individual lease area should be more than 5 ha. In the present case, though the proposed mining lease is in the cluster with total area of 10.4352 Ha (between 5-25 Ha) which can be dealt by DEIAA/DEAC, the proposed lease area is more than 5 ha which does not fit in to the category of 5-25 Ha cluster. Member Secretary may seek a clarification from the Policy Wing of the IA division regarding this ambiguity in the EIA Notification.

Committee further noted that a certificate from Forest Department is required regarding non-involvement of forest land in the proposed lease area to decide whether diversion of forest land under FC Act, 1980 is applicable or not. Further, the proposed mine lease is located at 1.9 km from the Simbalbara Wildlife Sanctuary. Authenticated map by Chief Wildlife Warden showing distance between the mine lease vis-à-vis sanctuary and its eco-sensitive zone (draft/final) could not be made available. As per the Hon'ble Supreme Court Orders, mining in 1km radius of the protected area is prohibited. The mining in the ESZ is also prohibited. Since, the ESZ is not finalised, whether the proposed mining activity is to be permitted or prohibited cannot be decided at present. Further, PP has not submitted PFR and Form-I online which are mandatory documents. Cluster EMP is to be prepared whereas PP submitted EMP for single mine

lease. Further, traffic management plan needs to be submitted. Committee suggested that an action may be initiated against the consultant for not submitting mandatory documents online with an intimation to NABET.

EAC after deliberations, returned the proposal in original form as mandatory documents are not submitted. Further, Member Secretary may obtain the clarification from the Policy Wing of IA division for appraising the proposals involving cluster area between 5-25 ha and with some of the individual leases more than 5 ha.

**(2.27) Bata Mandi-I Sand, Boulder and Gravel Mining Project with lease area of 5.0620 ha for total production of 1,10,250 Tonnes/annum in Khasra no.11161 along Yamuna River at Village UpsampadaBatamandi, Tehsil Paonta Sahib, District Sirmaur, Himachal Pradesh by M/s Sunil Kumar as Category 'B2'.
(File no. J-11015/61/2018-IA. II(M); Online no. IA/HP/MIN/75204/2018; Consultant: M/s ENVIRTA Sustainable Solutions India Pvt. Ltd.)**

Project Proponent submitted the proposal as Category 'B2' as the mining lease 5.0620 ha is falling in cluster with other mining lease having an area of 5.0507 Ha within 500 m radius of the proposed mine lease. Total mine lease area of the cluster is 10.1127 Ha. Project Proponent along with the consultant have made the presentation.

Committee noted that as per the EIA Notification amendment vide S.O.141(E) dated 15.1.2016, individual leases having area between 5-20 ha are to be treated as Category 'B2' project and to be dealt by SEIAA/SEAC. However, if the total lease area of the cluster is between 5-25 ha, it is to be considered as Category 'B2' project and to be dealt by DEIAA/DEAC. Further, it is mentioned in the table that that no individual lease area should be more than 5 ha. In the present case, though the proposed mining lease is in the cluster with total area of 10.1127Ha (between 5-25 Ha) which can be dealt by DEIAA/DEAC, both the mine leases within the cluster are more than more than 5 ha (viz.5.0620 Ha and 5.0507 Ha) which does not fit in to the category of 5-25 Ha cluster. Member Secretary may seek a clarification from the Policy Wing of the IA division regarding this ambiguity in the EIA Notification.

Committee further noted that a certificate from Forest Department is required regarding non-involvement of forest land in the proposed lease area to decide whether diversion of forest land under FC Act, 1980 is applicable or not. Further, the proposed mine lease is located at 1.1 km from the Simbalbara Wildlife Sanctuary. Authenticated map by Chief Wildlife Warden showing distance between the mine lease vis-à-vis sanctuary and its eco-sensitive zone (draft/final) could not be made available. As per the Hon'ble Supreme Court Orders, mining in 1 km radius of the protected area is prohibited. The mining in the ESZ is also prohibited. Since, the ESZ is not finalised, whether the proposed mining activity is to be permitted or prohibited cannot be decided at present. Further, PP has not submitted PFR and Form-I online which are mandatory documents. Cluster EMP is to be prepared whereas PP submitted EMP for single mine lease. Further, traffic management plan needs to be submitted. Committee suggested that an action may be initiated against the consultant for not submitting mandatory documents online with an intimation to NABET.

EAC after deliberations, returned the proposal in original form as mandatory documents are not submitted. Further, Member Secretary may obtain the clarification from the Policy Wing of IA division for appraising the proposals involving cluster area between 5-25 ha and with some of the individual leases more than 5 ha.

(2.28) Pamta Limestone Mining Project with lease area of 4.4 Ha for production of 1,25,130 Tonnes/annum Limestone at Mauza Chhitali&ShamahPamta, Tehsil Paonta Sahib, District Sirmaur, Himachal Pradesh by M/s A. Dean & Company. (File no.J-11015/349/2015-IA.II(M); Online no.IA/HP/MIN/3115175/2015; Consultant: M/s Shivalik Solid Waste Management Ltd.)

Terms of Reference (ToR) has been issued for Limestone Mining Lease in the area of 4.4 Ha for production of 1,25,130 TPA vide Ministry's letter dated 30.11.2015. The project is treated as Category 'A' project due to interstate boundary of Himachal Pradesh and Uttarakhand is within 5 km (at 3.5 km) from the proposed Mining Lease.

The mine lease first been granted by Department of Industries; Himachal Pradesh vide their letter dated 18.10.1976 for an area of 275-17 Bighas (22.28 Ha). Lease deed for 275-17 Bighas has been executed on 20.9.1977. Government of Himachal Pradesh vide letter dated 14.3.2007 allowed Project Proponent to surrender 222-14 Bighas (11.98 Ha, Govt./Forest land) out of total mine lease of 275-17 Bighas (22.28 Ha). Further State Govt. vide letter dated 20.8.2008 renewed the lease for remaining area 53-03 Bighas (~4.4 Ha) w.e.f. 20.9.1997 for twenty years, i.e. till 19.9.2017. The lease has been further renewed for 10 years, i.e. till 19.9.2027.

Mining Officer, District Mines and Geology has vide letter no.992 dated 16.9.2017 has provided the past production details from 1994-95 till 2015-16. District Mining Officer vide letter dated 29.5.2018 further provided the production details since 1991-92 till 1993-94. District Mining Officer vide letter dated 10.5.2018 also clarified that the production in 2016 is upto 14.1.2016, a day before the EIA amendment Notification dated 15.1.2016. Further, District Mining Officer vide letter dated 14.7.2017 has certified that mining lease is not in operation w.e.f. January, 2016 as per the records. Further, a cluster certificate has been issued by the District Mining Officer vide dated 10.4.2015 that there are two other mining leases exist in the periphery of 500 m from the proposed mine lease viz. Savita Chauhan mining lease (3.1 Ha) and M/s Friends Minerals Mining lease (4.9 Ha). The total area of the cluster is 12.4 Ha including proposed 4.4 Ha mining lease.

IBM, Dehradun vide RTI reply letter dated 12.2.2018 mentioned that there is no violation letter issued to Project Proponent for excess production in the last five years. IBM vide letter dated 22.4.2016 approved the mining plan for five years, i.e. till 20.3.2021.

Public Hearing has been conducted by Himachal Pradesh State Pollution Control Board on 22.8.2016 under the Chairmanship of Additional Deputy Commissioner at Mauza Shamah Pamta, Tehsil Paonta Sahib, Dist. Sirmaur, H.P.

From the past production details, it has been observed that the Limestone production in the year 1993-94 (base year) is 23,317 MT/Annum and in the year 1994-95 is 69,193 MT/Annum. Further, as per EIA Notification, 1994, all major minerals having lease area

more than 5 Ha requires prior Environmental Clearance. In the instant case, the lease deed for 22.28 Ha has been executed on 20.9.1977 which means mine is under operations since 1977. The mine operations since 1994 till 14.3.2007 (date on which approx.12 Ha of the mining lease area has been surrendered and reduced the mine lease to 4.4 Ha) were carried out without prior Environmental Clearance both under EIA Notifications, 1994 and 2006 which amounts to the violation as per the Judgement dated 2.8.2017 by Hon'ble Supreme Court. Further, the production has increased from the base year 1993-94 in the subsequent years. Further, from 14.3.2007 onwards, PP may not require Environmental Clearance till 15.1.2016 as the lease area is below 5 Ha. Further, PP has stopped the mine operations since 15.1.2016. Proponent had already applied for grant of ToR in the violation sector vide online application no. IA/HP/MIN/74387/2018 dated 13.4.2018.

Committee after deliberations, rejected the present proposal as the proposal is to be appraised by the Violation Committee and the PP had already submitted an application in the concerned Sector.

(2.29) Mining of 3.3 LTPA of Sand, Bajri and Boulders in River Yamuna Lot No. 21/2 by M/s Garhwal Mandal Vikas Nigam Ltd. from mining lease area 34.940 Ha located at Village-Dhakrani, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand. [File No. J-11015/137/2013-IA-II(M); Proposal No: IA/UK/MIN/18558/2013; Consultant: Grass Root Research & Creation India (P) Ltd.]-EC Regarding

The proposal of M/s Garhwal Mandal Vikas Nigam Ltd. (GMVN) is for production of 3.3 LTPA of Sand, Bajri and Boulders in River Yamuna Lot No. 21/2 from mining lease area 34.940 Ha located at the Village-Dhakrani, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand. The Project Proponent submitted that mining lease area is coming under Survey of India Topo-Sheet No 53F11 and falls between Latitude: 30° 28' 3.21" N to 30° 27' 16.24" N & Longitude: 77° 42' 59.22" E to 77° 42' 4.73" E.

The project falls under Schedule 1(a) of mining and is a Category- "A" project as per EIA notification 14th September 2006 (amended time to time) as the general condition is applicable for the project as the Aasan Conservation Reserve is at a distance of 2.4 KM from the mining lease area. The project also lies in Doon Valley (Eco-Sensitive Area as notified under sub-section (2) of section 3 of the Environment (Protection) Act, 1986).

The Project Proponent applied online on 08.05.2013 vide proposal no. **IA/UK/MIN/18558/2013** for prescribing Term of Reference (ToR) and submitted the Form-1 and Pre-Feasibility Report. The proposal was considered & recommended for prescribing Term of Reference in EAC Meeting held on 26th -28th June, 2013 and ToR was issued on 16.09.2013.

The Proponent applied for grant of EC online on 02.06.2015 and submitted the EIA Report after conducting the Public Hearing vide letter dated 29.11.2017. The Proponent has now submitted the desired information and the proposal is now placed in EAC Meeting held on 21-22 June, 2018.

The Project Proponent submitted that Letter of Intent was issued vide Government Order No 589/ भूखनिर्देश /2012-13 dated 23.01.2013 and corrigendum to the same was issued on letter no 40/ भूखनिर्देश/2012-13 dated 10.04.2013. The PP also submitted a letter no 3498/ औ वी-22 ख /2001 dated 17.10.2002 wherein it has mentioned that in the District Dehradun the mining lease will be allotted to Garhwal Vikas Nigam Limited and in Gola River the same will be allotted to Uttarakhand Forest Development Corporation.

The Project Proponent submitted that the operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meters. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The transportation of the mineral is through tippers. As per mining plan about 20% of the excavated material will be considered as waste and will be used for reclaiming the bank slope. The Project Proponent submitted that the Mining Plan was approved vide Lr. No. 2201/ मा प्लान/ उ खनि/ देहरादून /2013-14 dated 3.03.2015. The mining plan was approved after the public hearing and due to this PP submitted a letter No 13/Bhu khani/2015-16 dated 27.04.2015 issued by Joint Director, Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand, wherein it has mentioned that the mining characteristics in the approved mining plan of GMVN is compatible with and similar in all aspects in the EIA Report both in draft and final EIA.

The Proponent submitted cluster certificate issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 377/ गोमोविनि/ रोलॉट/ भूखनिर्देश/2017-18 dated 27.02.2018 as per which there are other three mining leases of area 68.364 Ha, 1.854 Ha and 2.5893 Ha are within 500 meters of this mining lease. As all these mining leases has already been granted EC before 15.01.2016 thus the area of these mining lease is not considered in calculating the cluster area as per S.O. 2269(E) dated 01.07.2016. Thus, the mining falls in individual category with mining lease area of 34.94 Ha. The PP also submitted a letter issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 74/ भूखनिर्देश/ जिंकार्यादेदून /2018-19 dated 24.05.2018 wherein it has mentioned that the details provided in the cluster certificate is as per S.O. 141(E) dated 15.01.2016 and S.O. 2269(E) dated 01.07.2016.

The Project Proponent submitted the District Survey Report of the Dehradun District and also submitted a letter issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 74/ भूखनिर्देश/ जिंकार्यादेदून /2018-19 dated 24.05.2018 wherein it has mentioned that DSR submitted by PP is final DSR and prepared as per Appendix-X of S.O. 141(E) dated 15.01.2016.

The PP submitted a report of inspection carried out on 14.09.2012 by a Committee constituted by Govt of Uttarakhand as per which there is no forest land in the mining lease area.

The Project Proponent also submitted a letter No 2902/12-1/ चक्राता dated 03.1.2015 issued by Divisional Forest Officer, Chakrata as per which Aasan Wetland is at a distance of 2.4 KM from the mining lease area. PP submitted the Minutes of 43rd meeting of Standing Committee of National Board of Wildlife (NBWL) held on 27.06.2017 wherein the proposal was recommended for NBWL Clearance.

The PP has submitted LR No 2465/9-2 dated 24.04.2015 thereby submitting the list of Schedule-1 & II species present in the Core and Buffer Zone of the Mining lease area duly authenticated by the State Forest Department. As per which there is no Schedule-1 species present in the core & buffer zone. However, there are 3 schedule-II species viz. Rhesus Macaque, Spotted Deer and Rat Snake is present in the buffer zone.

The PP submitted a conservation plan prepared for schedule-1 & Schedule-II species. The Conservation Plan was submitted for the approval of Chief Wildlife Warden vide LR No 691/ खनन / कन्ज्वेशन प्लान dated 16.02.2017. The Chief Wild Life Warden (CWLW) vide its LR No 350/121 देहरादून dated 11.08.2017 communicated the shortcoming in the conservation plan to GMVN. The GMVN submitted the revised conservation plan for the approval CWLW on 20.02.2018. The Budget proposed by PP in the Conservation Plan is ₹ 14.0 Lakh (Capital Expenditure) and ₹ 9.0 Lakh (Recurring Expenditure).

The primary **baseline data** for site specific micro meteorology data, ambient air quality, water quality, noise level, soil and flora & fauna has been collected during **October-December, 2013**. The monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and no major divergence was observed with respect to concentration values of various parameters between collected samples. The Project Proponent submitted that the baseline concentration of AAQ i.e. 98th percentile value of PM₁₀ is ranges from 69.1 µg/m³ to 85.2 µg/m³, 98th percentile value of PM_{2.5} is ranges from 37.5 µg/m³ to 42.1 µg/m³. The 98th percentile values of Sulphur dioxide 5.9-6.1 µg/m³ and Oxides of Nitrogen is 18.7-20.9 µg/m³.

The Project Proponent submitted that advertisement for the public hearing was published in Hindustan Times and Amar Ujala on 08.06.2014 and the public hearing was conducted on 08.07.2014 under the chairmanship of Shri Pratap Singh Shah ADM, Dehradun. The issue raised during the public hearing was deliberated during the meeting. The issues raised during public hearing are employment to local people, discount to local people for mineral, **alternative route for transportation of mineral**.

The Project Proponent submitted that every year 500 saplings (Aam, Jamun, Neem, Popular, Sisam, Siris, Gulmohar, Imli, Lichi, Bael, Ber, Amla) will be planted. During 5 year 1.0 Ha area shall be made covered under plantation.

The Project Proponent submitted that the budget proposed for the occupational health plan is ₹ 5.10 Lakh which includes assistance in setting up a temporary health center during the lease tenure; provide free medicines to mine workers, awareness campaign regarding health issues for mine workers and health checkup & medicine to mine workers.

The Project Proponent submitted that budget proposed for the Corporate Social Responsibility is ₹ 90,000 which includes free distribution of school bags & scholarship for students, distribution of blankets, vocational training, free medical camps, awareness programmes and distribution of free saplings.

The Project Proponent submitted that the budget earmarked for EMP shall be 4.5 Lakh (Capital) and ₹ 7.75 Lakh (Recurring). In addition to this the budget proposed for environment monitoring will be ₹ 2.2 Lakh/annum.

The Project Proponent submitted that the total project cost will be ₹ 18.50 Lakh. The project will give employment to 185 persons. In addition to this the PP also set an environment management cell.

The Project Proponent vide letter No. 355/खनन-(2018-19) dated 22.06.2018 submitted an undertaking that Garhwal Mandal Vikas Nigam Ltd. will carry out the mining operation themselves and will not outsource it to any Third Party.

Based on the discussion held and documents submitted by PP the Committee was of the view that PP should submit the following before considering the case for grant of Environmental Clearance and **deferred** the proposal:

- a) The Proponent should collect the baseline data in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level. The entire mining lease should be divided suitably in the grids of 25 Meter x 25 Meters with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid need to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank, safety barrier at lease boundary, restrictions as per condition of LoI/Mining Lease deed, restriction as Mineral Concession Rule of the Concerned State, restrictions as per sustainable sand mining management guidelines 2016 and restriction as per direction of any Court or NGT. The PP should ascertain the level of the river bed with the help of sections drawn across the width of the rivers and along the direction of flow of the river and based on this define the depth of mining of each grid. The PP should provide a detailed map and table clearly showing the grid wise material availability, dimension of grid, location of grid (latitude & longitude of the corner points), level of grid (AMSL and RL), depth of mining in each grid, grids left under no mining zone etc.

- b) PP should suitably name each section line. Section Plan for both sections drawn across the river and along the direction of the river needs to be submitted. Each Section should have level on vertical axis and distance from the bank of river on horizontal axis. For the section along the direction of the river the levels to be shown on vertical axis and distance from upstream to downstream should be shown on horizontal axis.
- c) The PP should prepare the modified Mining Plan based on the above survey. The information sought above needs to be a part of the mining plan. In the mining plan year wise production plan should be prepared in three plates for each year. Plat-1 show the mine working for the pre-monsoon period (1st APR- 14th June), Plate-2 should show the status of the mine after the replenishment and no working should be proposed in this period (15th June-1st Oct) as the mining lease area needs to be left for the replenishment of the river bed mineral and plat-3 show the mine working after replenishment of the river bed i.e. post monsoon period (2nd Oct-31st March).
- d) PP should specifically mention in the mining plan that in the subsequent scheme of mining/review of mining plan, the year wise data pertaining to replenishment study (all five years) shall be provided which include the level (AMSL & RL) of river bed recorded before and after the monsoon, year wise replenishment quantity, all plan & sections of the replenishment study for the past five years.
- e) The PP should also submit a kml file wherein the above-mentioned grid plans is superimposed on the satellite imaginary.
- f) PP should also submit an undertaking to the effect that each year after the replenishment study the plan & section shall be submitted to concerned Department of Mining & Geology of the State for verification and official record.
- g) The methodology for conducting replenishment study needs to be mentioned in the modified mining plan. PP should ensure that plan and section that will be submitted to EAC should be in proper scale.
- h) PP should ensure that relevant information as per ToR Conditions needs to be provided in the EIA Report.
- i) PP should clearly mention the designation and number of person to be engaged for Environmental Monitoring Cell. The EMC will be set up for this mine only or for all the mining lease of the GMVN in the area.
- j) The PP should clearly bring out the impact on environment due to cluster situation if any. Air Quality modeling needs to be done in Aermode software both for area and line source.

- k) The transportation route needs to be clearly provided in the EIA Report with other details such as width of road, length of road, type of road, impact due to transportation on the vegetation on the both side of the road, frequency of maintenance of the road, amount proposed for maintenance of the road, compensation to the land owners effected by transportation of mineral etc.
- l) Detailed occupational plan needs to be submitted with budget allocation. The Committee was of the view that being handling the large number of mines the GMVN should set up a dedicated cell for the occupational health surveillance.
- m) PP submitted the list of Secdule-1 species for core and buffer zone duly authenticated by Forest Department and same needs to be updated in the EIA Report. PP should provide the conservation plan for all secdule-1 and Schedule-II species present in the core & buffer zone.
- n) Proof of submission of EIA/EMP report within the validity of ToR needs to be submitted as the EIA report uploaded on the website initially is not the correct report.
- o) The budget of EMP needs to be revised as the Environmental Monitoring cost is not included in the EMP Budget.
- p) PP should submit a plan clearly mention the area that will be covered under plantation.
- k) Proof of submission of application for NBWL Clearance.

(2.30) Mining of 3.0 LTPA of Sand, Bajri and Boulders in River Yamuna Lot No. 23/2 by M/s Garhwal Mandal Vikas Nigam Ltd. from mining lease area 31.203 Ha located at Village-Dumet, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand. [File No. J-11015/123/2013-IA-II(M); Proposal No: IA/UK/MIN/18533/2013; Consultant: Grass Root Research & Creation India (P) Ltd.]-EC Regarding

The proposal of M/s Garhwal Mandal Vikas Nigam Ltd. (GMVN) is for production of 3.0 LTPA of Sand, Bajri and Boulders in River Yamuna Lot No. 23/2 from mining lease area 31.203 Ha located at Village-Dumet, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand. The Project Proponent submitted that mining lease area is coming under Survey of India Topo-Sheet No 53F14 and falls between Latitude: 30° 30' 41.09" N to 30° 30' 20.50" N & Longitude: 77° 49' 45.65" E to 77° 49' 15.53" E.

The project falls under Schedule 1(a) of mining and is a Category- "A" project as per EIA notification 14th September 2006 as the project lies in Doon Valley (Eco-Sensitive Area as notified under sub-section (2) of section 3 of the Environment (Protection) Act, 1986) and general condition is applicable for the project as per S.O. 1599(E) dated 25.06.2014.

The Project Proponent applied online on 26.04.2013 vide proposal no. **IA/UK/MIN/18533/2013** for prescribing Term of Reference (ToR) and submitted the Form-1 and Pre-Feasibility Report. The proposal was considered & recommended for prescribing Term of Reference in EAC Meeting held on 26th -28th June, 2013 and ToR was issued on 16.09.2013.

The Proponent submitted the EIA Report after conducting the Public Hearing online for grant of EC on 04.04.2015. The PP was asked to submit the proposal as per S.O 141(E) dated 15.01.2016 on 04.03.2016. The PP vide letter no 64/mining dated 21.04.2016 submitted that the proposal is category A Project as per S.O. 141(E) dated 15.01.2016. The Ministry vide LR No J-11015/123/2013-IA-II(M) dated 14.06.2017 asked the PP to submit the District Survey Report, Cluster Certificate and KML file. The PP vide Lr No 64/EIA-MoEF&CC dated 12.04.2018 submitted the above information online on 16.04.2018. The Ministry vide ADS dated 04.05.2018 asked the PP to carry out some correction and submit additional information viz. i) Cluster Certificate as per S.O 141(E) 15.01.2016 & S.O. 2269 (E) dated 1.07.2016 needs to be submitted; ii) On the cover page of EIA Report period of study is not mentioned as required as per O.M No. J-20012/11/98-IA. II (M) dated 28.10.2004; iii) EIA Report is not as per generic structure mentioned in Appendix-III of EIA Notification 2006; iv) Copy of advertisement published in English Newspaper needs to be submitted; v) LoI was issued on 23.01.2013 and is valid for 5 years i.e. up to 22.01.2018 please provides the valid LoI; vi) Clear copy of advertisement (Regional and English language) needs to be submitted; vii) List of schedule-1 species duly authenticated by Forest Department needs to be submitted; viii) Conservation Plan for schedule-1 species needs to be submitted; ix) Certificate from Forest Department regarding distance of mining lease from the protected area needs to be submitted and x) A letter from State Government to the effect that District Survey Report is prepared as per Appendix-X of S.O 141(E) dated 15.01.2016. The Proponent now submitted the desired information and the proposal is now placed in the EAC Meeting held on 21-22 June, 2018.

The Project Proponent submitted that Letter of Intent was issued vide Government Order No 589/भूखनिर्देश/2012-13 dated 23.01.2013 and corrigendum to the same was issued on letter not 40/भूखनिर्देश/2012-13 dated 10.04.2013. The PP also submitted a letter no 3498/और्वि-22 ख/2001 dated 17.10.2002 wherein it has mentioned that in the District Dehradun the mining lease will be allotted to Garhwal Vikas Nigam Limited and in Gola River the same will be allotted to Uttarakhand Forest Development Corporation.

The Project Proponent submitted that the proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meters. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The transportation of the mineral is through tippers. As per mining plan about 20% of the excavated material will be considered as waste and will be used for reclaiming the bank slope. The Project Proponent submitted that the Mining Plan was approved vide Lr. No. 2199/मांप्लान/उखनि/देहरादून/2013-14 dated 3.03.2015. The mining plan was approved after the

public hearing and due to this PP submitted a letter No 13/Bhu khani/2015-16 dated 27.04.2015 issued by Joint Director, Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand, wherein it has mentioned that the mining characteristics in the approved mining plan of GMVN is compatible with and similar in all aspects in the EIA Report both in draft and final EIA. Total water requirement will be 3 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression.

The Proponent submitted cluster certificate issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr. No 377/गोमोविनि/राजौट/भूखनिई/2017-18 dated 27.02.2018 as per which there is one more mining leases of area 10.11 Ha within 500 meters of this mining lease for which EC has already been granted before 15.01.2016. Thus, this mining lease is not coming under cluster situation as per S.O. 2269(E) dated 1.07.2016. The PP also submitted a letter issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 74/ भूखनिई/ जिंकार्यादेदून o/2018-19 dated 24.05.2018 wherein it has mentioned that the details provided in the cluster certificate is as per S.O 141(E) dated 15.01.2016 and S.O. 2269(E) dated 01.07.2016.

The Project Proponent submitted the District Survey Report of the Dehradun District and also submitted a letter issued by issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 74/ भूखनिई/ जिंकार्यादेदून o/2018-19 dated 24.05.2018 wherein it has mentioned that DSR submitted by PP is final DSR and prepared as per Appendix-X of S.O. 141(E) dated 15.01.2016.

The PP submitted a report of inspection carried out on 14.09.2012 by a Committee constituted by Govt of Uttarakhand as per which there is no forest land in the mining lease area.

The Project Proponent also submitted a letter No 344/32-1-1(जी.आई.एस) dated 14.06.2018 issued by Chief Wildlife Warden(आई.टी.जी.सी) as per which Aasan conservation reserve is at a distance of 12 KM and Mussoorie Wildlife Sanctuary is 12.0 Km from the mining lease area. In the same letter it has mentioned that the distances are approximate and directed Divisional Forest Officer, Kalsi for physical verification. The PP also submitted a letter no 2294/32-1-1 dated 14.06.2018 wherein he has confirmed that the distance of mining lease from the protected area is as per letter issued by CWW.

The PP did not submit the list of Schedule-1 & II species present in Core and Buffer Zone of the Mining lease area duly authenticated by the State Forest Department. As per the list there is no schedule-1 species in the Core & Buffer Zone but there are three schedule-II species viz. Spotted Deer, Rhesus Macaque, and Rat Snakes in the buffer Zone

The PP submitted a conservation plan prepared for schedule-1 & Schedule-II species. The Conservation Plan was submitted for the approval of Chief Wildlife Warden vides LR No 691/ खनन/ कन्व्ेशन प्लान dated 16.02.2017. The Chief Wild Life Warden (CWLW) vide its LR No 350/121 देहरादून dated 11.08.2017 communicated the shortcoming in the conservation plan to

GMVN. The GMVN submitted the revised conservation plan for the approval CWW on 20.02.2018.

The primary **baseline data** for site specific micro meteorology data, ambient air quality, water quality, noise level, soil and flora & fauna has been collected during **October-December, 2013**. The monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and no major divergence was observed with respect to concentration values of various parameters between collected samples. The Project Proponent submitted that the baseline concentration of AAQ i.e. 98th percentile value of PM₁₀ is ranges from 69.5 µg/m³ to 86.4 µg/m³, 98th percentile value of PM_{2.5} is ranges from 32.5 µg/m³ to 43.8 µg/m³. The 98th percentile values of Sulphur dioxide 5.5-6.0 µg/m³ and Oxides of Nitrogen is 16.6-20.7 µg/m³.

The Project Proponent submitted that advertisement for the public hearing was published in Hindustan Times and Amar Ujala on 14.05.2014 and corrigendum issued on 8.06.2017 as per which public hearing was scheduled to be held on 07.07.2014 in place of 16.06.2014. PP also submitted another advertisement copy published on 07.08.2014 wherein the date of public hearing was mentioned as 10.09.2014. The public hearing was conducted on 10.09.2014 under the chairmanship of Shri Pratap Singh Shah ADM, Dehradun. The issue raised during the public hearing was deliberated during the meeting. The issues raised during public hearing are scientific mining, protecting the bank of the river, CSR activities etc.

The Project Proponent submitted that every year 500 saplings (Aam, Jamun, Neem, Popular, Sisam, Siris, Gulmohar, Imli, Lichi, Bael, Ber, Amla) will be planted. During 5 years 1.0 Ha area shall be made covered under plantation.

The Project Proponent submitted that the budget proposed for the occupational health plan is ₹ 4.92 Lakh which includes assistance in setting up a temporary health center during the lease tenure; provide free medicines to mine workers, awareness campaign regarding health issues for mine workers and health checkup & medicine to mine workers.

The Project Proponent submitted that budget proposed for the Corporate Social Responsibility is ₹ 90,000 which includes free distribution of school bags & scholarship for students, distribution of blankets, vocational training, free medical camps, awareness programmes and distribution of free saplings.

The Project Proponent submitted that the budget earmarked for EMP shall be 4.46 Lakh (Capital) and ₹ 7.73 Lakh (Recurring). In addition to this the budget proposed for environment monitoring will be ₹ 2.2 Lakh/annum.

The Project Proponent submitted that the total project cost will be ₹ 17.70 Lakh. The project will give employment to 171 persons. In addition to this the PP also set an environment management cell.

The Project Proponent vide letter No. 355/खनन-(2018-19) dated 22.06.2018 submitted an undertaking that Garhwal Mandal Vikas Nigam Ltd. will carry out the mining operation themselves and will not outsource it to any Third Party.

Based on the discussion held and documents submitted by PP the Committee was of the view that PP should submit the following before considering the case for grant of Environmental Clearance and **deferred** the proposal:

- a) The Proponent should collect the baseline data in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level. The entire mining lease should be divided suitably in the grids of 25 Meter x 25 Meters with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid need to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank, safety barrier at lease boundary, restrictions as per condition of LoI/Mining Lease deed, restriction as Mineral Concession Rule of the Concerned State, restrictions as per sustainable sand mining management guidelines 2016 and restriction as per direction of any Court or NGT. The PP should ascertain the level of the river bed with the help of sections drawn across the width of the rivers and along the direction of flow of the river and based on this define the depth of mining of each grid. The PP should provide a detailed map and table clearly showing the grid wise material availability, dimension of grid, location of grid (latitude & longitude of the corner points), level of grid (AMSL and RL), depth of mining in each grid, grids left under no mining zone etc.
- b) PP should suitably name each section line. Section Plan for both sections drawn across the river and along the direction of the river needs to be submitted. Each Section should have level on vertical axis and distance from the bank of river on horizontal axis. For the section along the direction of the river the levels to be shown on vertical axis and distance from upstream to downstream should be shown on horizontal axis.
- c) The PP should prepare the modified Mining Plan based on the above survey. The information sought above needs to be a part of the mining plan. In the mining plan year wise production plan should be prepared in three plates for each year. Plat-1 show the mine working for the pre-monsoon period (1st APR- 14th June), Plate-2 should show the status of the mine after the replenishment and no working should be proposed in this period (15th June-1st Oct) as the mining lease area needs to be left for the replenishment of the river bed mineral and plat-3 show the mine working after replenishment of the river bed i.e. post monsoon period (2nd Oct-31st March).
- d) PP should specifically mention in the mining plan that in the subsequent scheme of mining/review of mining plan, the year wise data pertaining to replenishment study (all five years) shall be provided which include the level (AMSL & RL) of river bed recorded

before and after the monsoon, year wise replenishment quantity, all plan & sections of the replenishment study for the past five years.

- e) The PP should also submit a kml file wherein the above-mentioned grid plans is superimposed on the satellite imaginary.
- f) PP should also submit an undertaking to the effect that each year after the replenishment study the plan & section shall be submitted to concerned Department of Mining & Geology of the State for verification and official record.
- g) The methodology for conducting replenishment study needs to be mentioned in the modified mining plan. PP should ensure that plan and section that will be submitted to EAC should be in proper scale.
- h) PP should ensure that relevant information as per ToR Conditions needs to be provided in the EIA Report.
- i) PP should clearly mention the designation and number of person to be engaged for Environmental Monitoring Cell. The EMC will be set up for this mine only or for all the mining lease of the GMVN in the area.
- j) The PP should clearly bring out the impact on environment due to cluster situation if any. Air Quality modeling needs to be done in Aermode software both for area and line source.
- k) The transportation route needs to be clearly provided in the EIA Report with other details such as width of road, length of road, type of road, impact due to transportation on the vegetation on the both side of the road, frequency of maintenance of the road, amount proposed for maintenance of the road, compensation to the land owners effected by transportation of mineral etc.
- l) Detailed occupational plan needs to be submitted with budget allocation. The Committee was of the view that being handling the large number of mines the GMVN should set up a dedicated cell for the occupational health surveillance.
- m) PP submitted the list of Secdule-1 species for core and buffer zone duly authenticated by Forest Department and same needs to be updated in the EIA Report. PP should provide the conservation plan for all secdule-1 and Schedule-II species present in the core & buffer zone.
- n) The budget of EMP needs to be revised as the Environmental Monitoring cost is not included in the EMP Budget.
- o) PP should submit a plan clearly mentioning the area where plantation shall be carried out.

- p) Reason for changing in the date of public hearing needs to be submitted.
- q) The budget proposed for the Corporate Environment Responsibility needs to be revised.
- r) Details of the instruction of Hon'ble High Court if any for the mining close to the bridge.

(2.31) Mining of 85,000 TPA of Sand, Bajri and Boulders in River Ton Lot No. 3/13 by M/s Garhwal Mandal Vikas Nigam Ltd. from mining lease area 6.0 Ha located at Village-Banshiwala, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand. [File No. J-11015/88/2013-IA-II(M); Proposal No: IA/UK/MIN/18419/2013; Consultant: Grass Root Research & Creation India (P) Ltd.]-EC Regarding-

The proposal of M/s Garhwal Mandal Vikas Nigam Ltd. (GMVN) is for production of 85,000 TPA of Sand, Bajri and Boulders in River Yamuna Lot No. 3/13 from mining lease area 6.0 Ha located at Village-Banshiwala, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand. The Project Proponent submitted that mining lease area is coming under Survey of India Topo-Sheet No 53F14 and falls between Latitude: 30° 20' 29.19" N to 30° 20' 20.58" N & Longitude: 77° 53' 33.35" E to 77° 53' 49.23" E.

The project falls under Schedule 1(a) of mining and is a Category- "A" project as per S.O. 141(E) 15.01.2016 as the Cluster Area is 52.931 Ha and should be appraised by SEIAA, Uttarakhand. Further as the SEIAA in Uttarakhand is not functional the project is to be appraised by EAC. The project also lies in Doon Valley (Eco-Sensitive Area as notified under sub-section (2) of section 3 of the Environment (Protection) Act, 1986) and general condition is applicable for the project as per S.O. 1599(E) dated 25.06.2014 and thus should be treated as Category 'A' Project as per EIA Notification 2006. The Proponent submitted that inter state boundary is also within 8 Km from the project location.

The Project Proponent applied for ToR on 12.03.2013 and submitted the Form-1 and Pre-Feasibility Report. The proposal was considered & recommended for prescribing Term of Reference in EAC Meeting held on 15th -17th May, 2013 and ToR was issued on 16.07.2013.

The Proponent submitted the EIA Report after conducting the Public Hearing online vide proposal no IA/UK/MIN/18419/2013 on 04.04.2015 and proposal was considered in EAC Meeting held on 25th -27th August, 2015 wherein the Committee deferred the proposal due to want of i) Disaster management plan is not adequate and needs to be revised; ii) Action Plan along with budgetary provisions on the issues raised during Public Hearing are not prepared adequately; iii) There is no proper page numbers and index mentioned in the EIA/EMP Report; iv) The EIA/EMP report along with Annexures are not legible; v) Certified location map and distance certificate from the State Government with respect to protected areas has not been submitted; vi) NOC from Sarpanch has not mentioned the capacity of water; PP submit NOC for withdrawal of 2 KLD water; vii) List of flora/fauna and endangered species are not

accurate; Plant species w.r.t. river bed are not explored; viii) Green belt species proposed are not adequate. PP needs to resubmit the revised name of species; ix) TOR compliance no. 44 w.r.t. impact on mining on plankton was not addressed properly; x) PP has not done the replenishment study. PP informed that they had requested IIT Roorkee, vide letter dated 19.04.2015 for replenishment study. The Committee is of the view that Ministry issued TOR in 2013 and PP had given the replenishment study work to IITR only in April 2015. PP needs to conduct the replenishment study for appraising before the EAC; and xi) The Committee noted that Mine Plan has been approved by Department of Mining & Geology, Uttarakhand, vide, letter dated 03.03.2015 and the Public Hearing was held on 07.07.2014 i.e. prior to approval of the Mine Plan. Thus the Public was informed about the Mining Proposal with a draft Mine Plan only. In view of the above, it was decided by the Committee that the comments of the Mining & Geology Department be secured on material changes, if any in the Final Mine Plan compared to the said Draft Mining Plan submitted by the Proponent to the Public

The PP submitted the above information vide letter dated 21.04.2016 and upload the information on 28.04.2016. As the DSR was not submitted by PP proposal was not considered and de-listed from the system. The proposal was re-listed and proponent was asked to submit i) Cluster Certificate as per S.O 141(E) 15.01.2016 & S.O. 2269 (E) dated 1.07.2016 needs to be submitted; ii) On the cover page of EIA Report period of study is not mentioned as required as per O.M No. J-20012/11/98-IA. II (M) dated 28.10.2004; iii) EIA Report is not as per generic structure mentioned in Appendix-III of EIA Notification 2006; iv) Copy of advertisement published in English Newspaper needs to be submitted; v) LoI was issued on 23.01.2013 and is valid for 5 years i.e. up to 22.01.2018 please provides the valid LoI; vi) Clear copy of advertisement (Regional and English language) needs to be submitted; vii) List of schedule-1 species duly authenticated by Forest Department needs to be submitted; viii) Conservation Plan for schedule-1 species needs to be submitted; ix) Certificate from Forest Department regarding distance of mining lease from the protected area needs to be submitted and x) A letter from State Government to the effect that District Survey Report is prepared as per Appendix-X of S.O 141(E) dated 15.01.2016.

The PP submitted the above information online on 28.05.2018 and the proposal was placed in EAC Meeting held on 21-22 June, 2018.

The Project Proponent submitted that Letter of Intent was issued vide Government Order No 589/भूखनिर्देश/2012-13 dated 23.01.2013 and corrigendum to the same was issued on letter no 40/भूखनिर्देश/2012-13 dated 10.04.2013. The PP also submitted a letter no 3498/और्वि-22 ख/2001 dated 17.10.2002 wherein it has mentioned that in the District Dehradun the mining lease will be allotted to Garhwal Vikas Nigam Limited and in Gola River the same will be allotted to Uttarakhand Forest Development Corporation.

The Project Proponent submitted that the proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meters. Extraction of sand, bajri and boulder material will be done

only during the day time and completely stopped during the monsoon season. The transportation of the mineral is through tippers. As per mining plan about 20% of the excavated material will be considered as waste and will be used for reclaiming the bank slope. The Project Proponent submitted that the Mining Plan was approved vide Lr. No. 2206/मांप्लान/उ०खनि०/देहरादून/2013-14 dated 3.03.2015. The mining plan was approved after the public hearing and due to this PP submitted a letter No 13/Bhu khani/2015-16 dated 27.04.2015 issued by Joint Director, Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand, wherein it has mentioned that the mining characteristics in the approved mining plan of GMVN is compatible with and similar in all aspects in the EIA Report both in draft and final EIA. Total water requirement will be 2 KLD. This water will be supplied from the bore well from nearby villages through tankers and used for dust suppression & domestic purpose.

The Proponent submitted cluster certificate issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr. No 377/ग०म०वि०नि०/रा०लॉट/भू०खनि०ई०/2017-18 dated 27.02.2018 as per which there are two more mining leases of area 46.931 Ha and 6.7 Ha within 500 meters of this mining lease. PP submitted that EC has already been granted for the mining lease area of 6.7 Ha on 10.12.2015 i.e. before 15.01.2016. Thus, the total cluster area is 52.931 Ha. PP submitted that the EIA/ EMP report for both the mining leases under Cluster has already been submitted to the Ministry. The PP also submitted a letter issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 74/भू०खनि०ई०/ जि०कार्या०दे०दून ०/2018-19 dated 24.05.2018 wherein it has mentioned that the details provided in the cluster certificate is as per S.O 141(E) dated 15.01.2016 and S.O. 2269(E) dated 01.07.2016.

The Project Proponent submitted the District Survey Report of the Dehradun District and also submitted a letter issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 74/ भू०खनि०ई०/ जि०कार्या०दे०दून ०/2018-19 dated 24.05.2018 wherein it has mentioned that DSR submitted by PP is final DSR and prepared as per Appendix-X of S.O. 141(E) dated 15.01.2016.

The PP submitted a report of inspection carried out on 21.09.2012 by a Committee constituted by Govt. of Uttarakhand as per which there is no forest land in the mining lease area.

The Project Proponent also submitted a letter No 332/32-1-1(जी.आई.एस) dated 06.06.2018 issued by Chief Wildlife Warden (आई.टी.जी.सी) as per which there is no protected area, national park, conservation reserve within 10 KM of the mining lease boundary. Aasan conservation reserve is at a distance of 18 KM and Mussoorie Wildlife Sanctuary is 15.0 Km from the mining lease area and Rajaji National Park is at a distance of 12 KM. In the same letter it has mentioned that the distances are approximate and directed Divisional Forest Officer, Kalsi for physical verification. The PP also submitted a letter no 2294/32-1-1 dated 14.06.2018 wherein he has confirmed that the distance of mining lease from the protected area is as per letter issued by CWW.

The PP submitted the Lr. No 871 (TC) /12-1 dated 24.04.2015 thereby submitting the authenticated list of flora and fauna within 10 KM of the mining lease area. The PP submitted that there are 3 schedule-1 species viz. Leopard, Monitor Lizard and House Lizard present in the study. PP also submitted that there are 5 schedule-II species present in the buffer zone viz. Jungle Cat, Common langur, Jackal, Cobra, Monkey and Sabhar in the study area.

The PP submitted a conservation plan prepared for schedule-1 & Schedule-II species. The Conservation Plan was submitted for the approval of Chief Wildlife Warden vide LR No 691/ खनन / कन्व्हेशन प्लान dated 16.02.2017. The Chief Wild Life Warden (CWLW) vide its LR No 350/121 देहरादून dated 11.08.2017 communicated the shortcoming in the conservation plan to GMVN. The GMVN submitted the revised conservation plan for the approval CWW on 20.02.2018. The PP did not submit any documents regarding approval of the same. The Budget proposed by PP in the Conservation Plan is ₹ 14.0 Lakh (Capital Expenditure) and ₹ 9.0 Lakh (Recurring Expenditure).

The primary **baseline data** for site specific micro meteorology data, ambient air quality, water quality, noise level, soil and flora & fauna has been collected during **October-December, 2013**. The monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and no major divergence was observed with respect to concentration values of various parameters between collected samples. The Project Proponent submitted that the baseline concentration of AAQ i.e. 98th percentile value of PM₁₀ is ranges from 75.4 µg/m³ to 88.9 µg/m³, 98th percentile value of PM_{2.5} is ranges from 32.4 µg/m³ to 45.5 µg/m³. The 98th percentile values of Sulphur dioxide 5.7-7.0 µg/m³ and Oxides of Nitrogen is 20.5-23.6 µg/m³.

The Project Proponent submitted that advertisement for the public hearing was published in Hindustan Times and Danik Jagran on 03.06.2014. The public hearing was conducted on 07.07.2014 under the chairmanship of Shri Pratap Singh Shah ADM, Dehradun. The issue raised during the public hearing was deliberated during the meeting. The issues raised during public hearing compensation of landowners, provision of mineral concession rule for mining, illegal mining etc. PP made the commitment that the land owners if any will be compensated as per State Government Policy.

The Project Proponent submitted that every year 500 saplings (Aam, Jamun, Neem, Popular, Sisam, Siris, Gulmohar, Imli, Lichi, Bael, Ber, Amla) will be planted. During 5 year 1.0 Ha area shall be made covered under plantation.

The Project Proponent submitted that the budget proposed for the occupational health plan is ₹ 2.38 Lakh which includes assistance in setting up a temporary health center during the lease tenure; provide free medicines to mine workers, awareness campaign regarding health issues for mine workers and health checkup & medicine to mine workers.

The Project Proponent submitted that budget proposed for the Corporate Social Responsibility is ₹ 58,000 which includes free distribution of school bags & scholarship for

students, distribution of blankets, vocational training, free medical camps, awareness programmes and distribution of free saplings.

20. The Project Proponent submitted that the budget earmarked for EMP shall be 3.5 Lakh (Capital) and ₹ 5.03 Lakh (Recurring). In addition to this the budget proposed for environment monitoring will be ₹ 2.2 Lakh/annum. **The Committee observed that allocation of funds for Air, Water, Noise and Soil Quality Monitoring is to be a part of EMP. Thus, the total budget for EMP shall be considered as 3.5 Lakh (Capital) and ₹ 7.23 Lakh (Recurring).**

The Project Proponent submitted that the total project cost will be ₹ 5.61 Lakh. The project will give employment to 54 persons. In addition to this the PP also set an environment management cell.

The Project Proponent vide letter No. 355/खनन-(2018-19) dated 22.06.2018 submitted an undertaking that Garhwal Mandal Vikas Nigam Ltd. will carry out the mining operation themselves and will not outsource it to any Third Party.

Based on the presentation and documents submitted by the PP. The Committee **recommended** the project for the grant of Environmental Clearance for **Mining of 85,000 TPA of Sand, Bajri and Boulders in River Ton Lot No. 3/13 by M/s Garhwal Mandal Vikas Nigam Ltd. from mining lease area 6.0 Ha located at Village-Banshiwala, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand** subject to submission of i) Conservation plan for all schedule-1 & II species present in the core and buffer zone and ii) Baseline Survey of the Initial Level of the mining lease in the following manner:

- a) The Proponent should collect the baseline data in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level. The entire mining lease should be divided suitably in the grids of 25 Meter x 25 Meters with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid need to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank, safety barrier at lease boundary, restrictions as per condition of LoI/Mining Lease deed, restriction as Mineral Concession Rule of the Concerned State, restrictions as per sustainable sand mining management guidelines 2016 and restriction as per direction of any Court or NGT. The PP should ascertain the level of the river bed with the help of sections drawn across the width of the rivers and along the direction of flow of the river and based on this define the depth of mining of each grid. The PP should provide a detailed map and table clearly showing the grid wise material availability, dimension of grid, location of grid (latitude & longitude of the corner points), level of grid (AMSL and RL), depth of mining in each grid, grids left under no mining zone etc.

- b) PP should suitably name each section line. Section Plan for both sections drawn across the river and along the direction of the river needs to be submitted. Each Section should have level on vertical axis and distance from the bank of river on horizontal axis. For the section along the direction of the river the levels to be shown on vertical axis and distance from upstream to downstream should be shown on horizontal axis.
- c) The PP should prepare the modified Mining Plan based on the above survey. The information sought above needs to be a part of the mining plan. In the mining plan year wise production plan should be prepared in three plates for each year. Plat-1 show the mine working for the pre-monsoon period (1st APR- 14th June), Plate-2 should show the status of the mine after the replenishment and no working should be proposed in this period (15th June-1st Oct) as the mining lease area needs to be left for the replenishment of the river bed mineral and plat-3 show the mine working after replenishment of the river bed i.e. post monsoon period (2nd Oct-31st March).
- d) PP should specifically mention in the mining plan that in the subsequent scheme of mining/review of mining plan, the year wise data pertaining to replenishment study (all five years) shall be provided which include the level (AMSL & RL) of river bed recorded before and after the monsoon, year wise replenishment quantity, all plan & sections of the replenishment study for the past five years.
- e) The PP should also submit a kml file wherein the above-mentioned grid plans is superimposed on the satellite imaginary.
- f) PP should also submit an undertaking to the effect that each year after the replenishment study the plan & section shall be submitted to concerned Department of Mining & Geology of the State for verification and official record.
- g) The methodology for conducting replenishment study needs to be mentioned in the modified mining plan. PP should ensure that plan and section that will be submitted to EAC should be in proper scale.

The Committee also prescribed the following additional conditions specific to the project in addition to conditions as mentioned Sustainable Sand Mining Management Guidelines 2016.

- 1) Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of Uttarakhand, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
- 2) The project lies in Door Valley which is an eco-sensitive area. This Environmental Clearance is subject to obtaining requisite NBWL Clearance from the Standing Committee of National Board for Wildlife as applicable for this Mining project.

- 3) The Project Proponent shall obtain Consent to Operate from the State Pollution Control Board, Uttarakhand and effectively implement all the conditions stipulated therein.
- 4) Project Proponent shall submit the replenishment study after one year of grant of Environment Clearance. Project Proponent shall decrease/stop the mining of Sand, Bajri and Boulder, in case the replenishment is lower than the approved rate of production, till the replenishment is completed.
- 5) Project Proponent shall appoint a Monitoring Committee to monitor the replenishment study, traffic management, levels of production, River Bank erosion and maintenance of Road etc.
- 6) Excavation will be carried out up to a maximum depth of 1.5 meter from surface of sand deposit and 1 meter above from the water level of the River channel whichever is reached earlier.
- 7) Project Proponent shall implement the Disaster Management Plan as the mine lease area is located in Seismic Zone-IV. Project Proponent shall appoint a Committee to have a check over any disaster to warn workers well before for the safety of the workers. Emergency helpline number will be displayed at all levels.
- 8) Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained, also Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted; All the old age people of the Surrounding villages may be provided medical facilities.
- 9) The number of trips of the trucks shall not exceed the estimated quantity of 38 trucks (loaded) (10 tonnes capacity) trips per day. Transport of minerals shall be done either by dedicated road or it should be ensured that the trucks/dumpers carrying the mineral should not be allowed to pass through the villages. The Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density.
- 10) Implementation of Action Plan on the issues raised during the Public Hearing. The Proponent shall complete all the tasks as per the Action Plan submitted with the budgetary provisions during the Public Hearing.

- 11) The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUCC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized testing centre.
- 12) Permanent pillars has to be constructed to demarcate width of extraction of ROM leaving 25% of River width from the bank with depth of 1.5m below the ground and 1.2 m above the ground to observe its stability.
- 13) The Project Proponent shall also take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.
- 14) The illumination and sound at night at project site, disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the village located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. Project Proponent must ensure that the biological dock 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 light/night hours.
- 15) Transportation of the minerals by road passing though the village shall not be allowed. A bypass road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The Project Proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.
- 16) At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office Dehradun. Implementation of such program shall be ensured accordingly in a time bound manner.
- 17) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water. Medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

- 18) A Final Mine Closure plan along with details of Corpus fund shall be submitted to the Ministry of Environment, Forest and Climate Change 5 years in advance of final mine closure for approval.
- 19) The Project Proponent shall plant 500 saplings of (Aam, Jamun, Neem, Popular, Sisam, Siris, Gulmohar, Imli, Lichi, Bael, Ber, Amla) every year .
- 20) The Budget earmarked for the implementation of Occupation Health is ₹ 2.38 Lakh. The proponent shall keep the amount in a separate bank account. The amount should be utilized for providing assistance in setting up a temporary health center during the lease tenure; provide free medicines to mine workers, awareness campaign regarding health issues for mine workers and health checkup & medicine to mine workers. The PP shall submit the detail report of implementation of the Occupational Health Plan to Regional Office, MoEF&CC annually along with photograph and audited statement of expenditure incurred.
- 21) The Budget earmarked for the implementation for the Corporate Social Responsibility is ₹ 58,000/Annum which includes free distribution of school bags & scholarship for students, distribution of blankets, vocational training, free medical camps, awareness programmes and distribution of free saplings. The proponent shall keep the amount in a separate bank account and submit the detail report of implementation of the same to Regional Office, MoEF&CC annually, along with photograph and audited statement of expenditure incurred.
- 22) The Budget earmarked for the implementation of the Environmental Management Plan shall be 3.5 Lakh (Capital) and ₹ 7.23 Lakh (Recurring). The amount should be spent for a) air, water, noise & soil quality monitoring; b) plantation; c) maintenance of roads; d) dust suppression etc. The Proponent shall keep the amount in a separate bank account and submit the detail report of implementation of the same to Regional Office, MoEF&CC annually, along with photograph and audited statement of expenditure incurred.
- 23) The Project Proponent shall carry out the mining operation themselves and shall not outsource it to any Third Party.
- 24) The Project proponent shall engage Mining Engineer for overall supervision of mining operations.

(2.32) Mining of 3,20,000 TPA of Sand, Bajri and Boulders in River Ton Lot No. 3/12 by M/s Garhwal Mandal Vikas Nigam Ltd. from mining lease area 46.931 Ha located at Village-Jhajhara & East Hope Town, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand. [File No. J-11015/121/2013-IA-II(M); Proposal No: IA/UK/MIN/18530/2013; Consultant: Grass Root Research & Creation India (P) Ltd.]-EC Regarding

The proposal of M/s Garhwal Mandal Vikas Nigam Ltd. (GMVN) is for production of 3,20,000 TPA of Sand, Bajri and Boulders in River Yamuna Lot No. 3/12 from mining lease area 46.931 Ha located at Village- Jhajhara & East Hope Town, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand. The Project Proponent submitted that mining lease area is coming under Survey of India Topo-Sheet No 53F15 and falls between Latitude: 30° 20' 25.45" N to 30° 20' 16.24" N & Longitude: 77° 53' 59.61" E to 77° 55' 7.06" E.

The project falls under Schedule 1(a) of mining and is a Category- "A" as the project lies within Doon Valley (Eco-Sensitive Area as notified under sub-section (2) of section 3 of the Environment (Protection) Act, 1986) and general condition is applicable for the project as per S.O. 1599(E) dated 25.06.2014.

The Project Proponent applied for ToR on 26.04.2013 and submitted the Form-1 and Pre-Feasibility Report. The proposal was considered & recommended for prescribing Term of Reference in EAC Meeting held on 26th -28th June, 2013 and ToR was issued on 16.09.2013.

The Proponent submitted the EIA Report after conducting the Public Hearing online vide proposal no IA/UK/MIN/18530/2013 on 21.11.2015 and proposal was considered in EAC Meeting held on 24th -25th October, 2016 wherein the Committee deferred the proposal and is of the view that the project proponent first to submit the details of manpower/officers involved during mining operation in the organization and whether M/s Garhwal Mandal Vikas Nigam Ltd. will operate the mine by its own or outsource the mining operation. The proposal may be considered after submission of above mentioned details. The PP submitted the above information on 16.04.2018.

The PP was then asked to submit a) Cluster Certificate as per S.O. 141(E) 15.01.2016 & S.O. 2269 (E) dated 1.07.2016 needs to be submitted; b) On the cover page of EIA Report period of study is not mentioned as required as per O.M No. J-20012/11/98-IA.II (M) dated 28.10.2004; c) EIA Report is not as per generic structure mentioned in Appendix-III of EIA Notification 2006; e) Copy of advertisement published in English Newspaper needs to be submitted; f) LoI was issued on 23.01.2013 and valid for 5 years i.e till 22.01.2018 thus copy of valid LOI needs to be submitted; g) Clear copy of advertisement (Regional and English language) needs to be submitted. List of schedule-1 species duly authenticated by Forest Department needs to be submitted; h) Conservation Plan for schedule-1 species needs to be submitted; i) Certificate from Forest Department regarding distance of mining lease from the protected area needs to be submitted and j) a letter from State Government to the effect that District Survey Report is prepared as per Appendix-X of S.O 141(E) dated 15.01.2016. The PP submitted the above information on 29.05.2018 and the proposal was considered in EAC Meeting held on 21-22 June, 2018.

The Project Proponent submitted that Letter of Intent was issued vide Government Order No 589/भूखनिर्देश/2012-13 dated 23.01.2013 and corrigendum to the same was issued on letter not 40/भूखनिर्देश/2012-13 dated 10.04.2013. The PP also submitted a letter no 3498/औदो-22 ख/2001 dated 17.10.2002 wherein it has mentioned that in the District

Dehradun the mining lease will be allotted to Garhwal Vikas Nigam Limited and in Gola River the same will be allotted to Uttarakhand Forest Development Corporation.

The Project Proponent submitted that the proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meters. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The transportation of the mineral is through tippers. As per mining plan about 20% of the excavated material will be considered as waste and will be used for reclaiming the bank slope. The Project Proponent submitted that the Mining Plan was approved vide Lr. No. 2210/मांप्लान/उ०खनि०/देहरादून/2013-14 dated 3.03.2015. The mining plan was approved after the public hearing and due to this PP submitted a letter No 13/Bhu khani/2015-16 dated 27.04.2015 issued by Joint Director, Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand, wherein it has mentioned that the mining characteristics in the approved mining plan of GMVN is compatible with and similar in all aspects in the EIA Report both in draft and final EIA. Total water requirement will be 3.2 KLD. This water will be supplied from the bore well from nearby villages through tankers and used for dust suppression & domestic purpose.

The Proponent submitted cluster certificate issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr. No 377/ग०म०वि०नि०/रा०लॉट/भू०खनि०ई०/2017-18 dated 27.02.2018 as per which there is one more mining leases of area 6.0 Ha within 500 meters of this mining lease. Thus the total area of the cluster is 52.931 Ha. The PP submitted that EIA/EMP report for the same has already been submitted. The PP also submitted a letter issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 74/भू०खनि०ई०/ जि०कार्या०दे०दून ०/2018-19 dated 24.05.2018 wherein it has mentioned that the details provided in the cluster certificate is as per S.O 141(E) dated 15.01.2016 and S.O. 2269(E) dated 01.07.2016.

The Project Proponent submitted the District Survey Report of the Dehradun District and also submitted a letter issued by issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 74/ भू०खनि०ई०/ जि०कार्या०दे०दून ०/2018-19 dated 24.05.2018 wherein it has mentioned that DSR submitted by PP is final DSR and prepared as per Appendix-X of S.O. 141(E) dated 15.01.2016.

The PP submitted a report of inspection carried out on 21.09.2012 by a Committee constituted by Govt. of Uttarakhand as per which there is no forest land in the mining lease area.

The Project Proponent also submitted a letter No 332/32-1-1(जी.आई. एस) dated 06.06.2018 issued by Chief Wildlife Warden(आई.टी.जी. सी) as per which the distance of protected area, national park, conservation reserve from mining lease area is 15.0 Km Musoorie Wildlife Sanctuary and 19-21 Aasan Conservation Reserve and 11-12 Km Rajaji

National Park. within 10 KM of the mining lease boundary. The KML file is also analyzed on DSS and it has found that mining lease is not falls under forest and there is no protected area within 10 KM of the same.

The PP submitted the Lr. No 871 (TC) /12-1 dated 24.04.2015 thereby submitting the authenticated list of flora and fauna within 10 KM of the mining lease area. The PP submitted that there are 3 schedule-1 species viz. Leopard, Monitor Lizard and House Lizard present in the study. PP also submitted that there are 5 schedule-II species present in the buffer zone viz. Jungle Cat, Common langur, Jackal, Cobra, Monkey and Sabhar in the study area.

The PP submitted a conservation plan prepared for schedule-1 & Schedule-II species. The Conservation Plan was submitted for the approval of Chief Wildlife Warden vide LR No 691/ खनन / कन्व्हेशन प्लान dated 16.02.2017. The Chief Wild Life Warden (CWLW) vide its LR No 350/121 देहरादून dated 11.08.2017 communicated the shortcoming in the conservation plan to GMVN. The GMVN submitted the revised conservation plan for the approval CWW on 20.02.2018. The PP did not submit any documents regarding approval of the same. The Budget proposed by PP in the Conservation Plan is ₹ 14.0 Lakh (Capital Expenditure) and ₹ 9.0 Lakh (Recurring Expenditure).

The primary **baseline data** for site specific micro meteorology data, ambient air quality, water quality, noise level, soil and flora & fauna has been collected during **October-December, 2013**. The monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and no major divergence was observed with respect to concentration values of various parameters between collected samples. The Project Proponent submitted that the baseline concentration of AAQ i.e. 98th percentile value of PM₁₀ is ranges from 75.4 µg/m³ to 88.9 µg/m³, 98th percentile value of PM_{2.5} is ranges from 32.4 µg/m³ to 45.5 µg/m³. The 98th percentile values of Sulphur dioxide 5.7-7.0 µg/m³ and Oxides of Nitrogen is 20.5-23.6 µg/m³.

15. The Project Proponent submitted that advertisement for the public hearing was published in Hindustan Times and Danik Jagran on 03.06.2014. The public hearing was conducted on 07.07.2014 (11.00 A.M.) under the chairmanship of Shri Pratap Singh Shah ADM, Dehradun. The issue raised during the public hearing was deliberated during the meeting. The issues raised during public hearing provision of mineral concession rule for mining, benefit of local people from the project mining etc. PP made the commitment that preference will be given to local people in employment and around ₹ 91,000/Annum will be spent for social welfare.

The Project Proponent submitted that every year 500 saplings (Aam, Jamun, Neem, Popular, Sisam, Siris, Gulmohar, Imli, Lichi, Bael, Ber, Amla) will be planted. During the 5 year 1.0 Ha area shall be covered under plantation.

The Project Proponent submitted that the budget proposed for the occupational health plan is ₹ 4.82 Lakh which includes assistance in setting up a temporary health center during the lease tenure; provide free medicines to mine workers, awareness campaign regarding health issues for mine workers and health checkup & medicine to mine workers.

The Project Proponent submitted that budget proposed for the Corporate Social Responsibility is ₹ 91,000 which includes free distribution of school bags & scholarship for students, distribution of blankets, vocational training, free medical camps, awareness programmes and distribution of free saplings.

The Project Proponent submitted that the budget earmarked for EMP shall be 4.5 Lakh (Capital) and ₹ 8.97 Lakh (Recurring). In addition to this the budget proposed for environment monitoring will be ₹ 2.2 Lakh/annum. **The Committee observed that allocation of funds for Air, Water, Noise and Soil Quality Monitoring is to be a part of EMP. Thus, the total budget for EMP shall be considered as 4.5 Lakh (Capital) and ₹ 11.17 Lakh (Recurring).**

The Project Proponent submitted that the total project cost will be ₹ 18.25 Lakh. The project will give employment to 176 persons. In addition to this the PP also set an environment management cell.

The Project Proponent vide letter No. 355/खनन-(2018-19) dated 22.06.2018 submitted an undertaking that Garhwal Mandal Vikas Nigam Ltd. will carry out the mining operation themselves and will not outsource it to any Third Party.

Based on the presentation and documents submitted by the PP. The Committee **recommended** the project for the grant of Environmental Clearance for **Mining of 3,20,000 TPA of Sand, Bajri and Boulders in River Ton Lot No. 3/12 by M/s Garhwal Mandal Vikas Nigam Ltd. from mining lease area 46.931 Ha located at Village-Jhajhara & East Hope Town, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand** subject to submission of i) Conservation plan for all schedule-1 & II species present in the core and buffer zone and ii) Baseline Survey of the Initial Level of the mining lease in the following manner:

- a) The Proponent should collect the baseline data in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level. The entire mining lease should be divided suitably in the grids of 25 Meter x 25 Meters with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid need to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank, safety barrier at lease boundary, restrictions as per condition of LoI/Mining Lease deed, restriction as Mineral Concession Rule of the Concerned State, restrictions as per sustainable sand mining management guidelines 2016 and restriction as per direction of any Court or NGT. The PP should ascertain the level of the river bed with the help of sections drawn across the width of the rivers and along the direction of flow of the river and based on this define the depth of mining of each grid. The PP should provide a

detailed map and table clearly showing the grid wise material availability, dimension of grid, location of grid (latitude & longitude of the corner points), level of grid (AMSL and RL), depth of mining in each grid, grids left under no mining zone etc.

- b) PP should suitably name each section line. Section Plan for both sections drawn across the river and along the direction of the river needs to be submitted. Each Section should have level on vertical axis and distance from the bank of river on horizontal axis. For the section along the direction of the river the levels to be shown on vertical axis and distance from upstream to downstream should be shown on horizontal axis.
 - c) The PP should prepare the modified Mining Plan based on the above survey. The information sought above needs to be a part of the mining plan. In the mining plan year wise production plan should be prepared in three plates for each year. Plat-1 show the mine working for the pre-monsoon period (1st APR- 14th June), Plate-2 should show the status of the mine after the replenishment and no working should be proposed in this period (15th June-1st Oct) as the mining lease area needs to be left for the replenishment of the river bed mineral and plat-3 show the mine working after replenishment of the river bed i.e. post monsoon period (2nd Oct-31st March).
 - d) PP should specifically mention in the mining plan that in the subsequent scheme of mining/review of mining plan, the year wise data pertaining to replenishment study (all five years) shall be provided which include the level (AMSL & RL) of river bed recorded before and after the monsoon, year wise replenishment quantity, all plan & sections of the replenishment study for the past five years.
 - e) The PP should also submit a kml file wherein the above-mentioned grid plans is superimposed on the satellite imaginary.
 - f) PP should also submit an undertaking to the effect that each year after the replenishment study the plan & section shall be submitted to concerned Department of Mining & Geology of the State for verification and official record.
 - g) The methodology for conducting replenishment study needs to be mentioned in the modified mining plan. PP should ensure that plan and section that will be submitted to EAC should be in proper scale.
22. The Committee also prescribed the following additional conditions specific to the project in addition to conditions as mentioned Sustainable Sand Mining Management Guidelines 2016.
- 1) Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of Uttarakhand, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

- 2) The project lies in Door Valley which is an eco-sensitive area. This Environmental Clearance is subject to obtaining requisite NBWL Clearance from the Standing Committee of National Board for Wildlife as applicable for this Mining project.
- 3) The Project Proponent shall obtain Consent to Operate from the State Pollution Control Board, Uttarakhand and effectively implement all the conditions stipulated therein.
- 4) Project Proponent shall submit the replenishment study after one year of grant of Environment Clearance. Project Proponent shall decrease/stop the mining of Sand, Bajri and Boulder, in case the replenishment is lower than the approved rate of production, till the replenishment is completed.
- 5) Project Proponent shall appoint a Monitoring Committee to monitor the replenishment study, traffic management, levels of production, River Bank erosion and maintenance of Road etc.
- 6) Excavation will be carried out up to a maximum depth of 1.5 meter from surface of sand deposit and 1 meter above from the water level of the River channel whichever is reached earlier.
- 7) Project Proponent shall implement the Disaster Management Plan as the mine lease area is located in Seismic Zone-IV. Project Proponent shall appoint a Committee to have a check over any disaster to warn workers well before for the safety of the workers. Emergency helpline number will be displayed at all levels.
- 8) Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained, also Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted; All the old age people of the Surrounding villages may be provided medical facilities.
- 9) The number of trips of the trucks shall not exceed the estimated quantity of 142 trucks (loaded) (10 tonnes capacity) trips per day. Transport of minerals shall be done either by dedicated road or it should be ensured that the trucks/dumpers carrying the mineral should not be allowed to pass through the villages. The Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density.

- 10) Implementation of Action Plan on the issues raised during the Public Hearing. The Proponent shall complete all the tasks as per the Action Plan submitted with the budgetary provisions during the Public Hearing.
- 11) The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized testing centre.
- 12) Permanent pillars has to be constructed to demarcate width of extraction of ROM leaving 25% of River width from the bank with depth of 1.5m below the ground and 1.2 m above the ground to observe its stability.
- 13) The Project Proponent shall also take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.
- 14) The illumination and sound at night at project site, disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the village located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. Project Proponent must ensure that the biological dock 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 light/night hours.
- 15) Transportation of the minerals by road passing though the village shall not be allowed. A bypass road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The Project Proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.
- 16) At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office Dehradun. Implementation of such program shall be ensured accordingly in a time bound manner.
- 17) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water. Medical health care, crèche etc. The

housing may be in the form of temporary structures to be removed after the completion of the project.

- 18) A Final Mine Closure plan along with details of Corpus fund shall be submitted to the Ministry of Environment, Forest and Climate Change 5 years in advance of final mine closure for approval.
- 19) The Project Proponent shall plant 500 saplings of (Aam, Jamun, Neem, Popular, Sisam, Siris, Gulmohar, Imli, Lichi, Bael, Ber, Amla) every year .
- 20) The Budget earmarked for the implementation of Occupation Health is ₹ 4.82 Lakh. The proponent shall keep the amount in a separate bank account. The amount should be utilized for providing assistance in setting up a temporary health center during the lease tenure; provide free medicines to mine workers, awareness campaign regarding health issues for mine workers and health checkup & medicine to mine workers. The PP shall submit the detail report of implementation of the Occupational Health Plan to Regional Office, MoEF&CC annually along with photograph and audited statement of expenditure incurred.
- 21) The Budget earmarked for the implementation for the Corporate Social Responsibility is ₹ 91,000/Annum which includes free distribution of school bags & scholarship for students, distribution of blankets, vocational training, free medical camps, awareness programmes and distribution of free saplings. The proponent shall keep the amount in a separate bank account and submit the detail report of implementation of the same to Regional Office, MoEF&CC annually, along with photograph and audited statement of expenditure incurred.
- 22) The Budget earmarked for the implementation of the Environmental Management Plan shall be 4.5 Lakh (Capital) and ₹ 11.17 Lakh (Recurring). The amount should be spent for a) air, water, noise & soil quality monitoring; b) plantation; c) maintenance of roads; d) dust suppression etc. The Proponent shall keep the amount in a separate bank account and submit the detail report of implementation of the same to Regional Office, MoEF&CC annually, along with photograph and audited statement of expenditure incurred.
- 23) The Project Proponent shall carry out the mining operation themselves and shall not outsource it to any Third Party.
- 24) The Project proponent shall engage Mining Engineer for overall supervision of mining operations.

(2.33) Mining of 3,40,000 TPA of Sand, Bajri and Boulders in River Ton Lot No. 4/14 by M/s Garhwal Mandal Vikas Nigam Ltd. from mining lease area 35.405 Ha located at Village-Rampur & Kalyanpur, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand.

[File No. J-11015/131/2013-IA-II(M); Proposal No: IA/UK/MIN/18551/2013; Consultant: Grass Root Research & Creation India (P) Ltd.]-EC Regarding

The proposal of M/s Garhwal Mandal Vikas Nigam Ltd. (GMVN) is for production of 3,40,000 TPA of Sand, Bajri and Boulders in River Yamuna Lot No. 14/4 from mining lease area 35.405 Ha located at Village- Rampur & Kalyanpur, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand. The Project Proponent submitted that mining lease area is in two parts Block-1 & Block -2 and coming under Survey of India Topo-Sheet No 53F15. The Block-1 falls between Latitude: 30° 22' 1.77" N to 30° 21' 23.91" N & Longitude: 77° 49' 0.60" E to 77° 49' 48.14" E and Block-2 falls between Latitude: 30° 21' 33.83" N to 30° 21' 25.18" N & Longitude: 77° 49' 17.99" E to 77° 49' 39.04" E.

The project falls under Schedule 1(a) of mining and is a Category- "A" project as the project lies within Doon Valley (Eco-Sensitive Area as notified under sub-section (2) of section 3 of the Environment (Protection) Act, 1986) and general condition is applicable for the project as per S.O. 1599(E) dated 25.06.2014.

The Project Proponent applied for ToR on 26.04.2013 and submitted the Form-1 and Pre-Feasibility Report. The proposal was considered & recommended for prescribing Term of Reference in EAC Meeting held on 26th -28th June, 2013 and ToR was issued on 16.09.2013.

The Proponent submitted the EIA Report after conducting the Public Hearing online vide proposal no IA/UK/MIN/18551/2013 on 02.04.2015 and proposal was considered in EAC Meeting held on **25th-27th August, 2016** and **30th-31st January, 2017** wherein the Committee deferred the proposal and is of the view that the proposal can be considered after the proponent clarifies the reason for granting sub-contract to the leases for which EC is requested in favour of M/s Garhwal Mandal Vikas Nigam Ltd. The committee was also of the opinion that the order of the Hon'ble High Court of Uttarakhand banning the mining in river bed of Ganga and its highest flood plain area may be taken into consideration before any mining project is appraised in the EAC meetings. The PP submitted the above information online on 17.04.2018.

The PP was then asked to submit a) Cluster Certificate as per S.O. 141(E) 15.01.2016 & S.O. 2269 (E) dated 1.07.2016 needs to be submitted; b) On the cover page of EIA Report period of study is not mentioned as required as per O.M No. J-20012/11/98-IA.II (M) dated 28.10.2004; c) EIA Report is not as per generic structure mentioned in Appendix-III of EIA Notification 2006; e) Copy of advertisement published in English Newspaper needs to be submitted; f) LoI was issued on 23.01.2013 and valid for 5 years i.e till 22.01.2018 thus copy of valid LOI needs to be submitted; g) Clear copy of advertisement (Regional and English language) needs to be submitted. List of schedule-1 species duly authenticated by Forest Department needs to be submitted; h) Conservation Plan for schedule-1 species needs to be submitted; i) Certificate from Forest Department regarding distance of mining lease from the protected area needs to be submitted and j) a letter from State Government to the effect that District Survey Report is prepared as per Appendix-X of S.O 141(E) dated 15.01.2016. The

PP submitted the above information on 29.05.2018 and the proposal was considered in EAC Meeting held on 21-22 June,2018.

The Project Proponent submitted that Letter of Intent was issued vide Government Order No 589/भूखनिर्देश/2012-13 dated 23.01.2013 and corrigendum to the same was issued on letter no 40/भूखनिर्देश/2012-13 dated 10.04.2013. The PP also submitted a letter no 3498/औवि-22 ख/2001 dated 17.10.2002 wherein it has mentioned that in the District Dehradun the mining lease will be allotted to Garhwal Vikas Nigam Limited and in Gola River the same will be allotted to Uttarakhand Forest Development Corporation.

The Project Proponent submitted that the proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meters. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The transportation of the mineral is through tippers. As per mining plan about 40% of the excavated material will be considered as waste and will be used for reclaiming the bank slope. The Project Proponent submitted that the Mining Plan was approved vide Lr. No. 2215/माप्लान/उखनि/देहरादून/2013-14 dated 3.03.2015. The mining plan was approved after the public hearing and due to this PP submitted a letter No 13/Bhu khani/2015-16 dated 27.04.2015 issued by Joint Director, Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand, wherein it has mentioned that the mining characteristics in the approved mining plan of GMVN is compatible with and similar in all aspects in the EIA Report both in draft and final EIA. Total water requirement will be 5 KLD (3 KLD dust suppression and 2 KLD Domestic). This water will be supplied from the bore well from nearby villages through tankers and used for dust suppression & domestic purpose.

The Proponent submitted cluster certificate issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr. No 377/गोमविनि/सालोट/भूखनिर्देश/2017-18 dated 27.02.2018 as per which there are two more mining leases of area 32.709 Ha and 2.344 Ha within 500 meters of this mining lease. The EC has already been granted for the mining lease area 2.344 Ha on 16.01.2015 i.e. before 15.01.2016. Thus, the total area of the cluster is 64.837 Ha. The PP also submitted a letter issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 74/भूखनिर्देश/जिंकार्यादेश/2018-19 dated 24.05.2018 wherein it has mentioned that the details provided in the cluster certificate is as per S.O 141(E) dated 15.01.2016 and S.O. 2269(E) dated 01.07.2016.

The Project Proponent submitted the District Survey Report of the Dehradun District and also submitted a letter issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 74/ भूखनिर्देश/ जिंकार्यादेश/2018-19 dated 24.05.2018 wherein it has mentioned that DSR submitted by PP is final DSR and prepared as per Appendix-X of S.O. 141(E) dated 15.01.2016.

The PP submitted a report of inspection carried out on 21.09.2012 by a Committee constituted by Govt. of Uttarakhand as per which there is no forest land in the mining lease area.

The Project Proponent also submitted a letter No 332/32-1-1(जी.आई. एस) dated 06.06.2018 issued by Chief Wildlife Warden(आई.टी.जी. सी) as per which the distance of protected area, national park, conservation reserve from mining lease area is 17.0 Km Musoorie Wildlife Sanctuary , 11 Km from Aasan Conservation Reserve and 17 Km Rajaji National Park. The KML file is also analyzed on DSS and it has found that mining lease is not falls under forest and there is no protected area within 10 KM of the same.

The PP submitted the Lr. No 871 (TC) /12-1 dated 24.04.2015 thereby submitting the authenticated list of flora and fauna within 10 KM of the mining lease area. The PP submitted that there are 3 schedule-1 species viz. Leopard, Monitor Lizard and House Lizard present in the study. PP also submitted that there are 5 schedule-II species present in the buffer zone viz. Jungle Cat, Common langur, Jackal, Cobra, Monkey and Sabhar in the study area.

The PP submitted a conservation plan prepared for schedule-1 & Schedule-II species. The Conservation Plan was submitted for the approval of Chief Wildlife Warden vide LR No 691/ खनन / कन्व्हेशन प्लान dated 16.02.2017. The Chief Wild Life Warden (CWLW) vide its LR No 350/121 देहरादून dated 11.08.2017 communicated the shortcoming in the conservation plan to GMVN. The GMVN submitted the revised conservation plan for the approval CWW on 20.02.2018. The PP did not submit any documents regarding approval of the same. The Budget proposed by PP in the Conservation Plan is ₹ 14.0 Lakh (Capital Expenditure) and ₹ 9.0 Lakh (Recurring Expenditure).

The primary **baseline data** for site specific micro meteorology data, ambient air quality, water quality, noise level, soil and flora & fauna has been collected during **October-December, 2013 [P.2232-2306/c]**. The monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and no major divergence was observed with respect to concentration values of various parameters between collected samples. The Project Proponent submitted that the baseline concentration of AAQ i.e. 98th percentile value of PM₁₀ is ranges from 77.4 µg/m³ to 89.6 µg/m³, 98th percentile value of PM_{2.5} is ranges from 29.6 µg/m³ to 41.5 µg/m³ .The 98th percentile values of Sulphur dioxide 6.0-7.3 µg/m³ and Oxides of Nitrogen is 18.9-22.6 µg/m³.

The Project Proponent submitted that advertisement for the public hearing was published in Times of India and Danik Jagran on 21.05.2014 and 08.06.2014. The public hearing was conducted on 14.07.2014 (2.00 P.M.) under the chairmanship of Shri Pratap Singh Shah ADM, Dehradun. The issue raised during the public hearing was deliberated during the meeting. The issues raised during public hearing was providing mineral on the concessional rates, employment to local people, maintenance of roads, and illegal mining. PP made the commitment that preference will be given to local people in employment, 5% of the profit will be utilized for the maintenance & development activity in the village. The PP proposed that ₹

21,000/Annum will be spent for road maintenance. PP committed that mineral will be provided at concessional rate through proper channel.

The Project Proponent submitted that every year 500 saplings (Aam, Jamun, Neem, Popular, Sisam, Siris, Gulmohar, Imli, Lichi, Bael, Ber, Amla) will be planted. During the 5 year 1.0 Ha area shall be covered under plantation.

The Project Proponent submitted that the budget proposed for the occupational health plan is ₹ 1.5 Lakh which includes assistance in setting up a temporary health center during the lease tenure; provide free medicines to mine workers, awareness campaign regarding health issues for mine workers and health checkup & medicine to mine workers.

The Project Proponent submitted that budget proposed for the Corporate Social Responsibility is ₹ 1,00,000 which includes free distribution of school bags & scholarship for students, distribution of blankets, vocational training, free medical camps, awareness programmes and distribution of free saplings.

The Project Proponent submitted that the budget earmarked for EMP shall be 3.0 Lakh (Capital) and ₹ 5.51 Lakh (Recurring). In addition to this the budget proposed for environment monitoring will be ₹ 2.2 Lakh/annum. **The Committee observed that allocation of funds for Air, Water, Noise and Soil Quality Monitoring is to be a part of EMP. Thus, the total budget for EMP shall be considered as 3.0 Lakh (Capital) and ₹ 7.71 Lakh (Recurring).**

The Project Proponent submitted that the total project cost will be ₹ 19.8 Lakh. The project will give employment to 192 persons. In addition to this the PP also set an environment management cell.

The Project Proponent vide letter No. 355/खनन-(2018-19) dated 22.06.2018 submitted an undertaking that Garhwal Mandal Vikas Nigam Ltd. will carry out the mining operation themselves and will not outsource it to any Third Party.

Based on the presentation and documents submitted by the PP. The Committee **recommended the project for the grant of Environmental Clearance for Mining of 3,40,000 TPA of Sand, Bajri and Boulders in River Ton Lot No. 4/14 by M/s Garhwal Mandal Vikas Nigam Ltd. from mining lease area 35.405 Ha located at Village-Rampur & Kalyanpur, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand** subject to submission of i) Conservation plan for all schedule-1 & II species present in the core and buffer zone and ii) Baseline Survey of the Initial Level of the mining lease in the following manner:

- a) The Proponent should collect the baseline data in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level. The entire mining

lease should be divided suitably in the grids of 25 Meter x 25 Meters with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid need to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank, safety barrier at lease boundary, restrictions as per condition of LoI/Mining Lease deed, restriction as Mineral Concession Rule of the Concerned State, restrictions as per sustainable sand mining management guidelines 2016 and restriction as per direction of any Court or NGT. The PP should ascertain the level of the river bed with the help of sections drawn across the width of the rivers and along the direction of flow of the river and based on this define the depth of mining of each grid. The PP should provide a detailed map and table clearly showing the grid wise material availability, dimension of grid, location of grid (latitude & longitude of the corner points), level of grid (AMSL and RL), depth of mining in each grid, grids left under no mining zone etc.

- b) PP should suitably name each section line. Section Plan for both sections drawn across the river and along the direction of the river needs to be submitted. Each Section should have level on vertical axis and distance from the bank of river on horizontal axis. For the section along the direction of the river the levels to be shown on vertical axis and distance from upstream to downstream should be shown on horizontal axis.
- c) The PP should prepare the modified Mining Plan based on the above survey. The information sought above needs to be a part of the mining plan. In the mining plan year wise production plan should be prepared in three plates for each year. Plat-1 show the mine working for the pre-monsoon period (1st APR- 14th June), Plate-2 should show the status of the mine after the replenishment and no working should be proposed in this period (15th June-1st Oct) as the mining lease area needs to be left for the replenishment of the river bed mineral and plat-3 show the mine working after replenishment of the river bed i.e. post monsoon period (2nd Oct-31st March).
- d) PP should specifically mention in the mining plan that in the subsequent scheme of mining/review of mining plan, the year wise data pertaining to replenishment study (all five years) shall be provided which include the level (AMSL & RL) of river bed recorded before and after the monsoon, year wise replenishment quantity, all plan & sections of the replenishment study for the past five years.
- e) The PP should also submit a kml file wherein the above-mentioned grid plans is superimposed on the satellite imaginary.
- f) PP should also submit an undertaking to the effect that each year after the replenishment study the plan & section shall be submitted to concerned Department of Mining & Geology of the State for verification and official record.

- g) The methodology for conducting replenishment study needs to be mentioned in the modified mining plan. PP should ensure that plan and section that will be submitted to EAC should be in proper scale.

The Committee also prescribed the following additional conditions specific to the project in addition to conditions as mentioned Sustainable Sand Mining Management Guidelines 2016.

- 1) Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of Uttarakhand, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
- 2) The project lies in Door Valley which is an eco-sensitive area. This Environmental Clearance is subject to obtaining requisite NBWL Clearance from the Standing Committee of National Board for Wildlife as applicable for this Mining project.
- 3) The Project Proponent shall obtain Consent to Operate from the State Pollution Control Board, Uttarakhand and effectively implement all the conditions stipulated therein.
- 4) Project Proponent shall submit the replenishment study after one year of grant of Environment Clearance. Project Proponent shall decrease/stop the mining of Sand, Bajri and Boulder, in case the replenishment is lower than the approved rate of production, till the replenishment is completed.
- 5) Project Proponent shall appoint a Monitoring Committee to monitor the replenishment study, traffic management, levels of production, River Bank erosion and maintenance of Road etc.
- 6) Excavation will be carried out up to a maximum depth of 1.5 meter from surface of sand deposit and 1 meter above from the water level of the River channel whichever is reached earlier.
- 7) Project Proponent shall implement the Disaster Management Plan as the mine lease area is located in Seismic Zone-IV. Project Proponent shall appoint a Committee to have a check over any disaster to warn workers well before for the safety of the workers. Emergency helpline number will be displayed at all levels.
- 8) Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained, also Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for Labour for ensuring good

occupational environment for mine workers would also be adopted; All the old age people of the Surrounding villages may be provided medical facilities.

- 9) The number of trips of the trucks shall not exceed the estimated quantity of 151 trucks (loaded) (10 tonnes capacity) trips per day. Transport of minerals shall be done either by dedicated road or it should be ensured that the trucks/dumpers carrying the mineral should not be allowed to pass through the villages. The Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density.
- 10) Implementation of Action Plan on the issues raised during the Public Hearing. The Proponent shall complete all the tasks as per the Action Plan submitted with the budgetary provisions during the Public Hearing.
- 11) The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized testing centre.
- 12) Permanent pillars has to be constructed to demarcate width of extraction of ROM leaving 25% of River width from the bank with depth of 1.5m below the ground and 1.2 m above the ground to observe its stability.
- 13) The Project Proponent shall also take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.
- 14) The illumination and sound at night at project site, disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the village located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. Project Proponent must ensure that the biological dock 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 light/night hours.
- 15) Transportation of the minerals by road passing though the village shall not be allowed. A bypass road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The Project Proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement

should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.

- 16) At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office Dehradun. Implementation of such program shall be ensured accordingly in a time bound manner.
- 17) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water. Medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- 18) A Final Mine Closure plan along with details of Corpus fund shall be submitted to the Ministry of Environment, Forest and Climate Change 5 years in advance of final mine closure for approval.
- 19) The Project Proponent shall plant 500 saplings of (Aam, Jamun, Neem, Popular, Sisam, Siris, Gulmohar, Imli, Lichi, Bael, Ber, Amla) every year .
- 20) The Budget earmarked for the implementation of Occupation Health is ₹ 1.5 Lakh. The proponent shall keep the amount in a separate bank account. The amount should be utilized for providing assistance in setting up a temporary health center during the lease tenure; provide free medicines to mine workers, awareness campaign regarding health issues for mine workers and health checkup & medicine to mine workers. The PP shall submit the detail report of implementation of the Occupational Health Plan to Regional Office, MoEF&CC annually along with photograph and audited statement of expenditure incurred.
- 21) The Budget earmarked for the implementation for the Corporate Social Responsibility is ₹ 1,00,000/Annum which includes free distribution of school bags & scholarship for students, distribution of blankets, vocational training, free medical camps, awareness programmes and distribution of free saplings. The proponent shall keep the amount in a separate bank account and submit the detail report of implementation of the same to Regional Office, MoEF&CC annually, along with photograph and audited statement of expenditure incurred.
- 22) The Budget earmarked for the implementation of the Environmental Management Plan shall be 3.0 Lakh (Capital) and ₹ 7.71 Lakh (Recurring). The amount should be spent for a) air, water, noise & soil quality monitoring; b) plantation; c) maintenance of roads; d) dust suppression etc. The Proponent shall keep the amount in a separate bank account and submit the detail report

of implementation of the same to Regional Office, MoEF&CC annually, along with photograph and audited statement of expenditure incurred.

- 23) The Project Proponent shall carry out the mining operation themselves and shall not outsource it to any Third Party.
- 24) The Project proponent shall engage Mining Engineer for overall supervision of mining operations.

(2.34) Mining of 2.8 LTPA of Sand, Bajri and Boulders in River Yamuna Lot No. 23/1 by M/s Garhwal Mandal Vikas Nigam Ltd. from mining lease area 30.035 Ha located at Village-Dumet, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand. [File No. J-11015/125/2013-IA-II(M); Proposal No: IA/UK/MIN/18535/2013; Consultant: Grass Root Research & Creation India (P) Ltd.]-EC Regarding

The proposal of M/s Garhwal Mandal Vikas Nigam Ltd. (GMVN) is for production of 2.8 LTPA of Sand, Bajri and Boulders in River Yamuna Lot No. 23/1 from mining lease area 30.035 Ha located at Village-Dumet, Tehsil- Vikashnagar, Distt-Dehradun, Uttarakhand. The Project Proponent submitted that mining lease area is coming under Survey of India Topo-Sheet No 53F11 and falls between Latitude: 30° 30' 42.15" N to 30° 30' 40.55" N & Longitude: 77° 50' 22.59" E to 77° 51' 10.91" E.

The project falls under Schedule 1(a) of mining and is a Category- "B1" project as per S.O. 141(E) 15.01.2016. The project also lies within Doon Valley (Eco-Sensitive Area as notified under sub-section (2) of section 3 of the Environment (Protection) Act, 1986) and general condition is applicable for the project as per S.O. 1599(E) dated 25.06.2014 and thus it should be treated as Category 'A' Project as per EIA Notification 2006.

The Project Proponent applied for ToR on 26.04.2013 and submitted the Form-1 and Pre-Feasibility Report. The proposal was considered & recommended for prescribing Term of Reference in EAC Meeting held on 26th -28th June, 2013 and ToR was issued on 16.09.2013.

The Proponent applied for grant of EC online vide proposal no. IA/UK/MIN/18535/2013 on 04.04.2015 and submitted the EIA Report after conducting the Public Hearing. The Ministry then asked to apply as per provision of S.O. 141(E) 15.01.2016 on 04.03.2016. The PP vide LR No 63/ Mining dated 21.04.2016 submitted that the proposal is a Category 'A' mines as per S.O 141(E) dated 15.01.2016 in cluster situation. As cluster certificate was not submitted the Ministry asked the PP to submit the cluster certificate, DSR and KML file of the mining lease area vide LR No. J-11015/125/2013-IA-II(M) dated 13.07.2017. The PP submitted the above information online on 16.04.2018.

The PP was then asked to submit a) Cluster Certificate as per S.O. 141(E) 15.01.2016 & S.O. 2269 (E) dated 1.07.2016 needs to be submitted; b) On the cover page of EIA Report period of study is not mentioned as required as per O.M No. J-20012/11/98-IA.II (M) dated

28.10.2004; c) EIA Report is not as per generic structure mentioned in Appendix-III of EIA Notification 2006; e) Copy of advertisement published in English Newspaper needs to be submitted; f) LoI was issued on 23.01.2013 and valid for 5 years i.e till 22.01.2018 thus copy of valid LOI needs to be submitted; g) Clear copy of advertisement (Regional and English language) needs to be submitted. List of schedule-1 species duly authenticated by Forest Department needs to be submitted; h) Conservation Plan for schedule-1 species needs to be submitted; i) Certificate from Forest Department regarding distance of mining lease from the protected area needs to be submitted and j) a letter from State Government to the effect that District Survey Report is prepared as per Appendix-X of S.O 141(E) dated 15.01.2016. The PP submitted the above information on 29.05.2018 and the proposal was considered in EAC Meeting held on 21-22 June,2018.

The Project Proponent submitted that Letter of Intent was issued vide Government Order No 589/ भूखनिर्देश /2012-13 dated 23.01.2013 and corrigendum to the same was issued on letter no 40/ भूखनिर्देश/2012-13 dated 10.04.2013. The PP also submitted a letter no 3498/ औ वी-22 ख /2001 dated 17.10.2002 wherein it has mentioned that in the District Dehradun the mining lease will be allotted to Garhwal Vikas Nigam Limited and in Gola River the same will be allotted to Uttarakhand Forest Development Corporation.

The Project Proponent submitted that the operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meters. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The transportation of the mineral is through tippers. Silt/Clay (6-12% of sand excavated) will be generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The Project Proponent submitted that the Mining Plan was approved vide Lr. No. 2214/ मा प्लान/ उ खनि/ देहरादून /2013-14 dated 3.03.2015. The mining plan was approved after the public hearing and due to this PP submitted a letter No 13/Bhu khani/2015-16 dated 27.04.2015 issued by Joint Director, Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand, wherein it has mentioned that the mining characteristics in the approved mining plan of GMVN is compatible with and similar in all aspects in the EIA Report both in draft and final EIA.

The Proponent submitted cluster certificate issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 377/ गोमविनि/ रालॉट/ भूखनिर्देश/2017-18 dated 27.02.2018 as per which there are other two mining leases of area 3.258 Ha and 1.292 Ha are within 500 meters of this mining lease. PP submitted that as the EC has already been granted to these two mining lease before 15.01.2016 and as per S.O. 2269(E) dated 01.07.2016 and the area of these mining lease should not be counted while defining the cluster area. Thus, the proposal become individual proposal of 30.035 Ha area. The PP also submitted a letter issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 74/ भूखनिर्देश/ जिकार्यादेदून /2018-19 dated 24.05.2018 wherein it has mentioned that the details provided in the cluster certificate is as per S.O 141(E) dated 15.01.2016 and S.O. 2269(E) dated 01.07.2016.

The Project Proponent submitted the District Survey Report of the Dehradun District and also submitted a letter issued by Geology and Mining Unit, Directorate of Industries, Govt. of Uttarakhand vide Lr No 74/ भूखनिर्देश/ जिंकार्यादेश/देहरादून/2018-19 dated 24.05.2018 wherein it has mentioned that DSR submitted by PP is final DSR and prepared as per Appendix-X of S.O. 141(E) dated 15.01.2016.

The PP submitted a report of inspection carried out on 14.09.2012 by a Committee constituted by Govt of Uttarakhand as per which there is no forest land in the mining lease area.

The Project Proponent also submitted a letter No 344/32-1-1(जी.आई.एस) dated 14.06.2018 issued by Chief Wildlife Warden(आई.टी.जी.सी) as per which Aasan conservation reserve is at a distance of 14-15 KM and Mussoorie Wildlife Sanctuary is 10-11 Km from the mining lease area. In the same letter it has mentioned that the distances are approximate and directed Divisional Forest Officer, Kalsi for physical verification. The PP also submitted a letter no 2294/32-1-1 dated 14.06.2018 wherein he has confirmed that the distance of mining lease from the protected area is as per letter issued by CWW.

The PP submitted the list of Schedule-1 & II species present in Core and Buffer Zone of the Mining lease area duly authenticated by the State Forest Department. As per which there is no Schedule-1 species present in the core & buffer zone. However, there are 3 schedule-II species viz. Rhesus Macaque, Spotted Deer and Rat Snake is present in the buffer zone.

The PP submitted a conservation plan prepared for schedule-1 & Schedule-II species. The Conservation Plan was submitted for the approval of Chief Wildlife Warden vide LR No 691/ खनन/ कन्व्हेशन प्लान dated 16.02.2017. The Chief Wild Life Warden (CWLW) vide its LR No 350/121 देहरादून dated 11.08.2017 communicated the shortcoming in the conservation plan to GMVN. The GMVN submitted the revised conservation plan for the approval CWLW on 20.02.2018. The PP did not submit any documents regarding approval of the same. The Budget proposed by PP in the Conservation Plan is ₹ 14.0 Lakh (Capital Expenditure) and ₹ 9.0 Lakh (Recurring Expenditure).

The primary **baseline data** for site specific micro meteorology data, ambient air quality, water quality, noise level, soil and flora & fauna has been collected during **October-December, 2013**. The monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and no major divergence was observed with respect to concentration values of various parameters between collected samples. The Project Proponent submitted that the baseline concentration of AAQ i.e. 98th percentile value of PM₁₀ is ranges from 69.5 µg/m³ to 84.4 µg/m³, 98th percentile value of PM_{2.5} is ranges from 32.5 µg/m³ to 43.8 µg/m³. The 98th percentile values of Sulphur dioxide 5.5-6.0 µg/m³ and Oxides of Nitrogen is 16.6-20.7 µg/m³.

The Project Proponent submitted that advertisement for the public hearing was published in Hindustan Times and Rashtriya Sahara Amar Ujala on 14.06.2014, 08.06.2014 and 09.08.2014. The public hearing was conducted on 10.09.2014 under the chairmanship of Shri

Pratap Singh Shah ADM, Dehradun. The issue raised during the public hearing was deliberated during the meeting. The issues raised during public hearing is mainly for supply of mineral free of cost or on concessional rate to the local public.

The Project Proponent submitted that every year 500 saplings (Aam, Jamun, Neem, Popular, Sisam, Siris, Gulmohar, Imli, Lichi, Bael, Ber, Amla) will be planted. During 5 year 1.0 Ha area shall be made covered under plantation.

The Project Proponent submitted that the budget proposed for the occupational health plan is ₹ 4.66 Lakh which includes assistance in setting up a temporary health center during the lease tenure; provide free medicines to mine workers, awareness campaign regarding health issues for mine workers and health checkup & medicine to mine workers.

The Project Proponent submitted that budget proposed for the Corporate Social Responsibility is ₹ 1,00,000 which includes free distribution of school bags & scholarship for students, distribution of blankets, vocational training, free medical camps, awareness programmes and distribution of free saplings.

The Project Proponent submitted that the budget earmarked for EMP shall be 4.23 Lakh (Capital) and ₹ 7.41 Lakh (Recurring). In addition to this the budget proposed for environment monitoring will be ₹ 2.2 Lakh/annum.

The Project Proponent submitted that the total project cost will be ₹ 17.15 Lakh. The project will give employment to 158 persons. In addition to this the PP also set an environment management cell. **The Committee noted that manpower to be engaged for EMC is not provided by the PP.**

The Project Proponent vide letter No. 355/खनन-(2018-19) dated 22.06.2018 submitted an undertaking that Garhwal Mandal Vikas Nigam Ltd. will carry out the mining operation themselves and will not outsource it to any Third Party.

Based on the discussion held and documents submitted by PP the Committee **deferred** the proposal and asked the PP to submit the following information:

- a) The Proponent should collect the baseline data in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level. The entire mining lease should be divided suitably in the grids of 25 Meter x 25 Meters with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid need to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank, safety barrier at lease boundary, restrictions as per condition of LoI/Mining Lease deed, restriction as Mineral Concession Rule of the Concerned State, restrictions as per

sustainable sand mining management guidelines 2016 etc. The PP should ascertain the level of the river bed with the help of sections drawn across the width of the rivers and along the direction of flow of the river and based on this define the depth of mining of each grid. The PP should provide a detailed map and table clearly showing the grid wise material availability, dimension of grid, location of grid (latitude & longitude of the corner points), level of grid (AMSL and RL), depth of mining in each grid, grids left under no mining zone etc.

- b) PP should suitably name each section line. Section Plan for both sections drawn across the river and along the direction of the river needs to be submitted. Each Section should have level on vertical axis and distance from the bank of river on horizontal axis. For the section along the direction of the river the levels to be shown on vertical axis and distance from upstream to downstream should be shown on horizontal axis.
- c) The PP should prepare the modified Mining Plan based on the above survey. The information sought above needs to be a part of the mining plan. In the mining plan year wise production plan should be prepared in three plates for each year. Plat-1 show the mine working for the pre-monsoon period (1st APR- 14th June), Plate-2 should show the status of the mine after the replenishment and no working should be proposed in this period (15th June-1st Oct) as the mining lease area needs to be left for the replenishment of the river bed mineral and plat-3 show the mine working after replenishment of the river bed i.e. post monsoon period (2nd Oct-31st March).
- d) PP should specifically mention in the mining plan that in the subsequent scheme of mining/review of mining plan, the year wise data pertaining to replenishment study (all five years) shall be provided which include the level (AMSL & RL) of river bed recorded before and after the monsoon, year wise replenishment quantity, all plan & sections of the replenishment study for the past five years.
- e) The PP should also submit a kml file wherein the above-mentioned grid plans is superimposed on the satellite imaginary.
- f) PP should also submit an undertaking to the effect that each year after the replenishment study the plan & section shall be submitted to concerned Department of Mining & Geology of the State for verification and official record.
- g) The methodology for conducting replenishment study needs to be mentioned in the modified mining plan. PP should ensure that plan and section that will be submitted to EAC should be in proper scale.
- h) PP should ensure that relevant information as per ToR Conditions needs to be provided in the EIA Report.
- i) PP is having number of mining leases and Environmental Policy needs to be revised to address various Environmental Issues. The number of manpower to be engaged for

Environmental Management Cell is not clear. PP should clearly mention the designation and number of person to be engaged for Environmental Monitoring Cell. The EMC will be set up for this mine only or for all the mining lease of the GMVN in the area.

- j) The PP should clearly bring out the impact on environment due to cluster situation. Air Quality modeling needs to be done in Aermod software both for area and line source.
- k) The transportation route needs to be clearly provided in the EIA Report with other details such as width of road, length of road, type of road, impact due to transportation on the vegetation on the both side of the road, frequency of maintenance of the road, amount proposed for maintenance of the road, compensation to the land owners effected by transportation of mineral etc.
- l) Detailed occupational plan needs to be submitted with budget allocation. The Committee was of the view that being handling the large number of mines the GMVN should set up a dedicated cell for the occupational health surveillance.
- m) Proof of submission of EIA/EMP report within the validity of ToR needs to be submitted as the EIA report uploaded on the website initially is not the correct report.
- n) The budget of EMP needs to be revised as the Environmental Monitoring cost is not included in the EMP Budget.
- o) PP should submit a plan clearly mention the area that will be covered under plantation.
- p) Proof of submission of application for NBWL Clearance.
- q) Details of the instruction of Hon'ble High Court if any for the mining close to the bridge.

(2.35): Mangampet Barytes Project (Project area – 221.89 Ha) of M/S. APMDC Ltd for a peak production capacity of 0.162 MTPA of Dolomite and 0.969 MTPA of black shale located in Mangampeta & Govindampalli Villages of Obulavaripalli Mandal and Anantarajupeta Village of Koduru Mandal, YSR Kadapa District, Andhra Pradesh. – (File No. J-11015/157/2016-IA-II (M); Proposal No. IA/AP/MIN/53361/2016; Consultant: Creative Engineers & Consultants)-EC Regarding

The proposal is for Mangampet Barytes Project towards a peak production capacity of 0.162 MTPA of Dolomite and 0.969 MTPA of Black Shale from mining lease area of 221.89 Ha by M/S. Andhra Pradesh Mineral Development Corporation (APMDC) Ltd. The mining lease area is bounded by Latitude N 14° 00' 32.41" to 14° 00' 13.30" and longitude E 79° 18' 28.97" to E 79° 19' 54.13". As per the KML file submitted by the Project Proponent the mining lease is in two parts and between these two parts there is a Mangampet Barytes mining lease which is being operated by ADMDC since 1975.

The project falls under Schedule 1(a) of mining and is a Category- "A" project as per EIA notification 14th September 2006 (amended time to time) as the mining lease area is more than 50 Ha.

The PP vide proposal No IA/AP/MIN/53361/2016 applied online for grant of ToR on 2.05.2016 and the proposal was considered in EAC meeting held on May 23-24,2016 wherein the Committee recommended for grant of ToR. The ToR was issued vide Lr. No. J-11015/157/2016-IA-II (M) dated 10.06.2016.

The PP after conducting public hearing applied for grant of EC on 09.01.2018 and the proposal was considered in EAC Meeting held on February 26-27,2018 wherein the Committee deferred the proposal for want of additional information. The PP submitted the desired information vide Lr No. APMDC/HO/DGM(S)/EC/2016-17/154(s)/40 dated 04.05.2018 and upload the information online on 06.05.2018. The proposal was then considered in EAC meeting held on May 14-15,2018 wherein the committee deferred the proposal and asked the PP to submit the a) Modified Mining Plan after changing the year-wise production & development planning, direction of movement of the benches and all related plan and section, b) The EIA Report needs to be revised as per the mining plan and extension word should be removed from the EIA Report, c) PP should provide the EMP budget only for the proposed mine. PP should provide the activity wise budget along with timeline for its implementation, d) PP should provide the detailed occupational health surveillance plan. The activity wise budget and time period for its implementation needs to be provided in the EIA report. The Occupational Plan not only covers the worker working in the mining lease area but it should also cover the nearby community, e) The Ministry has issued O.M No 22-65/2017-IA.II (M) dated 1.05.2018 pertaining to Corporate Environment Responsibility (CER). PP should provide the activity wise budget for the same along with timeline for its implementation. The PP should ensure that all the issues raised during public hearing should be addressed while finalizing the CER. It is to be noted here that CER is over and above the CSR and activity proposed in the CER should address the issues raised during Public Hearing and as proposed in aforementioned O.M. and f) Activity wise emission rate i.e. loading, transportation, drilling etc. needs to be provided in the EIA Report for the total material handling i.e. production of mineral, waste and top soil. Accordingly, the GLC needs to be provided in worst case and controlled case scenario.

The PP submitted the above information vide Lr No. APMDC/HO/DGM(S)/EC/2016-17/154(s)/180 dated 30.05.2018 and upload the information online on 31.05.2018. The proposal is now considered in EAC meeting held on 21-22 June, 2018 and proponent submitted the following:

a) Modified Mining Plan after changing the year-wise production & development planning, direction of movement of the benches and all related plan and section.

The PP submitted the copy of modified mining approved by Department of Mines & Geology, Govt of Andhra Pradesh vide Lr No. 1750/MP-KDP/2016 dated 30.05.2018.

The modification of the approved mining plan is carried out showing the mine working independently for the particular lease by leaving the 7.5 meters safety zone all along the periphery of the lease.

b) The EIA Report needs to be revised as per the mining plan and extension word should be removed from the EIA Report.

The EIA report is revised as per the approved modified mining plan and extension word has been removed in the EIA report and the EIA report is prepared and submitted is for this proposed project only.

c) PP should provide the EMP budget only for the proposed mine. PP should provide the activity wise budget along with timeline for its implementation.

PP submitted that the budget for the EMP is for the proposed mine only. PP submitted that the capital cost for EMP shall be Rs 190 Lakh. The activity proposed is a) Mobile Water Sprinkler (70 Lakh , 2018-19); Fixed Sprinkler (40 Lakh, 2019-20); Garland drain, retaining wall, settling pond, rain water harvesting pits and surface runoff management structures (20 Lakh, 2018-21); Scientific/technical studies (15 Lakh ,2018-19); ETP for workshop (10 lakh, 2018-19); Establishment of observation well with piezometer (5 lakh , 2018-19); procurement of automatic weather monitoring instrument, blasting vibration meter, noise level meter (10 Lakh , 2018-19); safety instrument & equipment (20 lakh , 2018-19). The recurring cost for implementation of EMP shall be 390.51 Lakh.

d) PP should provide the detailed occupational health surveillance plan. The activity wise budget and time period for its implementation needs to be provided in the EIA report. The Occupational Plan not only covers the worker working in the mining lease area but it should also cover the nearby community.

The PP submitted that the detailed occupational health surveillance plan provided in the EIA report covering the mine worker and nearby community. The total budgetary provision for implementation of the same is Rs 40 Lakh/annum.

e) The Ministry has issued O.M No 22-65/2017-IA. II (M) dated 1.05.2018 pertaining to Corporate Environment Responsibility (CER). PP should provide the activity wise budget for the same along with timeline for its implementation. The PP should ensure that all the issues raised during public hearing should be addressed while finalizing the CER. It is to be noted here that CER is over and above the CSR and activity proposed in the CER should address the issues raised during Public Hearing and as proposed in aforementioned O.M.

The PP submitted that Rs 239 Lakh is proposed for Corporate Environment Responsibility (CER) which include a) providing full-fledged mobile medical unit comprising lab test facility (Rs 40 Lakh, 2018-19); b) Renovation of school building, toilets in schools etc. (22 lakhs,

2018-23), c) providing scholarship, education support for the school going children (Rs 57 Lakh, 2018-23); d) Maintenance of internal roads in rural areas (Rs 40 Lakh, 2018-23); e) providing solar lighting facilities for schools, panchayats building, hospital etc.(Rs 28.0 Lakh, 2018-23); f) Maintenance of the village pond (Rs 5 Lakh, 2019-21); g) skill development like training electrical, plumbing, tailoring, HEMM operators etc.(Rs 27 Lakh,2018-23); Capacity building for farmers (Rs 20 lakh, 2018-23).

f) Activity wise emission rate i.e. loading, transportation, drilling etc. needs to be provided in the EIA Report for the total material handling i.e. production of mineral, waste and top soil. Accordingly, the GLC needs to be provided in worst case and controlled case scenario.

The PP submitted that activity wise emission rate and submitted that value of PM_{10} after implementation of the project will be between 58.4-93.7 $\mu g/m^3$, $PM_{2.5}$ will be between 33.1-49.7 $\mu g/m^3$, SO_2 will be between 5.3-7.7 $\mu g/m^3$, NO_x will be between 12.2-19.6 $\mu g/m^3$.

In addition to above, PP submitted that the mining lease granted over an area of 114.14 Ha for a period of 20 years from the date of lease execution and letter of Grant of mining lease issued by Industries & Commerce (Mines III) Dept. of Govt of Andhra Pradesh vide LR. No. 5635/M.III (2)/2015 dated 18.05.2015. The Proponent also submitted the extension of validity of the letter of intent issued by the Department of Mines & Geology, Government of Andhra Pradesh vide LR. 52044/R5-2/2012 dated 1.01.2018. Further as per direction of EAC PP submitted the revised LOI granted over an area of 221.89 Ha for a period of 20 years from the date of lease execution issued by Government of Andhra Pradesh, Department of Mines and Geology, Ibrahimpatnam, vide Notice. No. 4020/R5-2/2018 dated 18.04.2018.

The proponent submitted that entire lease area of 114.14 Ha is Government Land. However, dumping will be carried out outside the lease over an area of 107.75 Ha. The Thasildar, Obulavaripalli has already issued NOC for dumping of waste material outside the lease area. The proponent submitted LR No 482/2017/WL-1(ii) dated 10.10.2017 & LR No 1170/2016/M1 dated 20.09.2017 issued by Forest Department, Govt. of Andhra Pradesh stating that the project area does not involve any forest land. The proponent also submitted LR No 482/2017/WL-1 dated 12.09.2017 along with authenticated map showing the distance of mining lease from protected areas, as per which the mining lease is more than 10 Km from any protected area. Further, as per direction of EAC the PP has obtained letter of intent from State Govt. for entire area of 221.89 Ha(114.14 Ha +107.75 Ha) included outside area into the mining lease. Thus, there is no mining activity proposed outside the mining lease area. The PP submitted that modified mining plan for 221.89 Ha has also been approved by Department of Mines & Geology, Govt of Andhra Pradesh vide Lr No. 1750/MP-KDP/2016 dated 30.05.2018.

The proponent submitted LR No 482/2017/WL-1(ii) dated 10.10.2017 & LR No 1170/2016/M1 dated 20.09.2017 issued by Forest Department, Govt. of Andhra Pradesh stating that the project area does not involve any forest land. The proponent also submitted

LR No 482/2017/WL-1 dated 12.09.2017 along with authenticated map showing the distance of mining lease from protected areas, as per which the mining lease is more than 10 Km from any protected area.

The proponent submitted the LR No 482/2017WL-1 dated 09.11.2017 issued by Forest Department, Government of Andhra Pradesh wherein it has mentioned that there are five schedule-1 species (Four Horned antelope, Indian Elephant, Leopard, Sloth Bear and Pythons) are present in buffer zone. The proponent submitted that ₹ 175 Lakh is earmarked for implementation of the wildlife conservation plan. The PP also submitted the LR No 482/2017/WL-1(I) dated 10.10.2017 issued by Principal Conservator of Forests (WL) & Chief Wildlife Warden (FAC), Agathavarapadu, Andhra Pradesh to Member Secretary Non-Coal Mining , MoEF&CCC there by forwarding the approved conservation plan.

The proponent submitted that the baseline data on micro-meteorology, ambient air quality, water quality, noise quality, soil and flora & fauna are collected during summer season (March-May 2016). The monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and no major divergence was observed with respect to concentration values of various parameters between collected samples. The existing air quality levels for PM10, PM2.5, SO2 and NO2 are well within the NAAQ standards. The proponent submitted that after considering the incremental concentration of various pollutants the post project concentration is also well within the NAAQ standards. The proponent submitted that the water requirement for the project will be 280 KLD and the same will be sourced from existing Barytes mine, but the drinking water requirement will sourced from bore wells within the project area. The proponent submitted that mining activities will not intersect the ground water table.

The PP submitted that in Pre-mining stage, Out of total lease area of 221.89 Ha, 161.80 Ha are Government land and remaining 60.09 Ha are private lands. The Government lands are mostly alienated and part of private lands of about 12.83 Ha is also already acquired. Ultimately there will not be any water body within the mined out area. In the post mining stage, out of 221.89 Ha of lease area, 191.8816 Ha will be reclaimed with plantation/Green belt (comprising entire Mine area - 45.3708 Ha, external dump area - 76.6738 Ha, Mineral Storage area - 19.2408 Ha, Top soil storage area - 3.0000 Ha and safety zone area - 47.5962 Ha), 1.25 Ha left for public use, 1.50 Ha for infrastructure & 27.2584 Ha left undisturbed.

The Proponent submitted that Andhra Pradesh Pollution Control Board had issued Public Notices in major dailies (namely Indian Express and Sakshi) on 02.04.2017 disclosing the details of the Public Hearing scheduled for this project and Corrigendum published on 6.4.2017 with detailed Survey nos of the area. The Public Hearing / Consultation was conducted on 04.05.2017 near the APMDC office, Mangampeta village, Obulavaripalli Mandal, YSR District through Joint Collector & Addl. District Magistrate - YSR District, Member Convener & Environmental Engineer APPCB, Regional Office – Tirupati, along with the representatives from M/s. The Andhra Pradesh Mineral Development Corporation Limited. The issue raised during the public hearing was also deliberated during the meeting. The main issues raised during public hearing are land acquisition and compensation, re-location of the

village, revenue records to be corrected, R&R packages, CSR, green belt, water depletion issue etc. The Commitment made by PP is providing medical facilities, employment, green belt development, and environmental monitoring. The PP also allocation of Rs 28.33 Crore for R&R Plan & Capital cost of Rs 190 Lakh for implementation of EMP.

The nearest habitation RR II on the eastern side of the lease area are already paid compensation and they have to be shifted soon to prevent them from environmental concerns due to its proximity. For scientific evaluation of the impact, Social Impact Assessment (SIA) Study is carried out through Centre for Excellence in Management of Land Acquisition, Resettlement and Rehabilitation (CMLARR) Administrative Staff Colleague of India (ASCI), Hyderabad. The displaced/affected families will be entitled to the Compensation and Resettlement and Rehabilitation (R&R) benefits under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCTLARR) Act, 2013. R & R Package for land losers is prepared. The estimated cost of this package is Rs. 28.23 crores which is as follows:

Sl. No	Description	Rate/Unit in Rs	No of Units	Rupees in Lakh
A	Land Compensation			
1	Value of land determined under Section 26	5,00,000/Acre		
2	Multiplication factor (1.25 in the rural area in Andhra Pradesh)	6,25,000/Acre		
3	Solatium @ 100 percent on Compensation (Market value of land, trees and structures).	6,25,000/Acre		
4	Sale price (2+3)	12,50,000/Acre	116.779	1634.906
5	Additional Market Value @ 12 percent on the market value of land under Section 26	1,50,000/Acre		
6	Final Land Price considered as per Act (4+5)	14,00,000/Acre		
7	Total Land Compensation Value	1400000		
B	Displaced Families		Nil	
1	House rate as per norms of IAY	1,50,000		
2	Choice of annuity per month per family for 20 years (with indexation to consumer price index for agricultural labour)	Rs. 2000 / Month /20 years		
3	Subsistence grant for PDF's per month per a period of one year from the date of Award	Rs. 3000/month/ 1 year		

4	One time grant to artisans, small traders or self-employed persons who are displaced from the affected area	Rs. 25000/person		
5	One time financial assistance of for shifting family, building belongings and cattle.	Rs. 50,000 / family		
6	One-time resettlement in lieu of loss of livelihood whether such PDF/PAF settle in the Resettlement zone or not	Rs. 50,000 / person		
7	Total Displacement compensation value		0	0
C	Affected Families			
1	1Payment per month per family for 20 years with indexation to consumer price index for agricultural labour, through annuity policies or one-time payment of Rupees 5 lakhs per affected family	2000/month/ family/20 years	216	1080
2	2 One time resettlement of Rs 50,000/- in lieu of loss of livelihood whether such PDF/PAF settle in the Resettlement zone or not.	50,000/person	216	1080
3	Total Affected families compensation value			1188

The proponent submitted that About 10.297 million m³ of waste and 0.04 million m³ of top soil is generated during the present plan period. Besides 2.00 million m³ of waste in Dump-3 on the Northern side of the lease area will be re-handled for advancing the mining benches. Further no waste is likely to be generated during the conceptual period. The waste will be dumped in dump 4 & 5 which is on the southern side of the lease area over an area of 63.6840 Ha. Besides, old dump exists over an area of 12.9898 Ha in the Northern Side of the lease. Top soil will be used for plantation purposes.

Project Proponent submitted that ultimately 191.8816 Ha will be covered with greenery of which 144.2854 Ha will be developed with plantation and 47.5962 Ha of safety zone (mine periphery, west of dump 4 & 5 & east of shale stock as a barrier for water bodies) will be covered with green belt.

The Project Proponent submitted that the total project cost shall be ₹ 60 Lakh and shall give employment to 126 persons.

Based on the discussion held and documents submitted the Committee **recommended** the proposal for grant of EC for **Mangampet Barytes Project (Project area – 221.89 Ha) of M/S. APMDC Ltd for a peak production capacity of 0.162 MTPA of Dolomite and**

0.969 MTPA of black shale located in Mangampeta & Govindampalli Villages of Obulavaripalli Mandal and Anantarajupeta Village of Koduru Mandal, YSR Kadapa District, Andhra Pradesh. The Committee also prescribed the following additional specific conditions:

- 1) Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of Andhra Pradesh, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
- 2) No mining activities will be allowed in forest area, if any, for which the Forest Clearance is not available.
- 3) This Environmental Clearance is subject to obtaining requisite NBWL Clearance from the Standing Committee of National Board for Wildlife as applicable for this Mining project.
- 4) The Project Proponent shall obtain Consent to Operate from the State Pollution Control Board, Andhra Pradesh and effectively implement all the conditions stipulated therein.
- 5) Adequate protection against the dust and other environmental pollution arising due to mining activity shall be made so that human habitation located near the lease is not adversely affected. The status of implementation shall be report to Regional Office, MOEF&CC and SPCB, Andhra Pradesh.
- 6) The budget earmarked for the implementation of R&R Plan shall not be less than ₹ 28.23 crores. The amount proposed shall be kept in a separate bank account. The report of implementation of R&R plan needs to be submitted to Regional Office, MoEF&CC annually along with supporting documents and audited statement.
- 7) The Budget earmarked for Corporate Environment Responsibility (CER) shall not be less than ₹ 239 Lakh and shall be spent for a) providing full-fledged mobile medical unit comprising lab test facility (Rs 40 Lakh, 2018-19); b) Renovation of school building, toilets in schools etc. (22 lakhs, 2018-23), c) providing scholarship, education support for the school going children (Rs 57 Lakh, 2018-23); d) Maintenance of internal roads in rural areas (Rs 40 Lakh, 2018-23); e) providing solar lighting facilities for schools, panchayats building, hospital etc.(Rs 28.0 Lakh, 2018-23); f) Maintenance of the village pond (Rs 5 Lakh , 2019-21); g) skill development like training electrical, plumbing, tailoring, HEMM operators etc.(Rs 27 Lakh,2018-23); Capacity building for farmers (Rs 20 lakh ,2018-23) in a time bound manner. The amount proposed in CER shall be kept in a separate bank account. The report of implementation of activities proposed in CER needs to be submitted to Regional Office, MoEF&CC annually along with supporting documents, photographs, purchase documents and audited statement.

- 8) The Budget earmarked for Environmental Management Plan (EMP) shall not be less than ₹ 190 Lakh (Capital) & 390.51 Lakh (Recurring). The activity proposed for capital expenditure are a) Mobile Water Sprinkler (70 Lakh , 2018-19); Fixed Sprinkler (40 Lakh, 2019-20); Garland drain, retaining wall, settling pond, rain water harvesting pits and surface runoff management structures (20 Lakh, 2018-21); Scientific/technical studies (15 Lakh ,2018-19); ETP for workshop (10 lakh, 2018-19); Establishment of observation well with piezometer (5 lakh , 2018-19); procurement of automatic weather monitoring instrument, blasting vibration meter, noise level meter (10 Lakh , 2018-19); safety instrument & equipment (20 lakh , 2018-19) shall be implemented in a time bound manner. The Project Proponent shall keep the amount proposed for EMP in a separate bank account and submit a report of implementation of activities proposed in EMP to Regional Office, MoEF&CC annually along with supporting documents, photographs, purchase documents and audited statement.
- 9) The budget earmarked for Occupational Health Plan shall not be less than ₹ 40 Lakh/annum. The PP shall implement the activities proposed Occupational Health Plan as mentioned in EIA report in a time bound manner. The amount proposed in for the same shall be kept in a separate bank account. The report of implementation of activities proposed in Occupational Health Plan needs to be submitted to Regional Office, MoEF&CC annually along with supporting documents, photographs, purchase documents and audited statement.
- 10) The Project Proponent shall ensure that mine waste shall not be dumped outside the mining lease.
- 11) Shelter belt i.e. wind barrier of 30 meter width and consisting of at least 5 tiers around lease facing the habitation/school/public road (if any in the vicinity) shall be raised.
- 12) Adequate protection against the dust and other environmental pollution arising due to mining activity shall be made so that human habitation located near the lease is not adversely affected. The status of implementation shall be report to Regional Office, MOEF&CC and SPCB, Andhra Pradesh.
- 13) The proponent should ensure that mine working shall not intersect the ground water table of the area.
- 14) The Project Proponent shall adopt Akira Miyawaki method for development of green belt and afforestation. The implementation report of the same along with photographs needs to be submitted to Regional Office. MoEF&CC annually with photographs, plantation plan and latitude & longitude of the area where plantation has been carried out.

- 15) The PP shall fulfill the Commitment made during public hearing in a time bound manner and the report of the same needs to be submitted to Regional Office, MoEF&CC annually along with documentary evidence, photographs etc.

(2.36) Nandgaon-Ekodi Limestone Mine (Mining Lease Area 369.52 ha) with Total Excavation Capacity of 2.9 Million TPA [2.0 Million TPA Limestone, 0.9 Million TPA (Waste, Sub-grade, Screen rejects, top soil etc)] & 1200 TPH capacity crusher, Screening Plant [Category A:1(a) & 2(b)] at Villages-Nandgaon, Ekodi, Bhoygaon and Kawthala, Taluka- Korpana, District- Chandrapur Maharashtra by M/s Ambuja Cement Ltd.- ToR Regarding (File No. J-11015/62/2018-IA-II (M); Proposal No. IA/MH/MIN/73277/2018; Consultant: J.M Environet Pvt. Ltd.)-ToR Regarding

The proposal of M/s Ambuja Cement Limited is for Nandgaon-Ekodi Limestone Mine (Mining Lease Area 369.52 ha) with Total Excavation Capacity of 2.9 Million TPA [2.0 Million TPA Limestone, 0.9 Million TPA (Waste, Sub-grade, Screen rejects, top soil etc)] & installation of 1200 TPH capacity crusher, Screening Plant [Category A:1(a) & 2(b)] at Villages-Nandgaon, Ekodi, Bhoygaon and Kawthala, Taluka- Korpana, District- Chandrapur Maharashtra Study area falls within the Survey of India Topo-sheet No. E44B1 (56 M1), E44B5 (56 M 5). The Project is located in Seismic zone-II. The Latitude and Longitude of the mine site fall between 190 50' 23.42" N to 190 52' 12.81" N and 79010' 40.36" E to 790 11' 59.87" E respectively.

The PP applied online for grant of ToR under Category A:1(a) & 2(b) on 31.05.2018 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 50 Ha and category 2(b) as there is a beneficiation of mineral is involved.

The Proponent submitted that Letter of Intent (LoI) for grant of mining lease over an 369.52 ha has been issued in favor of M/s. Ambuja Cements Limited by Government of Maharashtra vide letter no MMN-0717/C.R.64/IND-9 dated 8.11.2017 for a period of 50 years through e-auction process.

The Proponent submitted that M/s. Ambuja Cements Limited has its existing Integrated Cement Plant with Cement Production Capacity (4.75 Million TPA), Clinker Production Capacity (2.85 Million TPA) Captive Power Plant (70 MW) at village- Uparwahi, Tehsil- Rajura and Korpana, District- Chandrapur (Maharashtra). The requirement of limestone as a prime raw material for cement manufacturing is met from its existing three limestone mines. Reserves at the existing mines are not sufficient for existing plant capacity and proposed expansion considering 50 years plant life. Nandgaon Ekodi limestone deposit has relatively better quality of limestone as compared to existing limestone leases. Limestone from this mine will be judiciously blended with limestone of existing leases to conserve mineral and increase mine

life. In view of limited limestone reserves in existing leases and to enhance the life of plant M/s. Ambuja Cements Limited (Unit: Maratha Cement Works) has proposed Nandgaon- Ekodi Limestone mine (ML Area: 369.52 ha.) with Production Capacity of 2 Million TPA at Villages Nandgaon, Ekodi, Bhoygaon, and Kawthala Taluka Korpana, District Chandrapur (Maharashtra)

The Proponent submitted that the total Mining lease area is 369.52 ha out of which 4.03 ha area is Govt waste land and 365.49 ha area is others (Pvt Land). Mining operation will be opencast utilizing Heavy Earth Moving Machines (HEMMs) following conventional drilling & blasting approach. Loading will be done by Hydraulic Excavators. Crusher of 1200 TPH capacity along with screening plant will be installed in the ML area. The ROM and crushed limestone will be transported to the Maratha Cement Works (MCW) plant (23 kms road distance in south direction) at village Upparwahi, Taluka Rajura and Korpana, District Chandrapur by road. The total water requirement for the proposed project will be 200 KLD, which will be met through Groundwater / Rainwater harvesting / Mine sump water (As and when developed)

The Proponent submitted that No National Park, Wild Life Sanctuaries, Tiger Reserves, Wildlife Corridors, etc. are there within 10 km radius of the study area.

The proponent submitted that one season primary Baseline Data collection for Summer Season (March to May-2018) has been started.

The Proponent submitted that the total cost of the project is Rs 180 Crores (including land cost). The Capital Cost for Environment Protection is Rs 3.0 crore with Recurring cost of Rs. 30 Lakhs per annum. The Proponent submitted that no litigation is pending against the project. The Project proponent submitted that 141 persons will be engaged for the project.

The proposal was considered in EAC Meeting held on 21-22 June, 2018. The KML file was analyzed on Google and DSS. Based on the information furnished and discussion held, the Committee **recommended** the project for prescribing standard terms of reference for category 1(a) & 2(b) for total excavation capacity of 2.9 Million TPA [2.0 Million TPA Limestone, 0.9 Million TPA (Waste, Sub-grade, Screen rejects, top soil etc)] & 1200 TPH capacity crusher, and Screening Plant at Villages-Nandgaon, Ekodi, Bhoygaon and Kawthala, Taluka- Korpana, District- Chandrapur Maharashtra.

(2.37) Masonry Stone Mine (Minor Mineral) in the mine lease area of 6.9818 Ha for production of 4,80,000 Tonnes per annum at Sy. Nos. 1376, 1377, 1378, 1405, 1406 & 1411, Kanichar Village, Iritty Taluk, Kannur District, Kerala by M/s New Bharat Stone Crusher & Hollow Bricks Industries- reg. Environmental Clearance (applied as B2 Category)

(F.No.J-11015/63/2018-IA.II(M) & Online no.IA/KL/MIN/75155/2018)

The proposed project is with mine lease area of 6.9818 ha. which is more than 5 ha. but less than 25 ha. and hence Category B2 project. There is one quarry (building stone mine) located within 500 m. radius with mine lease area of 3.8395 ha for which cluster certificate is issued. Further, SEIAA Kerala is not functional at present. Though the cluster area is between 5-25 Ha, the proposed mine lease is more than 5 Ha for which Member Secretary may be requested to seek clarification from Policy Wing of IA Division.

The following permits were granted for the Survey no.1411 part in the past.

Survey no.	Area of the lease	Permit/Lease/LOI grant	Valid till	Validity
Sy.no. 1411 Part	3.4166 Ha	11.12.2009	10.12.2010	1 year permit
Sy.no. 1411 Part	3.4166 Ha	8.12.2010	9.12.2011	1 year permit
Sy.no. 1411 Part	3.9676 Ha	14.12.2011	13.12.2012	1 year permit
Sy.no. 1411 Part	3.8395 Ha	20.6.2014	19.6.2014	10 years lease, EC issued on 15.3.2013 by SEIAA.
Sy.no. 1376, 1377, 1378, 1405, 1406 & 1411	6.9818 Ha	3.4.2018	-	LOI.

The kml file of proposed mine lease boundary shows that a portion of the mine lease had already been mined out. Further, there is another lease adjacent to the proposed mine lease. The owner of the lease holder for both the leases is same. Committee observed that mining has been carried out either through existing lease by way of expanding illegally or through mining the proposed lease without valid approvals which amounts to illegal mining. Environmental Clearance for the existing mine lease was accorded on 20.6.2014 by SEIAA, Kerala. Some portion of the Survey no.1411 falls in both the mining leases. It appears that PP has illegally mined in the Sy.no.1411 in the new lease area. This is substantiated by the lease deed dated 27.6.2014 wherein it is has mentioned the boundaries of the existing mine lease (3.8395 Ha) on four sides. The mine lease is bounded by Sy.no.1411 pt on South side where as the South side portion of Sy.no.1411 has been completely mined out which is part of the new lease. This amounts to the illegal mining under Mines Act, 1957. District Mines and Geology/State Govt. may ascertain the violation illegal mining. **Committee after deliberations, rejected the proposal.**

(2.38) Arasu Magnesite Mine of lease 96.34 ha (Magnesite - 1,14,000 TPA & Dunite - 1,13,415 TPA) located at Kurumbapatti RF, Thatayangarpatti Village, Omalur Taluk, Salem District, Tamil Nadu by M/s Tamil Nadu Magnesite Ltd. (File no.J-11015/64/2018-IA.II(M) & Online no.IA/TN/74485/2018)

M/s Tamil Nadu Magnesite Limited (TANMAG) submitted the following information:

- i. M/s TANMAG is a Govt. of Tamil Nadu undertaking and mining Magnesite and Dunite in 177.96 Ha of Forest Land from 1979. Initially, mining has been carried out by the Tamil Nadu Government. M/s TANMAG has been the raising contractor since 1988 till 1997. From the year 1998 onwards, M/s TANMAG is fully operating the mines with valid mine lease.
- ii. TANMAG has obtained combined Forest Clearance (FC) and Environmental Clearance (EC) in on 23.6.1998 for 177.96 Ha of reserve forest land. At Sl.No.8 of the said clearance, environmental safeguards have been stipulated. TANMAG was operating with genuine assumption that a separate EC is not required. Further, forest clearance has been issued on 14.7.2008 for renewal of mining lease and reduction of lease area from 177.96 Ha to 96.34 Ha. From 2008 onwards, mining operations have been carried out in the reduced area of 96.34 Ha.
- iii. Subsequent to Forest Clearance, Mining lease has been granted by Environment and Forest Department, Govt. of Tamil Nadu on 6.8.1988 for ten years. Further, lease has been renewed over an extent of 96.34 Ha in the Kurumbapatti Reserve Forest for a period of 20 years from 2008.
- iv. In respect of Mining lease in Poramboke lands for mining major minerals, Ministry of Mines, Govt. of India is the Competent Authority and separate EC has to be obtained from the MoEF&CC. In case of TANMAG, MoEF&CC is the authority to sanction EC and FC since mines are in the reserve forest. Hence, TANMAG obtained combine Forest and Environmental Clearance from MoEF&CC.
- v. TANMAG has obtained valid Consents issued by Tamil Nadu Pollution Control Board since 1993 till 2018. Similarly, Mining Plan and Scheme approval from the Indian Bureau of Mines (IBM) are being obtained continuously from 1998 onwards.
- vi. Sukinda Iron Ore Mines in Odisha State of M/s Tata Steel Ltd., was issued a combined EC & FC in 1998 and subsequently the validity of the EC was extended.
- vii. Like in the case of Sukinda Chromite mine of M/s Tata Steel Ltd., the combined EC and FC of TANMAG is valid till 2028 and is operating mines in compliance with all statutory requirements.
- viii. It is requested to intervene so that TANMAG may be permitted to resume its mining operations.

Committee has reviewed the clearance dated 23.6.1998 which conveys the approval under Section-2 of Forest (Conservation) Act, 1986 for diversion of 177.96 ha of forest land. Committee is of the opinion that the said clearance Forest Clearance. Magnesite is the major mineral and Dunite is the minor mineral. The lease was granted for 177.96 ha in 1998. Prior Environmental Clearance is needed for the major minerals having lease area more than 5 ha under EIA Notification, 1994. If the mine is in operational before the promulgation of the notification, then prior Environmental Clearance under

EIA Notification, 1994 is mandatory if there is an expansion in terms of lease area or production. The base year production in 1993-94 is 62,000 Tonnes/annum (Magnesite) and has increased in the subsequent years. The highest production of Magnesite is 1,39,396 Tonnes/annum in the year 2014-15 as per the certificate of DMG vide their letter dated 14.6.2018. Similarly, Dunite production in the base year (1993-94) is 1,770 Tonnes/annum and highest production in the subsequent years is 61,490.83 Tonnes/annum. Further, mining lease has been renewed in 2008. Further, Ministry vide letter dated 12.4.2018 had already ascertained the violations under E (P) Act, 1986 and communicated M/s TANMAG to comply all the provisions mentioned in the Judgement of the Hon'ble Supreme Court dated 2.8.2018 in the Common Cause vs UoI and apply in the violation sector as per the S.O.No.804(E) dated 14.3.2017.

EAC deliberated the matter and requested the Ministry to take a decision whether their proposal be transferred to violation sector.

(2.39) Building Stone Mining Project in the lease area of 5.1070 ha for production of 90,000 Tonnes/Annum at Valayam Village, Vanimel Panchayat, Vadakara Taluk, Kozhikode District, Kerala by M/s Malayoram Rock Products Private Limited.

(File No.J-11015/41/2018-IA.II(M) & Online no. IA/KL/MIN/73661/2018)

The proposal is a fresh lease of 5.1070 ha for production of 90,000 TPA Building stone which is a miner mineral. The LoI was issued on 18.8.2017 by Directorate of Mines and Geology, Govt. of Kerala. Mining Plan has been approved by the DMG on 23.8.2017. Cluster certificate was issued by DMG vide dated 23.8.2017 stating that there are no other mining leases within 500 m radius from the periphery of the proposed mine lease. Accordingly, the proposal is categorised as 'B2' which is to be dealt by SEIAA. As the SEIAA, Kerala is not functional at present, PP applied to the Ministry. Project 'B2' category requires only Form-I, PFR and Approved Mine Plan and Environmental Management Plan.

The proposal was earlier considered in the 31st meeting of EAC (Non-coal Mining) held during 14th -15th May, 2018 and sought the following additional information:

- i. The Member Secretary informed the Committee that the Ministry has issued the directions under Section 5 of the Environment (Protection) Act, 1986, vide letter No. 1-4/2012 - RE (Pt), dated 13.11.2013 regarding the prohibition of mining activity in the ESA identified by the HLWG and provided a list (State-wise, District-wise and Taluk-wise village). The Committee noted that the instant LOI/MLA is not a part of the list. However, the Ministry may seek the comments from concerned Division of the Ministry w.r.t. ESA identified by the HLWG and its further development, if any;
- ii. Details of type of rock and geology, method of mining, machinery details, blasting details etc. needs to be provided;

- iii. Details of haulage roads, slope at different sections needs to be provided;
- iv. Details of Occupational health along with budgetary provisions needs to be elaborated;
- v. 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).
- vi. 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 State Government. A Certificate from the Competent Authority in the State Forest Department should also be provided, confirming the involvement of forest land, if any, in the project area.
- vii. PP needs to submit the detailed Green Belt Development plan on periphery of the lease along with type of plantation etc. Plant species needs to be revised;
- viii. Test Reports of Free Silica Concentration need to be submitted;
- ix. Details of connectivity from mine to crusher and its transportation plan needs to be elaborated; and
- x. The Committee noted that the Ministry has recently issued a circular vide no. 22-65/2017-IA.III, dated 1st May 2018 on Corporate Environment Responsibility (CER). Accordingly, PP needs to submit the details of budget and its activities as per the said Circular.

Project Proponent submitted the following information:

- i. The proposed mine lease is located in Valayam Village, Vadakara Taluk, District Kozhikode which is not in the ESA villages identified by HLWG on Western Ghats.
- ii. The highest elevation of the area is 445 m AMSL and the lowest is 310 m AMSL. The drainage of the mine lease area is NW to SE. The contour map showing the topography of the mine lease area has been submitted. Main rock type in the study area is Charnockite granite. At places the granite is medium to coarse grained with dark grey quartz. The soil and over burden thickness varies from avg. 0.55 m to 0.35 m. Mining method is semi-mechanised method. One Jack hammer (32 mm dia and 1.5 m depth) is used for drilling, two excavators (0.9 m³) for loading, two dumpers (15 T) for transportation, 2 Compressors and 1 DG set (180 kVA) will be mainly used for mining of the building stone. In the drilling, 21-22 holes per blast are designed with consumption of explosive of about 5.5 kg/blast/day. Height of the benching will not be kept more than 5 m. The mining will not intersect with the groundwater table. About 20 trips will be required to for transportation of excavated material. Total excavation of building stone material of 10,61,820 Tonnes (maximum of 90,000 TPA), Top soil of 24,095 m³ (maximum of 3404 m³/annum) and Overburden of 15,333 m³ (maximum of 2398 m³/annum) will be carried out over a period of 12 years. Top soil will be stacked separately and will be reused in the reclaimed areas for plantation. Over burden will be utilized within the pit for lying of haul roads. At the end use, OB can be reutilized as

soil base for plantation. Storm water drains along with suitable silt traps will be suitably constructed along the periphery of the mine pit.

- iii. The haul road gradient will not exceed 1:16. The benches will be joined by 5 m wide ramps at gradient not exceeding 1:10. Bench height and width will be kept at 5 m which make the total slope of the pit will be 45°. Fencing will be done to prevent rock fall and if needed shortcrete will also be done. Jute geo matting will be done over the top soil/OB dump.
- iv. Health monitoring program has been designed to periodically check the health of the mine workers and supply free medicines. In this regard, Capital budget of Rs.1,40,000/- and Recurring budget of 20% capital cost is earmarked for health monitoring program.
- v. All corner co-ordinates have been submitted.
- vi. Certificate from DFO Kozhikode vide letter dated 11.5.2018 has been submitted that the mine lease has no forest land and there are no protected areas within 10 km radius of the proposed mining lease.
- vii. The mined material will be transported to the proposed crusher unit located within the complex and the finished product from the crusher will be sold in the open market.
- viii. Greenbelt will be developed in the area of 4.8156 Ha with indigenous species.
- ix. Free silica in the air has been analysed and the value is 0.96 µg/m³.
- x. The amount for CSR activities has been earmarked as Rs.5.25 Lakhs as Capital Expenditure and Rs. 5.05 Lakhs as recurring expenditure per annum.

Committee noted that jack hammer drilling generates so much dust and increases the explosive consumption leading to decrease in powder factor. Committee expressed that large dia hole (102 mm) blasting pattern with suitable drilling machine shall be used so that pollution levels will be reduced and at the same time yield per kg of explosive used will also be increased. Committee noted that a study by NIRM or any other national institute be conducted to ascertain vibrations, charge/delay, powder factor, etc. Committee noted that the proposed mine lease has dense plantation which is rubber plantation. Thought it does not constitute forest land, so many trees have to be denuded due to proposed mining. Member Secretary has also briefed the committee that they have obtained the comments from the ESZ division and it is not forming part of the ESZ villages as informed by the ESZ division. Committee noted that Capital budget of CSR activities should in line with the Ministry's OM dated 1.5.2018. For the project cost of Rs. 3.5 crores, the amount of 7 Lakhs (minimum at 2%) shall be kept.

Committee after detailed deliberations, recommended for grant of Environmental Clearance subject to the following specific conditions:

- i. Afforestation shall be taken up in the equivalent area in consultation with Social Forestry Department of the State Government.
- ii. Ground vibration study shall be conducted by NIRM or any other national institute. The study shall also include charge per delay and powder factor shall be conducted for the existing jack hammer drilling blast practice and the large hole dia blasting. The study report shall be submitted to the Ministry and its Regional Office.

- iii. Drilling shall not be done by jack hammer. Large hole drilling (minimum 102 mm) and adequate spacing and burden shall be maintained to achieve optimum production and minimum disturbance to the environment.
- iv. Capital CER/CSR budget shall be kept at 7 Lakhs (2% of the project cost) and shall be implemented over a period of 5 years. As proposed, recurring expenditure Rs. 5.05 Lakhs or 2% on profits as per Companies Act whichever is more shall be used for CSR activities.
- v. As proposed additional greenbelt will be developed in the area of 4.8156 Ha with indigenous species.

**(2.40) Mining of Building Stone (Minor Mineral) with production capacity of 9,00,000 TPA of Stone in the Mine Lease Area of 19.69 ha located at Survey Nos. 113 pt., 146/4A-5 pt., Balal Village & Panchayat, Vellarikundu Taluk, Kasargod District, Kerala by M/s Greenstone Rock Products Pvt. Ltd. (Consultant-M/s Environmental Engineers & Consultants Pvt. Ltd.)- Consideration of EC category 'B 2' project)
(F.No. J-11015/40/2018-IA. II (M) & online application no. IA/KL/MIN/73611/2018).**

The proposal is a fresh lease of 19.69 ha for production of 9,00,000 TPA Building stone which is a minor mineral. The LoI was issued on 17.10.2015 by Directorate of Mines and Geology, Govt. of Kerala. Mining Plan has been approved by the DMG on 30.10.2015. Cluster certificate was issued by DMG vide dated 19.10.2015 stating that there are no other mining leases within 500 m radius from the periphery of the proposed mine lease. Accordingly, the proposal is categorised as 'B2' which is to be dealt by SEIAA. As the SEIAA, Kerala is not functional at present, PP applied to the Ministry. Project 'B2' category requires only Form-I, PFR and Approved Mine Plan and Environmental Management Plan. The estimated project cost will be about Rs. 25 Crores. The expected life of mine estimated will be about 17 years.

The proposal was earlier considered in the 31st meeting of EAC (Non-coal Mining) held during 14th -15th May, 2018 and sought the following additional information:

- i. The Member Secretary informed the Committee that the Ministry has issued the directions under Section 5 of the Environment (Protection) Act, 1986, vide letter No. 1-4/2012 - RE (Pt), dated 13.11.2013 regarding the prohibition of mining activity in the ESA identified by the HLWG and provided a list (State-wise, District-wise and Taluk-wise village). The Committee noted that the instant LOI/MLA is not a part of the list. However, the Ministry may seek the comments from concerned Division of the Ministry w.r.t. ESA identified by the HLWG and its further development, if any;
- ii. Details of type of rock and geology, method of mining, machinery details, blasting details etc. needs to be provided;
- iii. Details of haulage roads, slope at different sections needs to be provided;

- iv. Details of Occupational health along with budgetary provisions needs to be elaborated;
- v. 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).
- vi. 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 State Government. A Certificate from the Competent Authority in the State Forest Department should also be provided, confirming the involvement of forest land, if any, in the project area.
- vii. PP needs to submit the detailed Green Belt Development plan on periphery of the lease along with type of plantation etc. Plant species needs to be revised;
- viii. Test Reports of Free Silica Concentration need to be submitted;
- ix. Details of connectivity from mine to crusher and its transportation plan needs to be elaborated; and
- x. The Committee noted that the Ministry has recently issued a circular vide no. 22-65/2017-IA.III, dated 1st May 2018 on Corporate Environment Responsibility (CER). Accordingly, PP needs to submit the details of budget and its activities as per the said Circular.

Project Proponent submitted the following information:

- i. The proposed mine lease is located in Balal Village, Vellarikundu Talum Kasargod District, Kerala which is not in the ESA villages identified by HLWG on Western Ghats.
- ii. The highest elevation of the area is 600 m AMSL and the lowest is 380 m AMSL. The drainage of the mine lease area is NE to SW. The contour map showing the topography of the mine lease area has been submitted. Main rock type in the study area is Charnockite granite. At places the granite is medium to coarse grained with dark grey quartz. The soil and over burden thickness varies from avg. 0.16 m to 0.28 m. Mining method is semi-mechanised method. Ten Jack hammers (32 mm dia and 1.5 m depth) are used for drilling, nine excavators (0.9 m³) for loading, 12 dumpers (15 T) for transportation, 12 Compressors and 1 DG set (180 kVA) will be mainly used for mining of the building stone. Multiple blast holes of 1.0 to 2.5 m depth will be drilled with the help of 32 mm drill rod, Jack Hammer and Air Compressor of 100 cfm capacity. It is estimated about 250 g of explosives per hole is required. About 215 holes per blast are proposed. Therefore, the requirement of explosives will be about 54 kg/blast/day. Height of the benching will not be kept more than 5 m. The mining will not intersect with the groundwater table. About 200 trips will be required to for transportation of excavated material. Total excavation of building stone material of 1,50,74,869 Tonnes (maximum of 9,00,000 TPA), Top soil of 45,287 m³ (maximum of 15,095 m³/annum) and Overburden of 35,442 m³ (maximum of 11814 m³/annum) will be carried out over a period of 17 years. Top soil will be stacked separately and will be reused in the reclaimed areas for plantation. Over burden will be utilized within the pit

for lying of haul roads. At the end use, OB can be reutilized as soil base for plantation. Storm water drains along with suitable silt traps will be suitably constructed along the periphery of the mine pit.

- iii. The haul road gradient will not exceed 1:16. The benches will be joined by 5 m wide ramps at gradient not exceeding 1:10. Bench height and width will be kept at 5 m which make the total slope of the pit will be 45°. Fencing will be done in the lease area to prevent and control of rolling stones over slope. At the sites of possible rock fall rock netting will be done to prevent rock fall and if needed shortcrete will also be done. Jute geo matting will be done over the top soil/OB dump.
- iv. Health monitoring program has been designed to periodically check the health of the mine workers and supply free medicines. In this regard, Capital budget of Rs.1,20,000/- and Recurring budget of 20% capital cost is earmarked for health monitoring program.
- v. All corner co-ordinates have been submitted.
- vi. Certificate from DFO Kasargodvide letter dated 2.6.2018 has been submitted that the mine lease has no forest land and there are no protected areas within 10 km radius of the proposed mining lease.
- vii. The mined material will be transported to the proposed crusher unit located within the complex and the finished product from the crusher will be sold in the open market.
- viii. Greenbelt will be developed in the area of 17.652 ha with indigenous species.
- ix. Free silica in the air has been analysed and the value is 0.94 µg/m³.
- x. The amount for CSR activities has been earmarked as Rs.33,35,000/- as Capital Expenditure and Rs. 26,72,000/- as recurring expenditure per annum.

Committee noted that jack hammer drilling generates so much dust and increases the explosive consumption leading to decrease in powder factor. Committee expressed that large dia hole (102 mm) blasting pattern with suitable drilling machine shall be used so that pollution levels will be reduced and at the same time yield per kg of explosive used will also be increased. Committee noted that a study by NIRM or any other national institute be conducted to ascertain vibrations, charge/delay, powder factor, etc. Committee noted that the proposed mine lease has dense plantation which is rubber plantation. Thought it does not constitute forest land, so many trees have to be denuded due to proposed mining. Member Secretary has also briefed the committee that they have obtained the comments from the ESZ division and it is not forming part of the ESZ villages as informed by the ESZ division. Committee noted that Capital budget of CSR activities should in line with the Ministry's OM dated 1.5.2018. For the project cost of Rs. 25 crores, the amount of Rs. 50 Lakhs (minimum at 2%) shall be kept.

Committee after detailed deliberations, recommended for grant of Environmental Clearance subject to the following specific conditions:

- vi. Afforestation shall be taken up in the equivalent area in consultation with Social Forestry Department of the State Government.
- vii. Ground vibration study shall be conducted by NIRM or any other national institute. The study shall also include charge per delay and powder factor shall be conducted

- for the existing jack hammer drilling blast practice and the large hole dia blasting. The study report shall be submitted to the Ministry and its Regional Office.
- viii. Drilling shall not be done by jack hammer. Large hole drilling (minimum 102 mm) and adequate spacing and burden shall be maintained to achieve optimum production and minimum disturbance to the environment.
 - ix. Capital CER/CSR budget shall be kept at Rs.50 Lakhs (2% of the project cost) and shall be implemented over a period of 5 years. As proposed, recurring expenditure Rs. 26,72, 000/- or 2% on profits as per Companies Act whichever is more shall be used for CSR activities.
 - x. As proposed additional greenbelt will be developed in the area of 17.652 Ha with indigenous species.

(2.41) Mining of Building Stone (Minor Mineral) with production capacity of 5,01,557 TPA of Stone in the Mine Lease Area of 8.0563 ha located at Sy. Nos. 118/p, 117/7-2, 117/7-3, 117/5-2, 120 of Elamad Village, Kottarakkara Taluk, Kollam District, Kerala by M/s Aiswarya Granites (Consultant-M/s Environmental Engineers & Consultants Pvt. Ltd.)- Consideration of EC category 'B 2' project.)
(No. J-11015/46/2018-IA. II (M) & online application no. IA/KL/MIN/74806/2018).

The proposal is a fresh lease of 8.0563 ha for production of 5,01,557 TPA Building stone which is a minor mineral. The LoI was issued on 12.4.2018 by Directorate of Mines and Geology, Govt. of Kerala. Mining Plan has been approved by the DMG on 21.4.2018 for first year production proposed in the mine plan. Cluster certificate was issued by District Geologist, DMG vide dated NIL stating that there are no other operating mining leases within 500 m radius from the periphery of the proposed mine lease. Accordingly, the proposal is categorised as 'B2' which is to be dealt by SEIAA. As the SEIAA, Kerala is not functional at present, PP applied to the Ministry. Project 'B2' category requires only Form-I, PFR and Approved Mine Plan and Environmental Management Plan. The estimated project cost will be about Rs. 6.15 Crores. The expected life of mine estimated will be about 6 years.

The proposal was earlier considered in the 31st meeting of EAC (Non-coal Mining) held during 14th -15th May, 2018 and sought the following additional information:

- i. The Member Secretary informed the Committee that the Ministry has issued the directions under Section 5 of the Environment (Protection) Act, 1986, vide letter No. 1-4/2012 - RE (Pt), dated 13.11.2013 regarding the prohibition of mining activity in the ESA identified by the HLWG and provided a list (State-wise, District-wise and Taluk-wise village). The Committee noted that the instant LOI/MLA is not a part of the list. However, the Ministry may seek the comments from concerned Division of the Ministry w.r.t. ESA identified by the HLWG and its further development, if any;
- ii. Details of type of rock and geology, method of mining, machinery details, blasting details etc. needs to be provided;

- iii. Details of haulage roads, slope at different sections needs to be provided;
- iv. Details of Occupational health along with budgetary provisions needs to be elaborated;
- v. 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).
- vi. 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 State Government. A Certificate from the Competent Authority in the State Forest Department should also be provided, confirming the involvement of forest land, if any, in the project area.
- vii. PP needs to submit the detailed Green Belt Development plan on periphery of the lease along with type of plantation etc. Plant species needs to be revised;
- viii. Test Reports of Free Silica Concentration need to be submitted;
- ix. Details of connectivity from mine to crusher and its transportation plan needs to be elaborated; and
- x. The Committee noted that the Ministry has recently issued a circular vide no. 22-65/2017-IA.III, dated 1st May 2018 on Corporate Environment Responsibility (CER). Accordingly, PP needs to submit the details of budget and its activities as per the said Circular.
- xi. Certificate from Department of Mines and Geology stating that no mining is currently carried out at project site by the project proponent. Also, the certificate should state that there was no mining in the proposed site by the project proponent in the past;
- xii. Proponent has informed that there is court case /litigation pending against the land in which the project is proposed, vide WP no. Civil 10132 of 2018, High Court of Kerala. The details of court case and its status need to be submitted by the PP.

Project Proponent submitted the following information:

- i. The proposed mine lease is located in Elamad Village, Kottarakara Taluk, Kollam District, Kerala which is not in the ESA villages identified by HLWG on Western Ghats.
- ii. The highest elevation of the area is 115 m AMSL and the lowest is 50 m AMSL. The drainage of the mine lease area is NW to SE. The contour map showing the topography of the mine lease area has been submitted. Main rock type in the study area is Charnockite granite. At places the granite is medium to coarse grained with dark grey quartz. The soil and over burden thickness varies from avg. 1 m to 2 m. Mining method is semi-mechanised method. Six Jack hammers (32 mm dia and 1.5 m depth) are used for drilling, six excavators (0.9 m³) for loading, 5 dumpers (15 T) for transportation, 2 Compressors and 1 DG set (180 kVA) will be mainly used for mining of the building stone. Multiple blast holes of 1.0 to 2.5 m depth will be drilled with the help of 32 mm drill rod, Jack Hammer and Air Compressor of 100 cfm capacity. It is estimated about 250 g of explosives per hole is required. About 119-120 holes per blast are proposed.

Therefore, the requirement of explosives will be about 30 kg/ blast/day. Height of the benching will not be kept more than 5 m. The mining will not intersect with the groundwater table. About 112 trips will be required to for transportation of excavated material. Total excavation of building stone material of 30,09,342 Tonnes (maximum of 5,01,557 TPA), Top soil of 96,208 m³ (maximum of 21,894 m³/annum) and Overburden of 48, 104 m³ (maximum of 11783 m³/annum) will be carried out over a period of 6 years. Top soil will be stacked separately and will be reused in the reclaimed areas for plantation. Over burden will be utilized within the pit for lying of haul roads. At the end use, OB can be reutilized as soil base for plantation. Storm water drains along with suitable silt traps will be suitably constructed along the periphery of the mine pit.

- iii. The haul road gradient will not exceed 1:16. The benches will be joined by 5 m wide ramps at gradient not exceeding 1:10. Bench height and width will be kept at 5 m which make the total slope of the pit will be 45°. Fencing will be done in the lease area to prevent and control of rolling stones over slope. At the sites of possible rock fall rock netting will be done to prevent rock fall and if needed shortcrete will also be done. Jute geo matting will be done over the top soil/OB dump.
- iv. Health monitoring program has been designed to periodically check the health of the mine workers and supply free medicines. In this regard, Capital budget of Rs.1,32,000/- and Recurring budget of 20% capital cost is earmarked for health monitoring program.
- v. All corner co-ordinates have been submitted.
- vi. Certificate from DFO Punalurvide letter dated 11.5.2018 has been submitted that the mine lease has no forest land and there are no protected areas within 10 km radius of the proposed mining lease.
- vii. The mined material will be transported to crusher unit which is located outside the mine lease area at a distance of about 250 m and the finished product from the crusher will be sold in the open market.
- viii. Greenbelt will be developed in the area of 5.6557 ha with indigenous species.
- ix. Free silica in the air has been analysed and the value is 0.96 µg/m³.
- x. The amount for CSR activities has been earmarked as Rs.7,00,000/- as Capital Expenditure and Rs. 6.00,00/- as recurring expenditure per annum.
- xi. Certificate from District Geologist dated NIL mentioned that M/s Aiswarya Granites is currently not doing any quarrying operations in the Government land comprised in Survey no.120& 118 of Vilalge Elamad. Certificate states that there was no mining in the proposed site in the past.
- xii. There is a litigation pending against the land in the proposed mining lease in the Hon'ble High Court of Kerala. A notice is issued and a copy of the Writ Petition is received at our end. No order is passed by Hon'ble High Court.

Committee noted that the certificates issued by District Geologist regarding cluster certificate and present operations of the project proponent do not have any number or date. Further, after reviewing the kml file, the land had already been broken and mining activities were carried in the past either by Project Proponent or some other lease holder. The excavation is seen both within the proposed mine lease area as well as outside of the mine lease area. As there is already an existing mine which was under

operation, the cluster certificate needs be verified and authenticated. Further, there is a case pending before Hon'ble High Court of Kerala. The exact details of the issue for which case was filed, petitioner, any land dispute are not available.

Committee after deliberations, deferred the proposal for want of following additional information:

- i. Clarification from Directorate of Mines and Geology, Govt. of Kerala regarding existing mines, its operations, owner, production details since inception of the mine, details regarding mining already carried out in the proposed mine lease and cluster details. An authenticated map by DMG showing different mine leases (broken and proposed) and proposed mine lease along with land survey numbers to be submitted. In case, all the leases belong to the same project proponent, the production details since inception of the mine shall be submitted.
- ii. Whether illegal mining has been carried out in the existing or proposed lease under Mines Act, 1957 shall be clarified by the DMG.
- iii. Mining Plan for five years approved by Directorate of Mines and Geology.
- iv. Complete details of Court case pending before Hon'ble High Court of Kerala.

(2.42) Mining of Building Stone (Minor Mineral) with production capacity of 2,50,000 TPA of Stone in the Mine Lease Area of 6.8976 ha located near Kootickal Village & Panchayat, Kanjirappally Taluk, Kottayam District, Kerala by M/s Petra Crushers. (Consultant-M/s Environmental Engineers & Consultants Pvt. Ltd.)- Consideration of EC category 'B2' project. (F.No. J-11015/43/2018-IA. II (M) & online application no. IA/KL/MIN/73725/2018).

The proposal is a fresh lease of 6.8976 ha for production of 2,50,000 TPA Building stone which is a minor mineral. The physiography of the surrounding of the lease area is a part of elevated terrain with waste land with some native tree species, shrubs, herbs, grass, climbers, bushes etc. the topography of the lease area is hilly terrain. The highest elevation of the mine area is 500 m. MSL and lowest is 365 m MSL. The LoI was not made available. Mining Plan has been approved by the DMG on 11.11.2015. Lease deed has been executed on 20.3.2012 for a period of twelve years, i.e. till 19.3.2014. Cluster certificate was issued by DMG vide dated 20.3.2015 stating that there are no other mining leases within 500 m radius from the periphery of the proposed mine lease. Accordingly, the proposal is categorised as 'B2' which is to be dealt by SEIAA. As the SEIAA, Kerala is not functional at present, PP applied to the Ministry. The estimated project cost will be about Rs. 8 Crores. The expected life of mine estimated will be about 8 years.

The proposal was earlier considered in the 31st meeting of EAC (Non-coal Mining) held during 14th -15th May, 2018 and sought the following additional information:

- i. The Member Secretary informed to the Committee that the Ministry has issued the directions under Section 5 of the Environment (Protection) Act, 1986, vide letter

No. 1-4/2012 - RE (Pt), dated 13.11.2013 regarding prohibition of mining activity in the ESA identified by the HL WG and provided a list (State-wise, District-wise and Talukwise village). The Committee noted that the instant LOI/MLA is a part of the list. The project site is in Kootickal village and which is in the list. MoEF vide O.M. dt. 20-12-2013 while accepting the recommendations of HLWG report directed all concerned State Governments to demarcate the boundaries of ESA. MoEF published the draft Notification on Western Ghats dt. 04-03-2014 inviting suggestions and objections from the stakeholders. In the list published along with the draft Notification, Kootickal village in which the project site is located is not in the list. This draft Notification was re-published by MoEF&CC on 27-02-2017 and in the list re-published along with the draft Notification, Kootickal village in which the project site is located is not in the list. In view of the above situation, the PP approached Hon'ble High Court of Kerala with a plea to consider the application for Environmental Clearance by SEIAA Kerala / MoEF and both were respondents in the said case. The Hon'ble High Court of Kerala vide Judgment dt. 20-02-2018 directed SEIAA Kerala / MoEF to consider the application of the PP for Environmental Clearance. In this context, the Committee suggested that the Ministry may seek the comments from concerned Division of the Ministry w.r.t. ESA identified by the HLWG and its further development, if any.

- ii. Details of type of rock and geology, method of mining, machinery details, blasting details etc. needs to be provided;
- iii. Details of haulage roads, slope at different sections needs to be provided;
- iv. Details of Occupational health along with budgetary provisions needs to be elaborated;
- v. 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).
- vi. 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 State Government. A Certificate from the Competent Authority in the State Forest Department should also be provided, confirming the involvement of forest land, if any, in the project area.
- vii. PP needs to submit the detailed Green Belt Development plan on periphery of the lease along with type of plantation etc. Plant species needs to be revised;
- viii. Test Reports of Free Silica Concentration need to be submitted;
- ix. Details of connectivity from mine to crusher and its transportation plan needs to be elaborated; and
- x. The Committee noted that the Ministry has recently issued a circular vide no. 22-65/2017-IA.III, dated 1st May 2018 on Corporate Environment Responsibility (CER). Accordingly, PP needs to submit the details of budget and its activities as per the said Circular.

Project Proponent submitted the following information:

- i. The mine lease area (project site) was in the ESA village as identified by the High Level Working Group (HLWG) on Western Ghats for the State of Kerala. The said group submitted their report to MoEF on 15-04-2013. There were 123 ESA villages as per the report of HLWG. Kootickal Village, Kanjirappally Taluk, Kottayam District, Kerala was in the list of HLWG report. MoEF vide OM No. 1-4/2012-RE (Pt) dated the 20th December, 2013 had sought suggestion from the State Governments on modifications in the boundary of the ecologically sensitive area as identified by HLWG group on the basis of physical verification. Subsequently, as per the directions of MoEF, Govt. of Kerala constituted a three member Expert Committee to demarcate the ecologically sensitive area by physical verification. The said Committee after physical verification excluded the village in which the project site is located from ESA. MoEF issued a draft Notification vide S.O. No. 733 (E) dated 10th March, 2014 declaring ecologically sensitive area in the Western Ghats as demarcated by Govt. of Kerala excluding the area in which the project site is located. Since the period of draft Notification was ended, re-Notification of the draft was published by MoEF on couple of times. From the website of Kerala State Biodiversity Board, it is observed that all the four villages in Kottayam District, Kerala including the village in which the project site is located is excluded from the list of Ecologically Sensitive Area. There are only 119 villages as ESA in the State of Kerala. On the basis of the exclusion of the project site from the ESA and since there was no final decision on the draft Notification by MoEF, PP approached Hon'ble High Court of Kerala for a direction to environmental Authorities for consideration of the application for Environmental Clearance. The Hon'ble High Court of Kerala vide judgment dt. 20-02-2018 directed the MoEF / SEIAA to consider application for Environmental Clearance.
- ii. The highest elevation of the area is 500 m AMSL and the lowest is 365 m AMSL. The drainage of the mine lease area is SE to SW. The contour map showing the topography of the mine lease area has been submitted. Main rock type in the study area is Charnockite granite. At places the granite is medium to coarse grained with dark grey quartz. The soil and over burden thickness varies from avg. 0.85 m to 0.3 m. Mining method is semi-mechanised method. Three Jack hammers (32 mm dia and 1.5 m depth) are used for drilling, four excavators (0.9 m³) for loading, 5 dumpers (15 T) for transportation, 2 Compressors and 1 DG set (180 kVA) will be mainly used for mining of the building stone. Multiple blast holes of 1.0 to 2.5 m depth will be drilled with the help of 32 mm drill rod, Jack Hammer and Air Compressor of 100 cfm capacity. It is estimated about 250g of explosives per hole is required. About 59-60 holes per blast are proposed. Therefore, the requirement of explosives will be about 15 kg/ blast/day. Height of the benching will not be kept more than 5 m. The mining will not intersect with the groundwater table. About 56 trips will be required for transportation of excavated material. Total excavation of building stone material of 19,70,428 Tonnes (maximum of 2,5,000 TPA), Top soil of 58,630 m³ (maximum of 12,827 m³/annum) and Overburden of 20.693 m³ (maximum of 3759 m³/annum) will be carried out over a period of 8 years. Top soil will be stacked separately and will be reused in the reclaimed areas for plantation. Over burden will be utilized within the pit for lying of haul roads. At the end use, OB can be reutilized as soil base for plantation. Storm water

drains along with suitable silt traps will be suitably constructed along the periphery of the mine pit.

- iii. The haul road gradient will not exceed 1:16. The benches will be joined by 5 m wide ramps at gradient not exceeding 1:10. Bench height and width will be kept at 5 m which make the total slope of the pit will be 450. Fencing will be done in the lease area to prevent and control of rolling stones over slope. At the sites of possible rock fall rock netting will be done to prevent rock fall and if needed shortcrete will also be done. Jute geo matting will be done over the top soil/OB dump.
- iv. Health monitoring program has been designed to periodically check the health of the mine workers and supply free medicines. In this regard, Capital budget of Rs.1,20,000/- and Recurring budget of 20% capital cost is earmarked for health monitoring program.
- v. All corner co-ordinates have been submitted.
- vi. Certificate from DFO Kottayam vide letter dated 28.5.2018 has been submitted that the mine lease has no forest land and there are no protected areas within 10 km radius of the proposed mining lease.
- vii. The mined material will be transported to the proposed crusher unit located within the complex and the finished product from the crusher will be sold in the open market.
- viii. Greenbelt will be developed in the area of 6.8976 ha with indigenous species.
- ix. Free silica in the air has been analysed and the value is 0.95 µg/m³.
- x. The amount for CSR activities has been earmarked as Rs.6,65,000/- as Capital Expenditure and Rs. 16,53,000/- as recurring expenditure per annum.

Committee noted that the HLWG in its report on Western ghats has demarcated 51 km² in the Kanjirapally Taluka of Kottayam District with one village (Village Koottickal) as Eco Sensitive Zone. Exact demarcation of the 51 km² of the proposed ESZ area is not made available to ascertain whether the proposed mine lease is forming part of it or not. Ministry vide directions dated 13.11.2013 prohibited mining in the ESZ villages as provided in the list wherein the proposed mine lease is forming part of the village which was listed there. It is also brought to the notice of the committee that the village in which proposed mine lease is located is not listed in the subsequent draft ESZ Notifications. Member Secretary has also briefed the committee that they have obtained the comments from the ESZ division. However, it was mentioned that Ministry's orders and notifications on ESZ are self explanatory and the ESZ division did not provided the specific comments w.r.t Village Koottickal. Committee further noted that the proposed mine lease at the hill top on the western ghats and group of hills which is in the centre of thick green cover. The access to the proposed mine site requires laying of approach roads. Excavation activities and the transportation of material will cause disturbance to the surrounding pristine and undisturbed ghats. Committee noted that jack hammer drilling generates so much dust and increases the explosive consumption leading to decrease in powder factor. Committee expressed that large dia hole (102 mm) blasting pattern with suitable drilling machine shall be used so that pollution levels will be reduced and at the same time yield per kg of explosive used will also be increased. Committee noted that a study by NIRM or any other national institute be conducted to ascertain vibrations, charge/delay, powder factor, etc. Committee noted that the proposed mine lease has some plantation though some

portion is rocky area. Thought it does not constitute forest land, so many trees have to be denuded due to proposed mining. Committee noted that Capital budget of CSR activities should in line with the Ministry's OM dated 1.5.2018. For the project cost of Rs. 8 crores, the amount of Rs. 16 Lakhs (minimum at 2%) shall be kept.

Committee after deliberations, deferred for seeking following information:

- i. Specific comments from ESZ division shall be obtained w.r.t Village Koottickal, proposed mine lease area and directions issued by Ministry 13.11.2013 for prohibition of mining activities in Village Koottickal.
- ii. Project Proponent shall submit a copy of valid LoI.
- iii. Details of access roads for approaching the mine lease and evacuation of excavated material.

(2.43) Mining of Building Stone (Minor Mineral) with production capacity of 2,40,000 TPA of Stone in the Mine Lease Area of 5.3810 ha located Chengalam East Village, Kottayam Taluk, Kottayam District, Kerala by M/s Palathra Constructions Pvt. Ltd. (Consultant-M/s Environmental Engineers & Consultants Pvt. Ltd.)- Consideration of EC category 'B 2' project.) (F.No. J-11015/44/2018-IA. II (M) & online application no. IA/KL/MIN/74763/2018).

The proposal is a fresh lease of 5.3810 ha for production of 2,40,000 TPA Building stone which is a miner mineral. The LoI was issued on 13.3.2018 by Directorate of Mines and Geology, Govt. of Kerala. Mining Plan has been approved by the DMG on 10.4.2018. Cluster certificate was issued by DMG vide dated 23.4.2018 stating that there are no other mining leases within 500 m radius from the periphery of the proposed mine lease. Accordingly, the proposal is categorised as 'B2' which is to be dealt by SEIAA. As the SEIAA, Kerala is not functional at present, PP applied to the Ministry. Project 'B2' category requires only Form-I, PFR and Approved Mine Plan and Environmental Management Plan. The estimated project cost will be about Rs. 4.5 Crores. The expected life of mine estimated will be about 5 years.

The proposal was earlier considered in the 31st meeting of EAC (Non-coal Mining) held during 14th -15th May, 2018 and sought the following additional information:

- i. The Member Secretary informed the Committee that the Ministry has issued the directions under Section 5 of the Environment (Protection) Act, 1986, vide letter No. 1-4/2012 - RE (Pt), dated 13.11.2013 regarding the prohibition of mining activity in the ESA identified by the HLWG and provided a list (State-wise, District-wise and Taluk-wise village). The Committee noted that the instant LOI/MLA is not a part of the list. However, the Ministry may seek the comments from concerned Division of the Ministry w.r.t. ESA identified by the HLWG and its further development, if any;
- ii. Details of type of rock and geology, method of mining, machinery details, blasting details etc. needs to be provided;
- iii. Details of haulage roads, slope at different sections needs to be provided;

- iv. Details of Occupational health along with budgetary provisions needs to be elaborated;
- v. 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).
- vi. 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 State Government. A Certificate from the Competent Authority in the State Forest Department should also be provided, confirming the involvement of forest land, if any, in the project area.
- vii. PP needs to submit the detailed Green Belt Development plan on periphery of the lease along with type of plantation etc. Plant species needs to be revised;
- viii. Test Reports of Free Silica Concentration need to be submitted;
- ix. Details of connectivity from mine to crusher and its transportation plan needs to be elaborated; and
- x. The Committee noted that the Ministry has recently issued a circular vide no. 22-65/2017-IA.III, dated 1st May 2018 on Corporate Environment Responsibility (CER). Accordingly, PP needs to submit the details of budget and its activities as per the said Circular.
- xi. The existing project was accorded with Environment Clearance vide Order No. 835/EC4/2713/2015 dated 07-05-2016 by SEIAA, Kerala with mine lease area of 2.0766 ha with a production capacity of 50,000 TPA. Accordingly, PP needs to submit the (a) certified copy compliance of earlier EC conditions from the RO of the MoEF&CC/SPCB as per provision of the EIA Notification, 2006 as amended on 15.01.2016, (b) Copy of CTE/CTO; and (iii) Production details since inception of mine which is duly authenticated by the State Mines and Geology Department.

Project Proponent submitted the following information:

- i. The proposed mine lease is located in Chengalam East Village, Kottayam Taluk and District, Kerala which is not in the ESA villages identified by HLWG on Western Ghats.
- ii. The highest elevation of the area is 135 m AMSL and the lowest is 85 m AMSL. The drainage of the mine lease area is W to E. The contour map showing the topography of the mine lease area has been submitted. Main rock type in the study area is Charnockite granite. At places the granite is medium to coarse grained with dark grey quartz. The soil and over burden thickness varies from avg. 0.2 m to 0.4 m. Mining method is semi-mechanised method. Three Jack hammers (32 mm dia and 1.5 m depth) are used for drilling, four excavators (0.9 m³) for loading, 5 dumpers (15 T) for transportation, 2 rock breakers, 2 Compressors and 1 DG set (180 kVA) will be mainly used for mining of the building stone. Multiple blast holes of 1.0 to 2.5 m depth will be drilled with the help of 32 mm drill rod, Jack Hammer and Air Compressor of 100 cfm capacity. It is estimated about 250 g of explosives per hole is required. It is estimated about 250gms of explosives per hole is required. About 57-58 holes per blast are proposed. Therefore,

the requirement of explosives will be about 14.5 kg / blast / day. Height of the benching will not be kept more than 5 m. The mining will not intersect with the groundwater table. About 54 trips will be required to for transportation of excavated material. Total excavation of building stone material of 11,87,403 Tonnes (maximum of 2,40,000 TPA), Top soil of 8,953 m³ (maximum of 2625 m³/annum) and Overburden of 4,476 m³ (maximum of 1409 m³/annum) will be carried out over a period of 5 years. Top soil will be stacked separately and will be reused in the reclaimed areas for plantation. Over burden will be utilized within the pit for lying of haul roads. At the end use, OB can be reutilized as soil base for plantation. Storm water drains along with suitable silt traps will be suitably constructed along the periphery of the mine pit.

- iii. The haul road gradient will not exceed 1:16. The benches will be joined by 5 m wide ramps at gradient not exceeding 1:10. Bench height and width will be kept at 5 m which make the total slope of the pit will be 45°. Fencing will be done in the lease area to prevent and control of rolling stones over slope. At the sites of possible rock fall rock netting will be done to prevent rock fall and if needed shortcrete will also be done. Jute geo matting will be done over the top soil/OB dump.
- iv. Health monitoring program has been designed to periodically check the health of the mine workers and supply free medicines. In this regard, Capital budget of Rs.1,10,000/- and Recurring budget of 20% capital cost is earmarked for health monitoring program.
- v. All corner co-ordinates have been submitted.
- vi. Certificate from DFO Kottayam vide letter dated 1.6.2018 has been submitted that the mine lease has no forest land and there are no protected areas within 10 km radius of the proposed mining lease.
- vii. The rubble from the project will be sold to the open market. There is no crusher unit within the complex. There is a crusher unit located about 8 km from the mine lease area and the transportation requirement is estimated accordingly and the route map to the crusher is submitted.
- viii. Greenbelt will be developed in the area of 2.1528 ha with indigenous species.
- ix. Free silica in the air has been analysed and the value is 1.32 µg/m³.
- x. The amount for CSR activities has been earmarked as Rs.9,00,000 /- as Capital Expenditure and Rs. 80,000 /- as recurring expenditure per annum.
- xi. Certified copy of the existing EC conditions, Consent to Establish and Operate, production details duly authenticated by the DMG are submitted.

Committee noted that the cluster certificate submitted by the DMG vide letter dated 23.4.2018 stating there are no quarries within 500 m radius of the proposed mine lease is to be verified since there is a broken mine visible in the kml file adjacent to the proposed mine lease area. Further existing mine lease is given for 1.8851 ha for the period of 10 years vide DMG order dated 24.6.2016. Environmental Clearance has been issued by SEIAA for the existing lease vide letter dated 3.2.2016. The owners of the existing and proposed mine lease is same. The certified production submitted by PP which was vetted by Assistant Geologist. However, the specific certificate from DMG for past production details since inception of the mine is not available. Further, after reviewing the kml file, the land had already been broken and mining activities were carried in the past either by Project Proponent or some other lease holder. The

excavation is seen both within the proposed mine lease area as well as outside of the mine lease area. As there is already an existing mine which was under operation, the cluster certificate needs to be verified and authenticated. Further, any violations such as mining beyond the permissible area for the existing lease and mining without prior statutory approvals in the proposed mine lease shall be ascertained by the DMG.

Committee after deliberations, deferred the proposal for want of following additional information:

- i. Clarification from Directorate of Mines and Geology, Govt. of Kerala regarding existing mines, its operations, owner, production details since inception of the mine, details regarding mining already carried out in the proposed mine lease and cluster details. An authenticated map by DMG showing different mine leases (broken and proposed) and proposed mine lease along with land survey numbers to be submitted. In case, all the leases belong to the same project proponent, the production details since inception of the mine shall be submitted.
- ii. Whether illegal mining has been carried out in the existing or proposed lease under Mines Act, 1957 shall be clarified by the DMG.

(2.44) "Building Stone Mine" situated with Production will be about 2,50,000 MTA of lease area consists of 8.2140 ha. at Thirumittacode II Village, Thirumittacode Panchayat, Pattambi Taluk, Palakkad District, Kerala by M/s Triphy Granites.[Category B2 Project] (F.No. J-11015/42/2018-IA.II & online application no. IA/KL/MIN/73668/2018).

The proposal is a fresh lease of 8.2140 ha for production of 2,50,000 TPA Building stone which is a minor mineral. The LoI was issued on 30.10.2017 by Directorate of Mines and Geology, Govt. of Kerala. Mining Plan has been approved by the DMG on 22.12.2017. Cluster certificate was issued by DMG vide dated 9.11.2017 stating that there are three other mining leases (1.78 ha working, 4.7811 ha working & 1.98 ha work yet to be started) situated within 500 m radius from the periphery of the proposed mine lease leading to 16.7551 ha. Accordingly, the proposal is to be categorised as 'B2' which is to be dealt by DEIAA. Further, the cluster formation is applicable to the mine leases with lease/licences granted on and after 9.9.2013. In the instant case, the details of LoI/Lease grant for other three mines are not available. If the cluster of 5-25 ha is to be applicable, it is to be applied in the DEIAA, Kerala. PP submitted that since SEIAA, Kerala is not functional at present, the application is submitted to the Ministry. Project 'B2' category in the cluster requires Form-I, PFR and Approved Mine Plan and Environmental Management Plan for all leases in the cluster. The estimated project cost will be about Rs. 3.25 Crores. The expected life of mine estimated will be about 12 years.

The proposal was earlier considered in the 31st meeting of EAC (Non-coal Mining) held during 14th -15th May, 2018 and sought the following additional information:

- i. The Member Secretary informed the Committee that the Ministry has issued the directions under Section 5 of the Environment (Protection) Act, 1986, vide letter No. 1-4/2012 - RE (Pt), dated 13.11.2013 regarding the prohibition of mining activity in the ESA identified by the HLWG and provided a list (State-wise, District-wise and Taluk-wise village). The Committee noted that the instant LOI/MLA is not a part of the list. However, the Ministry may seek the comments from concerned Division of the Ministry w.r.t. ESA identified by the HLWG and its further development, if any;
- ii. Details of type of rock and geology, method of mining, machinery details, blasting details etc. needs to be provided;
- iii. Details of haulage roads, slope at different sections needs to be provided;
- iv. Details of Occupational health along with budgetary provisions needs to be elaborated;
- v. 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).
- vi. 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 State Government. A Certificate from the Competent Authority in the State Forest Department should also be provided, confirming the involvement of forest land, if any, in the project area.
- vii. PP needs to submit the detailed Green Belt Development plan on periphery of the lease along with type of plantation etc. Plant species needs to be revised;
- viii. Test Reports of Free Silica Concentration need to be submitted;
- ix. Details of connectivity from mine to crusher and its transportation plan needs to be elaborated; and
- x. The Committee noted that the Ministry has recently issued a circular vide no. 22-65/2017-IA.III, dated 1st May 2018 on Corporate Environment Responsibility (CER). Accordingly, PP needs to submit the details of budget and its activities as per the said Circular.
- xi. The existing project was accorded with Environment Clearance vide Order No. 835/EC4/2713/2015 dated 07-05-2016 by SEIAA, Kerala with mine lease area of 2.0766 ha with a production capacity of 50,000 TPA. Accordingly, PP needs to submit the (a) certified copy compliance of earlier EC conditions from the RO of the MoEF&CC/SPCB as per provision of the EIA Notification, 2006 as amended on 15.01.2016, (b) Copy of CTE/CTO; and (iii) Production details since inception of mine which is duly authenticated by the State Mines and Geology Department.

Project Proponent submitted the information as sought by the EAC.

EAC deliberated that the project may form cluster project which requires EMP for cluster mines. Accordingly, the project is deferred for the following information:

- i. Project Proponent shall submit the mine lease grant/LoI of the other three mines to determine the applicability of the cluster. In the event of cluster formation, the proposal is to be referred to the DEIAA, Kerala.
- ii. Further, Member Secretary may seek comments of Policy Wing as the cluster area between 5-25 ha also stipulates that individual lease should not be more than 5 ha. In the instant case, the proposed mine lease is more than 5 ha.

**(2.45)Renewal of mining lease area 88.119 ha and enhancement of mineral sand production from 250000 TPA to 750000TPA(ROM) along with mineral concentration and separation plant by M/s Kerala Minerals and Metals Ltd., located at Villages- Panmana&Chavara, Taluk – Karunagapally, Distt- Kollam, Kerala. – reg. grant of ToR
(F.No. J-11015/245/2014-IA.II(M) & IA/KL/MIN/67970/2014)**

As submitted by Project Proponent, mine lease has been issued for mining of mineral sand, Ilmenite, Rutile, Leucoxeue, Zircon, Sillimanite, Monazite, etc. from the lease area of 203.802 ha. The mine is in operation since 1991 till 2018. As per the base year (1994-94) production 66660 MT, there is an increase in the production in the subsequent years. Further, Monazite is a major mineral. Major mineral with lease area more than 5 ha require Environmental Clearance under EIA Notification, 1994. Accordingly, PP applied for grant of ToR for preparation of ecological damage and remediation plant.

Committee deliberated the matter and opined that this is the violation case and to be referred to violation sector. Accordingly, the proposal is returned in original form.

(2.46) Enhancement of production capacity of Limestone from 1.60 MTPA ROM to 3.94 MTPA ROM of M/S Rain Cements Limited located at Revoor & Mellacheruvu Villages, Mellacheruvu Mandal, Suryapet District, Telangana State (ML area 417.95 ha) [File No. J-11015/246/2016-IA-II (M); Proposal No. IA/TG/MIN/59983/2016; Consultant: Vimta Labs Pvt. Ltd.]-ToR Amendment Regarding

The proposal of M/s Rain Cements Limited is for enhancement of mines production capacity of Limestone from 1.60 MTPA ROM to 3.94 MTPA ROM in their mine lease area of 417.95 ha located at Revoor & Mellacheruvu Villages, Mellacheruvu Mandal, Suryapet District, Telangana State. The propose project site located in the Latitude of 16° 50'6.0" to N16° 49' 21.1" N and Longitude of 79° 57' 42.7" E to 79° 59' 44.8 E.

The PP applied online for grant of ToR 06.12.2016 and proposal was considered in EAC meeting held on 30-31 January, 2017. The ToR was issued vide Ministry's letter No J-11015/246/2016-IA-II (M) dated 13.04.2017.

PP applied online for amendment in ToR granted on 26.10.2017 and submitted that as the mining lease coordinates was previously taken as per government revenue records. As there was a discrepancy observed, DGPS survey was conducted and the coordinates were revised accordingly. The previously submitted coordinates were Latitude of $16^{\circ} 50' 6.0''$ to $N 16^{\circ} 49' 21.1''$ N and Longitude of $79^{\circ} 57' 42.7''$ E to $79^{\circ} 59' 44.8$ E and the revised coordinates are $16^{\circ} 49' 23.7''$ to $N 16^{\circ} 50' 31.6''$ N and Longitude of $79^{\circ} 57' 39.0''$ E to $79^{\circ} 59' 43.7$ E.

The proposal was considered in the EAC Meeting held on 27th November, 2017 wherein the committee deferred the proposal and asked the PP to submit (i) A letter from land revenue department that survey numbers and their area falling under new mining lease boundary are correct and they have no objection over the same needs to be submitted, (ii) A modified mining plan based on new coordinates needs to be submitted and (iii) A letter from Department of Mines and Geology, Government of Madhya Pradesh that mining lease boundary as per new coordinates is correct and they have no objection over the same.

The PP submitted the above information online on 03.05.2018 vide letter no. RCL/MIN/04/18 dated 30.04.2018 and the proposal is considered in EAC meeting held on 21-22 June, 2018. During the presentation PP submitted that a) the mining plan has been modified and approved IBM vide letter AP/NLG/MP/Lst-22/Hyd dated 24th April, 2018, b) submitted A letter No. Lr. No. 15529/R2-2/2017, Dated 14-04-2017 issued by Director of Mines and Geology, Government of Telangana wherein it has mentioned that " The Govt, has accorded permission for revision of sketch based on the correction of mining lease boundary as per the new coordinates. Same as been certified by the Mandal Surveyor, Tahsildar, of Mellacheruvu Mandal, Suryapet District and the Asst. Director of Mines and Geology, Suryapet and there is no objection with reference to correction of Mining Lease boundary, which was corrected as per the new coordinates". Based on the discussion held and document submitted the Committee **recommended** the amendment in the coordinates from *Latitude of $16^{\circ} 50' 6.0''$ to $N 16^{\circ} 49' 21.1''$ N and Longitude of $79^{\circ} 57' 42.7''$ E to $79^{\circ} 59' 44.8$ E and the revised coordinates are $16^{\circ} 49' 23.7''$ to $N 16^{\circ} 50' 31.6''$ N and Longitude of $79^{\circ} 57' 39.0''$ E to $79^{\circ} 59' 43.7$ E* in the ToR letter issued by Ministry vide letter No J-11015/246/2016-IA-II (M) dated 13.04.2017.

**(2.47)Baga-Bhalag limestone and shale mine with production capacity of 5.25 MTPA within existing lease area 331.424 ha located at Baga&Bhalag Villages, Arki Taluka, Solan District, Himachal Pradesh by M/s Ultra Tech Cement Ltd.-reg. amendment in EC for reduction of mine lease.
(F. No.J-11015/105/2013-IA-II (M) & IA/HP/MIN/26714/2013).**

This proposal is for Amendment in existing Environmental clearance for reduction in lease area from 331.424 ha to 324.4790 ha. PP submitted the following information:

- i. Jaypee Himachal Cement Plant (JHCP), a unit of Jaiprakash Associates Limited(JAL) had an integrated Cement Plant (Line-I) with production capacity 2.97 MTPA clinker and 2.54 MTPA cement located in Baga village, Taluka Arki, District Solan, Himachal Pradesh. The raw material requirement of existing plant is met by Baga – Bhalag Limestone & Shale mine with an area of 331.424 Ha with production capacity of 5.25 MTPA. Environmental Clearance to this Mine was granted by MoEF&CC vide letter 26.5.2016.
- ii. Initially the Mining Lease over an area of 331.4240 Ha was executed in favor of M/s Jaiprakash Associates; Jaypee Cement Plant on dated 29.09.2007. Further in term of provision of Section 5 of MMDR Amendment Act, 2015, validity period of mining lease has been extended for a term of 50 years i.e. up to 28.09.2057 by Government of Himachal Pradesh vide letter dated 28.09.2015.
- iii. **Further, after the request to the State Govt. for surrendering 6.9450 hectare private land (92-06 Bigha), Department of Industries, Govt. of Himachal Pradesh vide their letter No. Udyog-Bhu(Khani-4)Major-125/04-Vol-IV/3101 dated 30.03.2016 intended to exclude the same after submission of Approved copy of Final Closure Plan of the surrendered area and Modified Mining Plan for retained area(324.4790 ha).** M/s Jaiprakash Associates has also obtained approval for the Modified Mining Plan from Indian Bureau of Mines over an area of 324.4790 hectares vide letter no. 614(2)/MP-A-216/05-DDN dated 05.10.2016 and the same has been transferred in the name of M/s UltraTech Cement Limited vide letter dated 16.11.2017.
- iv. **Jaypee Himachal Cement Plant (JHCP) of M/s Jaiprakash associates Limited was taken over by M/s UltraTech Cement Limited with effect from 29th June, 2017** as per the scheme of arrangement approved by National Company Law Tribunal Bench Mumbai on 15th February, 2017 in case of UltraTech and National Company Law Tribunal Bench – Allahabad on 2nd March, 2017 in case Jai Prakash Associates Limited. Mining Lease Deed for 324.4790 ha area was executed in favor of M/s UltraTech Limited dt.05.08.2017 for the period up to 28.09.2057.
- v. The Forest Clearance pertaining to forest land involved in said mining lease has already been transferred in the name of M/s UltraTech Cement Limited by Ministry of Environment, Forests and Climate Change (Forest Conservation Division) vide their letter no. F.No. 8-72/2005-FC dated 26.07.2017.
- vi. UTCL applied for transfer of the EC Letter on 29.06.2017 which is under process and MoEF&CC, New Delhi vide its letter dated 19.03.2018 has asked to apply online for amendment in the EC for change in lease area from 331.424 ha to 324.4790 ha along with the revised mining plan.

Committee noted that the reduced are of 6.9450 ha is a private land. However, the status of mining activities, present land use and the exact reason for excluding the said area are not known. However, State Government intended exclude the area from the mine area. **Accordingly, the Committee recommended for amendment in EC for reduction in the mine lease area from 331.424 ha to 324.4790 ha along with the transfer of EC to**

M/s Ultra Tech Cement Ltd. subject to submission of detailed map along with land use status.

The Meeting ended with thanks to the Chair.

Standard Terms of Reference (TOR) for Mining Project

- 1) Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. 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.
- 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 pre-dominant 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) 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.

Recommendation of CSIR-NEERI Report on “Carrying Capacity Study for Environmentally Sustainable Iron and Manganese Ore Mining Activity in Keonjhar, Sundargarh and Mayurbhanj districts of Odisha State”

- 1) Department of Steel & Mines, Govt. of Odisha should prepare 5 years regional plan for annual iron ore requirement from the state, which in turn shall be met from different mines/zones (e.g. Joda, Koira.) in the state. Accordingly, sustainable annual production (SAP) for each zone/mine may be followed adopting necessary environmental protection measures.
- 2) The expansion or opening of new manganese ore mines may be considered only when the actual production of about 80% is achieved. Further, the mines that have not produced Mn ore for last two years and have no commitment in the current year as well; EC capacity in such cases may be reviewed. The Department of Steel & Mines, Govt. of Odisha shall submit the Annual Report on this issue to the MoEF&CC for further necessary action.
- 3) Analysis of baseline environmental quality data for the year 2014 and 2016 indicates that existing mining activities appear to have little / no potential impact on environmental quality, except on air environment, which was mainly due to re-suspension of road dust. Therefore, all the working mines can continue to operate with strict compliance to monitoring of environmental quality parameters as per EC and CTE/CTO conditions of the respective mine, and implementation of suggested measures for control of road dust and air pollution. Odisha State Pollution Control Board has to ensure the compliance of CTE/CTO. Regional office of the MoEF&CC, Bhubaneswar shall monitor the compliance of the EC conditions. Regional office of the Indian Bureau of Mines (IBM) shall monitor the compliance of mining plan and progressive mine closure plan. Any violation by mine lease holder may invite actions per the provisions of applicable acts.
- 4) Considering the existing environmental quality, EC capacity, production rate, iron ore resources availability and transport infrastructure availability, the share of Joda and Koira sector works out to be 70% and 30% respectively for the existing scenario for the year 2015-16. However, for additional EC capacity, it can be 50:50 subject to commensurate infrastructure improvement (viz. SOTM, pollution free road transport, enhancement of rail network etc.) in the respective regions.
- 5) Continuous monitoring of different environmental quality parameters as per EC and CTE/CTO conditions with respect to air, noise, water (surface & ground water) and soil quality in each region shall be done. The environmental quality parameters should not indicate any adverse impact on the environment. Monitoring within the mines should be done by individual mine lease holders, whereas outside the mine lease area, monitoring should be done by the Govt. of Odisha through various concerned departments/ authorized agencies. Various monitoring/ studies should be conducted through national reputed institutes, NABET/ MoEF&CC accredited laboratories/organizations. The reports submitted by individual mine lease holders and

study reports prepared by other concerned departments/agency for each of the regions should be evaluated and examined by SPCB/ MoEF&CC.

- 6) Construction of cement concrete road from mine entrance and exit to the main road with proper drainage system and green belt development along the roads and also construction of road minimum 300 m inside the mine should be done. This should be done within one year for existing mines and new mine should have since beginning. The concerned departments should extend full support; wherever the land does not belong to the respective mine lease holders. The Department of Steel & Mines, Govt. of Odisha should ensure the compliance and should not issue the Mining Permits, if mine lease holder has not constructed proper cement concrete road as suggested above.
- 7) In view of high dust pollution and noise generation due to road transport, it is proposed to regulate/guide the movement of iron and manganese ore material based on the EC capacity of the mines. Accordingly, ore transport mode has been suggested, as given below in Table.

Table : EC Capacity based Suggested Ore Transport Mode (SOTM)

Code	EC	Suggested Ore Transport Mode
SOTM 1	≥ 5 MTPA	100% by private railway siding or conveyor belt up to public railway siding or pipeline for captive mines and 70% for non-captive mines
SOTM 2	Between 3 and <5 MTPA	Minimum 70% by public railway siding, through conveyor belt and maximum 30% by road - direct to destination or other public railway siding or above option
SOTM 3	Between 1 and < 3 MTPA	Minimum 70% by public railway siding and maximum 30% by road - direct to destination or by other public railway siding or above options
SOTM 4	<1 MTPA	100 % by 10/17 Ton Trucks or above options

It is mentioned by State Govt. of Odisha that currently about 45% of the iron ore is despatched using rail network and progressively it will be increased to about 60% by rail/slurry over a period of 5 years, taking into account time required to set up more railway sidings.

In view of present ore transport practices and practical limitations, all the existing mines should ensure adoption of SOTM within next 5 years. New mines or mines seeking expansion should incorporate provision of SOTM in the beginning itself, and should have system in place within next 5 years.

However, the State Govt. of Odisha shall ensure dust free roads in mining areas wherever the road transportation of mineral is involved. The road shoulders shall be paved with fence besides compliance with IRC guidelines. All the roads should have proper drainage system and apart from paving of entire carriage

width the remaining right of way should have native plantation (dust capturing species). Further, regular maintenance should also be ensured by the Govt. of Odisha.

Transportation of iron & manganese ore through river (jetty) to nearest Sea port (Sea cargo option) may be explored or connecting Sea ports with Railway network from the mines to be improved further so that burden on existing road and rail network and also pollution thereof can be minimized.

Progress on development of dust free roads, implementation of SOTM, increased use of existing rail network, development of additional railway network/conveyor belt/ pipelines etc. shall be submitted periodically to MoEF&CC.

Responsibility: Department of Steel & Mines, Govt. of Odisha; Time Period: 5 Years for developing railway/ conveyor belt facilities

- 8) Development of parking plazas for trucks with proper basic amenities/ facilities should be done inside mine. This should be done within one year for existing mines and new mines should have since beginning. Small capacity mines (in terms of lease area or production) not having enough space within the mine lease areas should develop parking plaza at a common place within the region with requisite facilities. Responsibility: Individual Mine Lease Holders; Time Period: 1 Year
- 9) Construction of NH 215 as minimum 4 lane road with proper drainage system and plantation and subsequent regular maintenance of the road as per IRC guidelines. Construction of other mineral carrying roads with proper width and drainage system along with road side plantation to be carried out. Responsibility: Department of Steel & Mines with PWD / NHAI Time Period: 2 Years.
- 10) Regular vacuum cleaning of all mineral carrying roads aiming at "Zero Dust Re-suspension" may be considered. Responsibility: PWD / NHAI/ Mine Lease Holders; Time Period: 3 months for existing roads.
- 11) Expansion of existing mines and new mines should be considered after conducting recent EIA Study (as per the provisions of EIA Notification 2006, as amended time to time) with proper justification on demand scenario for iron ore requirement and availability of pollution free transport network in the region. Responsibility: IBM, Department of Steel & Mines and MoEF&CC, New Delhi.
- 12) **Mine-wise Allocation of Annual Production:** In case the total requirement of iron ore exceeds the suggested limit for that year, permission for annual production by an individual mine may be decided depending on approved EC capacity (for total actual dispatch) and actual production rate of individual mine during last year or any other criteria set by the State Govt., i.e. Dept. of Steel & Mines. Department of Steel and Mines in consultation with Indian Bureau of Mines-RO should prepare in advance mine-wise annual production scenario as suggested in Table, so that demand for iron ore can be anticipated, and actual production/dispatch does not exceed the suggested annual production.

Table: Allocation of Production to Different Mines for 5 Years (as per approved Mining Plan)

Mine Lease	EC Capacity (MTPA)	Suggested Annual Production (MT)				
		2016-17	2017-18	2018-19	2019-20	2020-21
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Mine 1	X1					
Mine 2	X2					
Mine 3	X3					
Mine n	Xn					
Total	160 + dX	105	129	153	177	201
<u>Next year allocation = Average of EC Capacity and Last year production</u>						

- 13) **Expansion of Existing Mines having Validity up to 2020:** In view of implementation of MMDR Act 2015, wherein many non-captive mines are expected to be closed by March 2020, total iron ore production scenario has been. It is expected that the non-captive mines having validity till 2020 shall try to maximize their production (limited to EC capacity) in the remaining period. Further, depending upon availability of iron ore resources, these mines may also seek expansion of EC capacity. It may be noted here that total EC capacity of existing 25 working mines having validity upto 2020 is about 85 MTPA, whereas actual production from these mines has been only 44.677 MT (52.6%) during 2015-16 and 57.07 MT (67.1%) during 2016-17. Also, it is expected that these mines would not even be able to achieve ore production as per existing EC capacity till March 2020. Therefore, these existing mines should go for production to the fullest extent to meet the requisite demand from the State. However, where EC limit is exhausted, application for expansion may be considered. Further, the EC process (i.e. Grant of TOR, Baseline data collection, Mining plan/ scheme approval, Public hearing, preparation of EIA/EMP Report. Appraisal by the EAC and grant of EC) takes about one year time. Under such circumstances, it is suggested that further applications for grant of TOR or grant of EC for expansion of production capacity of the mine should be considered for those existing mines, which have exhausted their capacity subject to consideration of all environmental aspects. Responsibility: Department of Steel & Mines and MoEF&CC, New Delhi.
- 14) **Sustained Iron Ore Production beyond 2020:** Considering the implementation of MMDR Act 2015, total production of iron ore in Odisha State is anticipated to be about 111 MT during 2016-17 (actual production was – 102.663 MT), 136 MT during 2017-18, 146 MT during 2018-19 and 146 MT during 2019-20. Then there will be substantial drop in total production (to the tune of 73 MT during 2020-21 onwards) due to closure of mines, which are valid up to 2020. Therefore, in order to maintain operation/sustained growth of downstream industries, iron ore mining in the region needs to be continued at a sustainable rate. The State Govt. through Department of Steel and Mines should initiate appropriate action to ensure continued availability of iron ore from the region, as per suggested sustainable annual production
- 15) **Reserves Estimation**–Mining Plan and Exploration: Appropriate actions (geo-technical

investigation for qualitative and quantitative resource estimation & other preparations for auction of mines), may be initiated taken into account the existing working mines, and the mines which were operational at some point of time (but closed presently due to various reasons). The total iron ore reserves/ resources available within the total lease area of each mine should be estimated by State Govt./NMET/ GSI (or any other approved agency) with respect to: (i) Total lease area of mine (surface), (ii) Maximum depth to which resources could be available, (iii) Resources below the ground water table (if intersected), (iv) Reserves are to be estimated as per UNFC code with respect to quantity and quality (% Fe content), (v) Maximum mining rate and area for auction (after 2020) will be calculated based on total resources available and proposed life of mine leading to closure of mine in a stipulated time period.

Responsibility: Department of Steel & Mines, IBM and GSI; Time frame: 1 year for the mines to be auctioned for next 2 years. The above mentioned organizations shall ensure the compliance with respect to timelines for implementations.

- 16) Depending upon availability of extractable iron ore resources within a mine, mining below the ground water table may be permitted after conducting necessary geological and hydro-geological study by GSI and requisite approval from the CGWB/CGWA (Central Ground Water Board/Authority). This can be explored at least in few mines on trial/pilot basis. Further, within a mine, it will be desirable to operate one pit at a time, and next pit should be opened after extracting maximum possible resources from the first pit, so that the exhausted pit can be used for back filling/ storing of low grade iron ore. However, depending upon the quantity and/or quality of iron/ manganese ore, other mine pits in the same mine lease may also be opened for sustainable scientific mining, as per approved mining plan/scheme of mining by IBM. The Department of Steel & Mines, Govt. of Odisha should initiate the pilot project so that minerals are fully utilized.
- 17) **Commercial Utilization of Low Grade Ore:** R&D studies towards utilization of low-grade iron ore should be conducted through research/academic institutes like IMMT, Bhubaneswar, NML, Jamshedpur, and concerned metallurgical departments in IITs, NITs etc., targeting full utilization of low-grade iron ore (Fe content upto 45% by 2020 and upto 40% by 2025). In fact, life cycle assessment of whole process including environmental considerations should be done for techno-economic and environmental viability. R&D studies on utilization of mine wastewater having high concentration of Fe content for different commercial applications in industries such as cosmetics, pharmaceutical, paint industry should also be explored. Responsibility: IBM, Dept. of Steel & Mines, Individual Mine Lease Holders
- 18) The mining activity in Joda-Koira sector is expected to continue for another 100 years, therefore, it will be desirable to develop proper rail network in the region. Rail transport shall not only be pollution free mode but also will be much economical option for iron ore transport. The rail network and/or conveyor belt system upto public railway siding needs to be created. The total length of the conveyor belt system/ rail network to be developed from mines to nearest railway sidings by 11 mines in Joda region is estimated to be about 64 km. Similarly, in Koira region, total length of rail network/ conveyor system for 8 mines (under SOTM 1 & 2) is estimated to be around 95 km. Further, it is suggested to develop a rail network connecting Banspani (Joda

region) and Roxy railway sidings in Koira region. Responsibility: Dept. of Steel & Mines, Govt. of Odisha and Concerned Mines along with Indian Railways. Time Period: Maximum 7 years (by 2025). The Department of Steel & Mines, Govt. of Odisha should follow-up with the concerned Departments and railways so that proposed proper rail network is in place by 2025.

- 19) State Govt. of Odisha shall make all efforts to ensure exhausting all the iron & manganese ore resources in the existing working mines and from disturbed mining leases/zones in Joda and Koira region. The criteria suggested shall be applicable while suggesting appropriate lease area and sustainable mining rate. Responsibility: Dept. of Steel & Mines, Govt. of Odisha
- 20) Large and medium mine leases contribute to better implementation of reclamation and rehabilitation plans to sustain the ecology for scientific and sustainable mining. The small leases do not possess scientific capability of environmentally sustainable mining. Therefore, new mine leases having more than 50 ha area should be encouraged, as far as possible. This will ensure inter-generational resource availability to some extent. Responsibility: Dept. of Steel & Mines, Govt. of Odisha
- 21) **Mining Operations/Process Related:** (i) Appropriate mining process and machinery (viz. right capacity, fuel efficient) should be selected to carry out various mining operations that generate minimal dust/air pollution, noise, wastewater and solid waste. e.g. drills should either be operated with dust extractors or equipped with water injection system. (ii) After commencement of mining operation, a study should be conducted to assess and quantify emission load generation (in terms of air pollution, noise, waste water and solid waste) from each of the mining activity (including transportation) on annual basis. Efforts should be made to further eliminate/ minimize generation of air pollution/dust, noise, wastewater, solid waste generation in successive years through use of better technology. This shall be ensured by the respective mine lease holders. (iii) Various machineries/equipment selected (viz. dumpers, excavators, crushers, screen plants etc.) and transport means should have optimum fuel/power consumption, and their fuel/power consumption should be recorded on monthly basis. Further, inspection and maintenance of all the machineries/ equipment/ transport vehicles should be followed as per manufacturer's instructions/ recommended time schedule and record should be maintained by the respective mine lease holders. (iv) Digital processing of the entire lease area using remote sensing technique should be carried out regularly once in 3 years for monitoring land use pattern and mining activity taken place. Further, the extent of pit area excavated should also be demarcated based on remote sensing analysis. This should be done by ORSAC (Odisha Space Applications Centre, Bhubaneswar) or an agency of national repute or if done by a private agency, the report shall be vetted/ authenticated by ORSAC, Bhubaneswar. Expenses towards the same shall be borne by the respective mine lease holders. Responsibility: Individual Mine Lease Holders
- 22) **Air Environment Related:** (i) Fugitive dust emissions from all the sources should be controlled regularly on daily basis. Water spraying arrangement on haul roads, loading and unloading and at other transfer points should be provided and properly maintained. Further, it will be desirable to use water fogging system to minimize water consumption. It should be ensured that the ambient air quality parameters conform to

the norms prescribed by the CPCB in this regard. (ii) The core zone of mining activity should be monitored on daily basis. Minimum four ambient air quality monitoring stations should be established in the core zone for SPM, PM₁₀, PM_{2.5}, SO₂, NO_x and CO monitoring. Location of air quality monitoring stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board (based on Emission Load Assessment Study). The number of monitoring locations may be more for larger capacity mines and working in larger area. Out of four stations, one should be online monitoring station in the mines having more than 3 MTPA EC Capacity. (iii) Monitoring in buffer zone should be carried out by SPCB or through NABET accredited agency. In addition, air quality parameters (SPM, PM₁₀, PM_{2.5}, SO₂, NO_x and CO) shall be regularly monitored at locations of nearest human habitation including schools and other public amenities located nearest to source of the dust generation as applicable. Further, 11 continuous air quality monitoring systems may be installed in Joida and Koira regions and one in Baripada/ Rairangpur region. (iv) Emissions from vehicles as well as heavy machinery should be kept under control and regularly monitored. Measures should be taken for regular maintenance of vehicles used in mining operations and in transportation of mineral. (v) The vehicles shall be covered with a tarpaulin and should not be overloaded. Further, possibility of 3 using closed container trucks should be explored for direct to destination movement of iron ore. Air quality monitoring at one location should also be carried out along the transport route within the mine (periodically, near truck entry and exit gate). Responsibility: Individual Mine Lease Holders and SPCB.

- 23) **Noise and Vibration Related:** (i) Blasting operation should be carried out only during daytime. Controlled blasting such as Nonel, should be practiced. The mitigation measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented. (ii) Appropriate measures (detailed in Section 5.4) should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs. (iii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone. Further, date, time and distance of measurement should also be indicated with the noise levels in the report. The data should be used to map the noise generation from different activities and efforts should be made to maintain the noise levels with the acceptable limits of CPCB (CPCB, 2000) (iv) Similarly, vibration at various sensitive locations should be monitored atleast once in month, and mapped for any significant changes due to successive mining operations. Responsibility: Individual Mine Lease Holders.
- 24) **Water/Wastewater Related :** (i) In general, the mining operations should be restricted to above ground water table and it should not intersect groundwater table. However, if enough resources are estimated below the ground water table, the same may be explored after conducting detailed geological studies by GSI and hydro- geological studies by CGWB or NIH or institute of national repute, and ensuring that no damage to the land stability/ water aquifer system shall happen. The details/ outcome of such study may be reflected/incorporated in the EIA/EMP report of the mine

appropriately. (ii) Natural watercourse and/or water resources should not be obstructed due to any mining operations. Regular monitoring of the flow rate of the springs and perennial nallas should be carried out and records should be maintained. Further, regular monitoring of water quality of nallas and river passing thorough the mine lease area (upstream and downstream locations) should be carried out on monthly basis. (iii) Regular monitoring of ground water level and its quality should be carried out within the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring should be carried out on monthly basis. (iv) In order to optimize water requirement, suitable conservation measures to augment ground water resources in the area should be undertaken in consultation with Central Ground Water Board (CGWB). (v) Suitable rainwater harvesting measures on long term basis should be planned and implemented in consultation with CGWB, to recharge the ground water source. Further, CGWB can prepare a comprehensive plan for the whole region. (vi) Appropriate mitigation measures (viz. ETP, STP, garland drains, retaining walls, collection of runoff etc.) should be taken to prevent pollution of nearby river/other water bodies. Water quality monitoring study should be conducted by State Pollution Control Board to ensure quality of surface and ground water sources on regular basis. The study can be conducted through NABL/ NABET approved water testing laboratory. However, the report should be vetted by SPCB. (vii) Industrial wastewater (workshop and wastewater from the mine) should be properly collected, treated in ETP so as to conform to the discharge standards applicable. (viii) Oil and grease trap should be installed before discharge of workshop effluents. Further, sewage treatment plant should be installed for the employees/colony, wherever applicable. (ix) Mine lease holder should ensure that no silt originating due to mining activity is transported in the surface water course or any other water body. Appropriate measures for prevention and control of soil erosion and management of silt should be undertaken. Quantity of silt/soil generated should be measured on regular basis for its better utilization. (x) Erosion from dumps site should be protected by providing geo-textile matting or other suitable material, and thick plantation of native trees and shrubs should be carried out at the dump slopes. Further, dumps should be protected by retaining walls. (xi) Trenches / garland drain should be constructed at the foot of dumps to arrest silt from being carried to water bodies. Adequate number of check dams should be constructed across seasonal/perennial nallas (if any) flowing through the mine lease areas and silt be arrested. De-silting at regular intervals should be carried out and quantity should be recorded for its better utilization, after proper soil quality analysis. (xii) The water so collected in the reservoir within the mine should be utilized for the sprinkling on hauls roads, green belt development etc. (xiii) There should be zero waste water discharge from the mine. Based on actual water withdrawal and consumption/ utilization in different activities, water balance diagram should be prepared on monthly basis, and efforts should be made to optimize consumption of water per ton of ore production in successive years. Responsibility: Individual Mine Lease Holders, SPCB and CGWB.

- 25) **Land/ Soil/ Overburden Related** (i) The top soil should temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long (not more

than 3 years or as per provisions mentioned in the mine plan/ scheme). The topsoil should be used for land reclamation and plantation appropriately. (ii) Fodder plots should be developed in the non-mineralised area in lieu of use of grazing land, if any. (iii) Over burden/ low grade ore should be stacked at earmarked dump site(s) only and should not be kept active for long period. The dump height should be decided on case to case basis, depending on the size of mine and quantity of waste material generated. However, slope stability study should be conducted for larger heights, as per IBM approved mine plan and DGMS guidelines. The OB dump should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles should be undertaken for stabilization of the dump. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Proper records should be maintained regarding species, their growth, area coverage etc. (iv) Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from mine operation, soil, OB and mineral dumps. The water so collected can be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly de-silted, particularly after monsoon and should be maintained properly. Appropriate documents should be maintained. Garland drain of appropriate size, gradient and length should be constructed for mine pit, soil, OB and mineral dumps and sump capacity should be designed with appropriate safety margin based on long term rainfall data. Sump capacity should be provided for adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and de-silted at regular intervals. (v) Backfilling should be done as per approved mining plan/scheme. There should be no OB dumps outside the mine lease area. The backfilled area should be afforested, aiming to restore the normal ground level. Monitoring and management of rehabilitated areas should continue till the vegetation is established and becomes self-generating. (vi) Hazardous waste such as, waste oil, lubricants, resin, and coal tar etc. should be disposed off as per provisions of Hazardous Waste Management Rules, 2016, as amended from time to time. Responsibility: Individual Mine Lease Holders.

- 26) **Ecology/Biodiversity (Flora-Fauna) Related:** (i) As per the Red List of IUCN (International Union for Conservation of Nature), six floral species and 21 faunal species have been reported to be under threatened, vulnerable & endangered category. Protection of these floral and faunal species should be taken by the State Forest & Wildlife Department on priority, particularly in the mining zones, if any. (ii) The mines falling within 5-10 km of the Karo-Karampada Elephant corridor buffer need to take precautionary measures during mining activities. The forest and existing elephant corridor routes are to be protected and conserved. Improvement of habitat by providing food, water and space for the elephants is required to be ensured to avoid Man-Elephant conflicts. Though as per the records of State Forest Department, movement of elephants in the Karo-Karampada elephant corridor within 10 km distance from the mines in Joda and Koira is not observed, the Forest Department shall further record and ensure that elephant's movement is not affected due to mining activities. (iii) All precautionary measures should be taken

during mining operation for conservation and protection of endangered fauna namely elephant, sloth bear etc. spotted in the study area. Action plan for conservation of flora and fauna should be prepared and implemented in consultation with the State Forest and Wildlife Department within the mine lease area, whereas outside the mine lease area, the same should be maintained by State Forest Department. (iv) Afforestation is to be done by using local and mixed species saplings within and outside the mining lease area. The reclamation and afforestation is to be done in such a manner like exploring the growth of fruit bearing trees which will attract the fauna and thus maintaining the biodiversity of the area. As afforestation done so far is very less, forest department needs to identify adequate land and do afforestation by involving local people in a time bound manner. (v) Green belt development carried out by mines should be monitored regularly in every season and parameters like area under vegetation/plantation, type of plantation, type of tree species /grass species/scrubs etc., distance between the plants and survival rate should be recorded. (vi) Green belt is an important sink of air pollutants including noise. Development of green cover in mining area will not only help reducing air and noise pollution but also will improve the ecological conditions and prevent soil erosion to a greater extent. Further, selection of tree species for green belt should constitute dust removal/dust capturing plants since plants can act as efficient biological filters removing significant amounts of particulate pollution. Thus, the identified native trees in the mine area may be encouraged for plantation. Tree species having small leaf area, dense hair on leaf surface (rough surface), deep channels on leaves should be included for plantation. (vii) Vetiver plantation on inactive dumps may be encouraged as the grass species has high strength of anchoring besides medicinal value. (viii) Details of compensatory afforestation done should be recorded and documented by respective forest divisions, and State Forest Department should present mine-wise annual status, along with expenditure details. (ix) Similarly, Wildlife Department is also required to record and document annual status of wildlife in the region and should identify the need for wildlife management on regional level. (x) Maintenance of the ecology of the region is prime responsibility of the State Forest and Wildlife Department. They need to periodically review the status and identify the need for further improvement in the region. The required expenditure may be met from the funds already collected in the form of compensatory afforestation and wildlife management. Further, additional fund, if required can be sought from DMF. Responsibility: Individual Mine Lease Holders and State Forest & Wildlife Department.

- 27) **Socio-Economic Related:** (i) Public interaction should be done on regular basis and social welfare activities should be done to meet the requirements of the local communities. Further, basic amenities and infrastructure facilities like education, medical, roads, safe drinking water, sanitation, employment, skill development, training institute etc. should be developed to alleviate the quality of life of the people of the region. (ii) Land outtees and land losers/affected people, if any, should be compensated and rehabilitated as per the national/state policy on Resettlement and Rehabilitation. (iii) The socio-economic development in the region should be focused and aligned with the guidelines/initiatives of Govt. of India/ NITI Aayog / Hon'ble Prime Minister's

Vision centring around prosperity, equality, justice, cleanliness, transparency, employment, respect to women, hope etc. This can be achieved by providing adequate and quality facilities for education, medical and developing skills in the people of the region. District administration in association with mine lease holders should plan for "*Samagra Vikas*" of these blocks well as other blocks of the district. While planning for different schemes in the region, the activities should be prioritized as per Pradhan Mantri Khanij Kshetra Kalyan Yojna (PMKKKY), notified by Ministry of Mines, Govt. of India, vide letter no. 16/7/2017-M.VI (Part), dated September 16, 2015. Responsibility: District Administration and Individual Mine Lease Holders.

- 28) **Road Transport Related:** (i) All the mine lease holders should follow the suggested ore transport mode (SOTM), based on its EC capacity within next 5 years. (ii) The mine lease holders should ensure construction of cement road of appropriate width from and to the entry and exit gate of the mine, as suggested in Chapter 10. Further, maintenance of all the roads should be carried out as per the requirement to ensure dust free road transport. (iii) Transportation of ore should be done by covering the trucks with tarpaulin or other suitable mechanism so that no spillage of ore/dust takes place. Further, air quality in terms of dust, PM₁₀ should be monitored near the roads towards entry & exit gate on regular basis, and be maintained within the acceptable limits. Responsibility: Individual Mine Lease Holders and Dept. of Steel & Mines
- 29) **Occupational Health Related:** (i) 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 periodically. (ii) Occupational health surveillance program for all the employees/workers (including casual workers) should be undertaken periodically (on annual basis) to observe any changes due to exposure to dust, and corrective measures should be taken immediately, if needed. (iii) Occupational health and safety measures related awareness programs including identification of work related health hazard, training on malaria eradication, HIV and health effects on exposure to mineral dust etc., should be carried out for all the workers on regular basis. A full time qualified doctor should be engaged for the purpose. Periodic monitoring (on 6 monthly basis) for exposure to respirable minerals dust on the workers should be conducted, and record should be maintained including health record of all the workers. Review of impact of various health measures undertaken (at an interval of 3 years or less) should be conducted followed by follow-up of actions, wherever required. Occupational health centre should be established near mine site itself. Responsibility: Individual Mine Lease Holders and District Administration (District Medical Officer)
- 30) **Reporting of Environmental Sustainability Achievement:** All the mines should prepare annual environmental sustainability report (ESR), highlighting the efforts made towards environmental protection with respect to different environmental components vis-à-vis production performance of the mine on monthly basis. The data collected as per EC and CTE/CTO conditions should be utilized to prepare the annual sustainability report. The mines performing high with effective environmental safeguards may be suitably recognized/rewarded. "Star Rating Format" formulated by the Ministry of Mines along with environmental sustainability report may be used.

- 31) **Environmental Monitoring Requirements at Regional Level:** Apart from strict compliance and monitoring by individual mine lease holder, there is a need for simultaneous monitoring in each of the regions by competent expert agencies under the guidance/ supervision of concerned regulatory agency. Details of the studies required to be done on regular basis (continuously for 5 years) through responsible agency (organization of national/state repute) and time frame are suggested in Table.

Table: Suggested Environmental Monitoring Requirements and Action Plans at Regional Level

Sr. No.	Study Component/ Action Plan	Responsibility	Monitoring and Reporting Time Frame (Approx.)
1.	Environmental Quality Monitoring with respect to Air, Water, Noise and Soil Quality in each region (Joda, Koira and Baripada/Rairangpur) as per specified frequency shall be done by a third party (preferably Govt.) and/or laboratory approved/ recognized by NABET/ CPCB/ SPCB/ MoEF&CC. All the water bodies (rivers, nallas, ponds etc.) shall be monitored. National/State level research/ academic institutes may be involved initially for couple of years to streamline the activity. The report shall be brought out annually by June each year. The study shall be conducted in consultation with MoEF&CC-RO.	SPCB	Continuous Annually
	<u>Installation of online ambient air quality monitor for PM₁₀, PM_{2.5}, SO_x and NO_x within the mine having more than 3 MTPA EC Capacity</u>	<u>Respective Mine Lease Holders</u>	<u>Continuous Annually</u>
	Installation of online ambient air quality monitor for PM ₁₀ , PM _{2.5} , SO _x and NO _x in the Joda and Koira Region (total 11 locations).	SPCB	Continuous Annually
2.	Status of flora and fauna in each of the regions shall be assessed on annual basis. Changes, if any, taking place in the region shall be brought out clearly. The study shall be conducted in consultation with State Forest and Wildlife Department.	State Forest & Wildlife Dept.	Annually in mining zone and once in 3 years in the region
3.	Socio-economic study incorporating	Respective	Annually

	developments taking place in each of the region, CSR initiatives made by the mining companies shall be conducted on annual basis. Further, micro level developmental needs shall be clearly brought out in the report for each region. The study shall be conducted in consultation with district administration.	District Administration	
4.	A detailed hydro-geological study in each of the regions shall be conducted in an integrated manner in consultation with Regional Director, Central Ground Water Board. Accordingly, all project proponents shall implement suitable conservation measures to augment ground water resources in the area.	SPCB	Once in 2 years
5.	The State Govt. shall ensure construction and maintenance of dust free common roads/ appropriate rail network for transport of ore from mines to the consumer end.	Dept. of Steel & Mines	12 months for road network and 5-7 years for rail network
6.	<u>Construction and maintenance of dust free roads from respective mine to the main road</u>	<u>Respective Mine Lease Holders</u>	<u>Continuous 6 months</u>
7.	Traffic/road inspection study addressing the condition of traffic/roads leading to different mines and connecting to different railway sidings shall be undertaken on annual basis. Further, detailed traffic study shall be undertaken on every 5 yearly basis to ensure adequacy of road/rail infrastructure in each of the regions. The study can be undertaken through national/ state level research/ academic institute (such as CSIR-CRRI, New Delhi).	Dept. of Steel & Mines	Continuous 6 months
8.	Assessment of land use/ land cover changes in each of the regions, with particular focus on mining areas, afforestation activities, variation in flow path of various water bodies etc. using remote sensing data	ORSAC	Annually
9.	R&D Studies for utilization of low-grade iron ore	Dept. of Steel & Mines through R&D /	Upto 45% by 2020 and upto 40% by 2025

		Academic Institutes	
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The data so generated for the region should be made available on the website of Department of Steel & Mines and also at MoEF&CC website, so that it can be effectively utilized by Individual Mine Lease Holders for preparing EIA/ EMP reports. This will meet the requirement for separate one season baseline environmental quality data collection by the individual proponents, if the mine proposed is in the same study region. Further, MoEF&CC (through EAC) can also utilize the data base available in evaluating the proposals for expansion of existing mines or new mines while granting ToR or EC to the mine, taking an holistic view of the region. State Govt. of Odisha should bring out an integrated environmental sustainability report for each of the regions (mainly for Joda and Koia region) incorporating ESR of individual mines and data collected in the region through various agencies, once in 5 years, to plan level of scientific and sustainable mining for the next 5 years.

32) Institutional Mechanism for Implementation of Environmentally Sustainable Mining:

The present study is not a one-time study, but a process to ensure environmentally sustainable mining activities in the region on long term basis. Looking into the large-scale mining activities and long term perspective for mining vis-à-vis environmentally sustainable mining and upliftment of people of the region, there is a need to create an agency, who will integrate all the aspects relating to sustainable mining in the region on long term basis. It could be a SPV of Govt. of Odisha or a cell within the overall control and supervision of Dept. of Steel & Mines, with members from IBM, GSI, OSPCB, MoEF&CC-RO and other concerned Departments and Mine Owners (EZMA), District Administration. It is found that the strong database available for the region needs to be taken into account to map and establish environmental quality of the region on daily, monthly, seasonal and annual basis. Further, the efforts and initiatives of the mines towards environmental protection as well as upliftment of the people of the region are required to be integrated, and a systematic plan at the block/regional level needs to be framed for the overall benefit of the local society, region, district, state and the country as a whole. It will be desirable to have proper environmental quality data management and analysis by NEERI or any other agency for next 5 years (six monthly compliance reports followed by field verification) ensuring sustainable mining practices in the region leading to an overall development of the region. District Mineral Funds should be utilized appropriately for various developmental activities/needs of the region. Further, an environmental sustainability report incorporating environmental status of region coupled with social upliftment may be brought out by SPCB or any other authorized agency on annual basis. This report can be used for supporting the regional EIA study, and also need for environmental quality monitoring by individual mine seeking environmental clearance for new mine/ expansion of mine, including public hearing. Since, outcome of the above study reports shall be in the overall interest of all the stakeholders (including local population) of the region, further planning for the region shall warrant cooperation and assistance of all the stakeholders (mine operators, industries, transporters, State & Central Government Offices, MoEF&CC, CPCB, SPCB, Dept. of Steel & Mines, IBM,

IMD, NGOs and local people) in sharing the relevant data/information/reports/documents etc. to continuously improve upon the environmentally sustainable development plan for economic growth in mining sector as well as for improvement in quality of life of the people of the region.

Standard Tor Beneficiation

- 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 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.

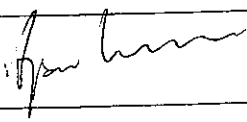
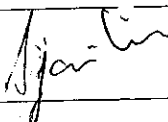
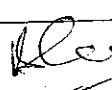
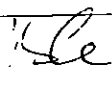
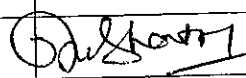
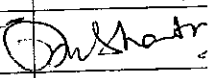
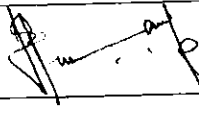
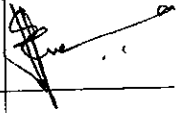
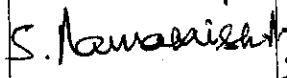

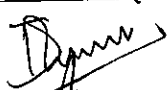
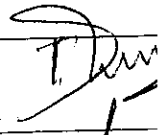


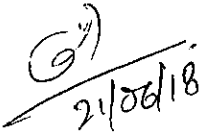

- 32) One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ 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.
- 50) Besides the above, the below mentioned general points are also to be followed:-
 - a) Executive Summary of the EIA/EMP Report
 - b) All documents to be properly referenced with index and continuous page numbering.
 - c) Where data are presented in the report especially in Tables, the period in which the data were collected and the sources should be indicated.

- d) 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.
- e) Where the documents provided are in a language other than English, an English translation should be provided.
- f) The Questionnaire for environmental appraisal of project as devised earlier by the Ministry shall also be filled and submitted.
- g) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF&CC 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 also be followed.
- h) 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.
- i) 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 by the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable

LIST OF EXPERT APPRAISAL COMMITTEE (MINING - Non Coal Mining Sector)

No.	Name and address	Designation	Date:21/06/2018	Date:22/06/2018
1.	Dr. Ajai Kumar B-1302, BestechParkView Spa, Sector-47, Gurgaon, Haryana	Chairman		
2.	Shri B Ramesh Kumar H-No. 6-1-134/6, Balram Compound, Padmarao Nagar, Secundrabad- 500025, Andhra Pradesh	Member		
3.	Prof. Dr. K.S. Rana MaharanaManzil, 18, Dholpur House, (D.M. Compound), M.G. Road, Agra-1, Uttar Pradesh - 282001	Member		
4.	Prof. A. K. Bhatnagar, JA/4B, Ashok Vihar-I, Delhi - 110052	Member		
5.	Dr. N. C. Karmakar Department of Mining Engineering, Indian Institute of Technology (BHU), Varanasi - 221 005, Uttar Pradesh	Member		
6.	Dr. Hemant S. Sahasrabudhe "Utkarsha", LB-53, Housing Board Colony, Laxminagar, Nagpur-440022	Member		
7.	Prof. S. Ramakrishna Rao 50-120-9/1, Tulasi Mani Regency North Extension, Seethammadhara, Visakhapatnam - 530013 Andhra Pradesh.	Member		
8.	Dr. Himanshu Pathak, Professor, Center for Environment Science and Climate Resilient Agriculture, Indian Agricultural Research Institute, New Delhi 110 012	Member		
9.	Dr. AL. Ramanathan Professor, School of Environmental Sciences, Jawaharlal Nehru University. New Mehrauli Road, New Delhi- 110067	Member		
10.	Dr. Tushar Kant Joshi, LaxmikantNiwas, SalanGaon, Bhagwantpur, Dehradun- 248009, Uttarakhand.	Member		
11.	Shri Santosh Gupta, Flat No. 405, Block -B, Gaur Green Vista, NyayKhand - 1, Indrapuram, Ghaziabad-201014	Member		
12.	Representative of Ministry of Mines Shri. Pushpender Gaur, Dy. Controller of Mines, Ministry of Mines, Shastri Bhawan New Delhi-110001.	Member		
13.	Representative of Indian Meteorological Mr. V.K. Soni, Scientist "E", (Meteorology/Air Pollution), 609, SatMet Building, MausamBhawan, Indian Meteorological Department, Lodhi Road, New Delhi-110003	Member		
14.	Representative of Wildlife Institute of India, Dr. (Ms.) Asha Rajvanshi, Wildlife Institute of India, Chandrabani, Dehradun- 248001	Member		
15.	Advisor IA-Division (Non Coal Mining) Vayu-305, Indira ParyavaranBhawan, Ministry of Environment, Forest & CC, Jorbagh Road, Lodhi Road, New Delhi-110003	Member Secretary	