

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

SUMMARY RECORD OF 34th MEETING OF THE RECONSTITUTED COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The 34th 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 **July 19-20, 2018**. The list of participants is annexed herewith. After welcoming the Committee Members, discussion on each of the Agenda Items was taken up ad-seriatim.

(1) Deliberation & Circulation on the Minutes of the 33rd EAC Meeting:

The Minutes of the 33rd Meeting of EAC held during June 21-22, 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 with following amendments.

(1.1): 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 (Agenda Item No: 33.2.35; File No. J-11015/157/2016-IA-II (M); Proposal No. IA/AP/MIN/53361/2016)-Reconsideration of EC

The Project Proponent, vide Lr. No. dated APMDC/HP/DGM(s)/EC/2016-17/154(S)/466, dated 17.07.2017 informed the Ministry that the project cost previously submitted was Rs. 60 Lakhs considering only the preliminary developmental cost. In the EMP report, capital cost towards EMP of Rs. 190 Lakhs & Land Acquisition cum R & R cost of Rs. 2823 Lakh was considered. The details of which are as follows: -

Mobile Water Sprinkler (₹70 Lakh , 2018-19); Fixed Sprinkler (₹40 Lakh, 2019-20); Garland drain, retaining wall, settling pond and other surface , rain runoff management structures, Rain water Harvesting pits (₹20 Lakh, 2018-21); Scientific studies like Blasting & vibration studies, Slope stability studies, Environment etc. (₹15 Lakh ,2018-19); ETP for workshop effluent treatment (₹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 PP submitted that in addition to Project Cost of Rs. 60 Lakh mentioned in the report, the Capital cost of EMP activities and R&R Expenditure is Rs. 3013 Lakhs. Hence, the total Project cost is Rs. 3073 Lakhs and the CER cost of Rs. 239 Lakhs proposed for 5 years will be met from the revenue.

In view of the submission of the PP, the Committee recommended the consideration of project cost as Rs. 3073 Lakhs in place of Rs. 60 Lakhs previously submitted for proposal No. IA/AP/MIN/53361/2016 and CER budget as Rs. 239 Lakhs proposed for 5 years. The Committee observed that amount proposed by the PP under CER is 7.7 % of total cost as against 2% suggested in Ministry's O.M No. 22-65/2017-IA.III dated 1.05.2018.

(1.2): 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 [Agenda Item No 33.2.34; File No. J-11015/125/2013-IA-II (M); Proposal No: IA/UK/MIN/18535/2013;]-EC

The Member Secretary informed the Committee that above proposal was considered in 33rd EAC meeting held on 21-22 June,2018 as agenda item no 2.34. The Committee deferred the proposal for want of requisite information. The information sought by Committee at Sl. No 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 and Sl. No. no (p) Proof of submission of application for NBWL Clearance. The above information is not required for this project. The Committee agreed with the same.

Day 1: Dated: July 19, 2018 [Thursday]

Consideration of Proposals

**(2.1).Proposal of M/s Ultratech Cement Ltd. (Unit: Kotputli Cement Works) w.r.t. incorporation of information of existing captive limestone crusher (1600 TPH) in Environmental Clearance granted dated 30th April 2010 for Mohanpura - Jodhpura Limestone Mining Lease (ML No. 03/2003, MLA 548.78 ha), located at Village- Mohanpura, Tehsil: Kotputli, District: Jaipur, Rajasthan (F. No. J-11015/350/2008-IA-II (M), Proposal No.-IA/RJ/MIN/74036/2018)-
Consideration of Modification in Environmental Clearance**

The proposal of M/s Ultratech Cement Ltd. (Unit: Kotputli Cement Works) is for incorporation of existing captive LS crusher information in EC letter granted by the Ministry vide letter no. J- 11015/350/2008-IA.II(M) dated 30th April 2010 for Mohanpura Jodhpura Limestone Mining Lease (ML No. 03/2003, MLA 548.78 ha). The mine is located at Village-Mohanpura, Tehsil: Kotputli, District: Jaipur Rajasthan. The bounded latitudes (North) of the ML area are from 27°39'51.03"N to 27°41'41.95"N and bounded longitudes (East) of the ML area are from 76°06'29.0"E to 76°08'42.88"E respectively.

The Project Proponent reported that Rajasthan State Pollution Control Board vide letter no. CD & SCMG (Gen-03)/RSPCB/1235-1271, dated 24.01.2017, has directed the project proponent for the amendment in Environmental Clearance required for inclusion of crusher activities; hence the proposal was submitted to the Ministry online.

The Project Proponent has submitted a fresh application online to the Ministry for incorporation of existing captive LS crusher information in EC letter granted by the Ministry vide letter no. J- 11015/350/2008-IA.II(M) dated 30th April 2010 for Mohanpura Jodhpura Limestone Mining Lease (ML No. 03/2003, Area 548.78 ha) and requested to consider the instant proposal under clause 7(ii) of EIA Notification, 2006. The Committee observed that the clause 7(ii) of EIA Notification, 2006 states as below: -

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

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

The Project Proponent reported that *there is no Expansion under Para 7(ii) / No Modernization under Para 7(ii) / No Change of Product Mix under Para 7(ii)*. The Project Proponent reported that crusher is existing since inception of mining lease. Project Proponent informed that crusher has been installed as per the guidelines of CPCB/ RSPCB, Jaipur and no additional pollution load will be there as there is no increase in capacity of crusher and no change in machinery is there.

The Committee noted that the Ministry has granted the Environmental Clearance vide letter no. J- 11015/350/2008-IA.II(M) dated 30th April 2010 in the name of M/s Grasim Industries Ltd. under the provisions of the EIA Notification, 2006 for Expansion of Mohanpura Jodhpura Limestone Mining Lease (ML No. 03/2003) with production capacity of 6.0 MTPA in MLA of 548.78 ha.

PP mentioned that in the EC at Specific Condition No. (xi) only mentions about Crushing and Screening Activities whereas in all documents complete mining & crushing activities such as drilling, blasting, hauling and crushing, impact of crushing activity and its air quality predictions through mathematical modeling has been mentioned including Approved scheme of mining and progressive mining plan; EIA/ EMP Report; Questionnaire for mining and in Minutes of Public Hearing which were submitted at the time of seeking the EC. Detailed

Environment Management Plan for all activities of mining including crusher has been mentioned in the EIA/EMP report. As per the EIA / EMP report and Mining scheme the type of crusher is "Compound Impactor of Make L&T". PP reported that the material will be unloaded in covered unloading hopper provided with permanent water sprinkling arrangements for suppression of dust generated during unloading of material. Water sprinkling arrangement also provided inside the crusher to make the crushed material sufficient moist so that there is no dust emission during the transportation of crushed limestone upto plant site by covered belt conveyor.

The Committee noted that DMG vide letter dated 8th May 2018 has submitted the production details and **PP has not enhanced the production capacity after grant of EC on 30th April 2010 and mined out within EC capacity**. Project Proponent has submitted the affidavit in compliance of the Ministry's OM no. 3-50/2017-IA.III (Pt.), dated 30th May 2018 w.r.t. judgment 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.

Based on the information submitted and presentation made by PP, the Committee **deferred** the proposal and sought the following requisite information: -

- (i). The Committee noted that the Ministry has granted the Environmental Clearance vide letter no. J-11015/350/2008-IA.II(M), dated 30th April 2010 in the name of M/s Grasim Industries Ltd. under the provisions of the EIA Notification, 2006 for Expansion of Mohanpura Jodhpura Limestone Mining Lease (ML No. 03/2003) with production capacity of 6.0 MTPA in MLA of 548.78 ha. **However, the transfer of EC from M/s Grasim Industries Ltd. to M/s Ultratech Cement Ltd. has not done yet.**
- (ii). The Committee noted that PP has not informed in the presentation w.r.t. issues related to non-compliance of the EC condition. The Committee observed that the PP has submitted the proposal for amendments in various EC conditions before the EAC of the similar mine. The proposal was apprised before the EAC in its meeting held during June 28, 2017 wherein the Committee recommended only one amendment in *Specific Condition (x)* w.r.t. Plantation/ green belt development in M.L. area. The Amendment requested in *Specific Condition (x)* is regarding Plantation/ green belt development in M.L. area in consultation with DFO/ Agriculture Department with tree density of 2000 plants/ Ha is accepted and Committee recommended the proposal for allowing PP to develop 7.5m wide Plantation/ Greenbelt in the safety zone by 2020 in the M.L. as per the areas identified and conditions mentioned in EC. The Committee was also of the view that the PP got EC in 2010 and even after the passage of 7 years it has not complied with the instant condition of EC. Hence, Ministry may also take suitable action towards non-compliance of EC condition. In this context, the Ministry, vide letter dated 27.10.2017, has issued Show Cause Notice under Section 5 of the Environment (Protection) Act, 1986 and directed to PP as why it has not complied with the EC conditions viz. *Specific Condition (x)* w.r.t. development of green belt in a phased manner and completing the same in a year and why action against PP may not be

initiated in view of observed non-compliance. The PP informed that they have submitted the reply of Show Cause Notice. **The Committee is of the view the proposal may be brought to EAC after Ministry examines the reply of PP and takes a decision on non-compliance.**

- (iii). The project proponent need to submit the modeling report to ascertain whether the input factor w.r.t. crusher has been taken care at the time of preparation of the EIA/EMP report or not.

Based on the information submitted and presentation made by PP, the Committee **deferred** the proposal. **The Committee is of the view the proposal may be brought to EAC after Ministry examines the reply of PP and takes a decision on non-compliance.**

(2.2).Expansion of Sanu-I Limestone Mining Project of M/s Rajasthan State Mines and Minerals Ltd. (ML No. 27/1996) from 1.25 MTPA to 1.50 MTPA (ML Area 1000 Ha), located at village Joga Tehsil & District-Jaisalmer, Rajasthan (File No. J-11015/66/2018-IA-II(M); Proposal No. IA/RJ/MIN/75613/2018)-Consideration of TOR

The proposal of M/s Rajasthan State Mines & Minerals Ltd. is for Sanu-I Limestone mines for enhancement in production capacity from 12.50 lakh MT to 15.00 lakh MT in the MLA of 1000ha. The mine is located at village Joga Tehsil & District-Jaisalmer, Rajasthan. The lease area lies between Latitude; 27°19'40.00"N to 27°16'43.00"N and Longitude 70°33'52.00"E to 70°35'00.00"E respectively. Under survey of India toposheet 40 I /11.

The Ministry has granted the earlier EC vide No. 11015/42/2006-IA.II (M), dated 3rd August 2007 for mining of limestone with production capacity 12,50,000 TPA in mine lease area of 1000 ha and further amendment vide No. 11015/42/2006-IA.II (M)(pt) dated 22.03.2017. The mine is located near village-Joga, Tehsil & District-Jaisalmer, Rajasthan.

The total mine lease area 1000 ha. Project Proponent reported that the Mining Plan along-with Progressive Mine Closure plan was approved by IBM, Office of the Regional Controller of Mines, Ajmer, vide letter no. 584(4)(3) (1667)/2016-RCM-Ajmer/2004 dated 16.12.2016. Project Proponent reported that the Consent to Operate granted by Rajasthan State Pollution Control Board, Jaipur vide letter No. F(Mines)/Jaisalmer(Jaisalmer)/1102(1)/ 2011-2012/8157-8161 dated 01.02.2012. Total project cost of Rs. 12 Crores, out of which cost for environmental protection measures capital of Rs. 0.25 crores, Recurring cost of Rs. 10.00 lakhs/annum. Cost for expansion will be Rs. 2.00 Crore. Total water requirement for this expansion project will be 50 KLD. Total manpower will be 65. Preference will be given to local people.

Project Proponent, vide letter dated 20.07.2018, reported that the online application is filed under TOR with the proposal No. IA/GA/MIN/75613/2018. The proposed production capacity expansion in only 20% i.e. from 1.25 MTPA to 1.50 MTPA in the Sanu-1 Limestone mining project District Jaisalmer, Rajasthan without any change in mining lease area or production methodology / technology. The mines is operating at optimum level of production i.e. 12.50 lac MTPA.

The demand of SMS grade limestone increased due to increase in steel production by SAIL plants from year 2017-18. The main buyers are SAIL & Tata Steel Ltd. State Government has only authorized to RSMML to mines & market SMS grade limestone from state Rajasthan. To meet the increasing demand in steel sector, it is essential to enhance the capacity of mines till the new leases are opened by RSMML in the vicinity, which are under consideration with GoI. The proposed expansion is only up to 20% from the granted capacity under EC & by observing the regular AAQ monitoring data; it is observed that sufficient scope to maintain the AAQ norm within permissible limit even after increase of Pollution loads under 20% expansion. As, there shall be least amount in increase of pollution load & the same shall be reduced by adopting planned mitigative measures to maintain the AAQ with in permissible limit. Therefore, no adverse impact in surrounding environment with proposed expansion is envisaged. In view of the above, PP has requested to consider application under clause 7(ii) of the EIA Notification, 2006 for seeking prior environmental clearance for expansion with increase in the production capacity beyond the capacity for which prior environmental clearance has been granted under notification 2006. With this back ground, PP requested to withdraw the TOR application as submitted under proposal No.-IA/RJ/MIN/75613/2018. PP further mentioned that fresh applications under clause 7(ii) of MoEF&CC notification shall be submitted for seeking prior environmental clearance.

Based on the information submitted and presentation made by PP, the Committee **accepted the request of PP to withdraw TOR application and submit the fresh application.**

(2.3). Expansion of Mining Project of China Clay from 5000 TPA (ROM) to 17,58,163 TPA (ROM) and Quartz from 2000 TPA (ROM) to 10829 TPA (ROM) by M/s B.R. Minerals, located at Village-Lohari Khurd (Deva KaKhera), Tehsil –Hindoli, District-Bundi, Rajasthan (Mine Lease Area 61.0Ha)(File No. J-11015/67/2018-IA-II(M); Proposal No. IA/RJ/MIN/75545/2018)- Consideration of TOR

The proposal of M/s B.R. Minerals is for expansion of Mining Project of China Clay from 5000 TPA (ROM) to 17,58,163 TPA (ROM) and Quartz from 2000 TPA (ROM) to 10829 TPA (ROM) in the Mine Lease Area 61.0Ha. The mine is located at Village-Lohari Khurd (Deva KaKhera), Tehsil –Hindoli, District-Bundi, Rajasthan.

Project Proponent reported that the earlier Environmental clearance has been granted by the Ministry vide letter J-11015/13/2000-IA.II(M) dated 18.5.2001 in favour of Sh. Himmat Singh Chaplot for production capacity of 5,000 TPA (ROM) and Quartz minerals with production capacity of 2,000 TPA (ROM) in the MLA of 61ha.

The total mine lease area 61.0 ha. Project Proponent reported that there is no National Park, Wild Life Sanctuary and Biosphere Reserve within 10 Km of Project site. Some Protected and Reserve Forest Area falling in 10km lease area. Total water requirement for this expansion project will be 104 KLD. Total manpower will be required for the project is 62. The Committee noted that Mines Department vide letter dated 17th July 2018 has submitted the production details and accordingly PP has not enhanced the production capacity after grant of EC in 2001 and mined out within EC capacity. PP reported that they have submitted the EC transfer proposal

in 2018 and based on the Common Cause judgment dated 2nd August 2017, the EC is not valid as it was issued under the provisions of the EIA Notification, 1994.

PP reported that the original mine lease was sanctioned in favour of Sh. Himmat Singh Chaplot vide Directorate of Mines & Geology, Rajasthan order dated 07/09/2001 for 30 years from date of registration; the lease registration was executed on 23.11.2001. The lease period has been extended for total 50 years as per the MMDR Act. Therefore, lease period valid up to 23.11.2001 to 22.11.2050. PP reported that due to the death of the lessee Sh. Himmat Singh Chaplot on date 24.06.2008, the lease was transferred in favor of his son Sh. Ajay Singh Chaplot S/o Late Sh. Himmat Singh Chaplot vide court decree ADM order no. ADM/Jai /Bundi-II/ML/27/95/1975 dated 30.12.2010 and corrigendum issued vide letter no. 119-24 dated 31.1.2011. Further, this mine lease M L No. 27/95 vide Form O (Rule 37A) of Mineral Concession Rules 1960 was transferred from Sh. Ajay Singh Chaplot to M/s B.R. Minerals, Village Guda, District Bhilwara (Raj.) vide lease deed for transfer executed on 29.1.2013. M/s B.R. Minerals is the current lease holder for this mine.

The Committee deliberated the issues and concluded that it **is non-compliance of EC as the PP has not transferred the EC as per the provisions of the EIA Notification and continued mining operation w.e.f. 2008 without transfer of EC. Moreover, the lease was transfer to Sh. Ajay Singh Chaplot in 2010 and further transferred in the name of M/s B.R. Minerals in 2013. The Ministry may take a view on this non-compliance as per provisions of E(P) Act, 1986.**

Based on the information submitted and presentation made by PP, the Committee **deferred** the proposal and sought the following requisite information/clarifications: -

- (i). The Committee deliberated the issues and concluded that it is non-compliance of EC as the PP has not transfer the EC as per the provisions of the EIA Notification and continued mining operation w.e.f. 2008 without transfer of EC. Moreover, the lease was transfer to Sh. Ajay Singh Chaplot in 2010 and further transferred in the name of M/s B.R. Minerals in 2013. **The Ministry may take a view on this non-compliance as per provisions of E(P) Act, 1986.**
- (ii). The Committee noted that the instant proposal is for expansion of Mining Project of China Clay from 5000 TPA (ROM) to 17,58,163 TPA (ROM) **i.e. 350 times** and Quartz from 2000 TPA (ROM) to 10829 TPA (ROM) **i.e. 5.4 times**. The PP has earlier mined out very less quantity from the mines. In view of the above, the Committee is of the view that PP needs to submit the justification w.r.t. huge enhancement of the production capacity of China Clay. PP may submit the revise application for reasonable expansion project.
- (iii). PP needs to submit the details of machinery to be involved in the mining operation. Details of plantation done and type of plant species in the boundary of the mine lease area.

(2.4). Gorumahisani Iron Ore Mine of M/s Ghanashyam Misra & Sons Pvt. Ltd. for enhancement of Iron Ore from 0.75 Million TPA to 1.1 Million TPA, located at villages of Kuliesilla, Badamouda, Sanamouda, Sundhal, Balitangi, Nodhabani, and Gorumahisani Reserve Forest under Badamghaty Sub-division of Dist-Mayurbhanj, Odisha (MLA 349.50 ha; Proposal No. IA/OR/MIN/75197/2018 (Consultant: Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar)- Consideration of TOR

The Proposal of M/s Ghanashyam Misra & Sons Pvt. Ltd. is for enhancement of Iron Ore from 0.75 Million TPA to 1.1 Million TPA. Kuliesilla, Badamouda, Sanamouda, Sundhal, Balitangi, Nodhabani, and Gorumahisani Reserve Forest, Tehesil Rairangpur, District Mayurbhanj, Odisha in the MLA of 349.50 ha. The lease area falls in Latitude: 22°18'12.05" – 22°20'28" North, Longitude: 86°14'40.74"–86°17'21.67" East and covered in Survey of India Topo Sheet No. 73J/7. The Eastern part of mine lease area represents a rugged topography from 480m to 906m above MSL. Western part of the area is mostly of plain land and altitude varies from 290m to 350m MSL. Gorumahisani, the nearest railway siding, is located at a distance of 0.5 km from the loading point of the lease area. The PP presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

The total lease area is 349.50 Ha. Out of total area 349.50 ha, 81.00 ha is diverted forest land, 9.50 ha is safety zone area and rest 259.00 ha is non-forest land comprising of Government land and Private land. Forest clearance for 81.00 ha has already been obtained by the Ministry, vide letter F No-8-41/2003-FC, dated 13th September 2006 excluding the safety zone forest area of 9.50 Ha. The Environmental Clearance has been obtained from MoEF, New Delhi for production of Iron ore 0.75 MTPA vide letter. No J-11015/426/2006-IA.II(M) dated 29.01.2008. CTO was also being obtained from State Pollution Control Board, Odisha vide letter No. 4848/IND-I-CON-250 dated 19.03.2016 with validity up to 31.03.2020. In accordance with the letter No. 2297/SM/III-ASM-06/2014 dated 16.3.2017 of Steel & Mines, Department, Government of Odisha, supplementary leased deed was executed on 14th June, 2017 and the Lease validity is up to 31st March 2020. Review of Mining Plan with Progressive Mine Closure Plan has been approved by IBM vide letter No. MPM/OTFM/09-ORI/BHU/2018-19 dated 04.07.2018 for expansion of Iron Ore Production from 0.75 MTPA to 1.1 MTPA.

Project Proponent reported that the mine is in operation since 1970. 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:

Sl. No.	Issues	PP' submission
1	Compliance of Order dated 02.08.2017 in CWP no. 114/2014 of Hon'ble Supreme Court.	In pursuance of the Supreme Court order dated 02.08.2017 in CWP No. 114/2014, the Mining Officer, Baripada has raised the demand notices No. 2320/Mines dated 04.09.2017 and 2970/Mines dated 09.11.2017 and the project proponent has deposited INR 28,64,02,776.00 (Rupees Twenty-Eight Crore Sixty-Four Lakhs

		Two Thousand Seven Hundred Seventy-Six only). The Project Proponent has took shelter of Revision Cell of Ministry Mines, Government of India vide Revision Application No. 2480/207TRC-I & the Hon'ble Revisional Authority vide their Order dated 28.12.2017 directed to the State Govt. not to take any coercive measures to recover the amounts specified in the impugned order 09.11.2017.
2	Details of demand if any raised by Dept. of Mining and Geology, Govt. of Odisha.	The details of demands raised by the Dept. of Mining and Geology, Govt. of Odisha vide demand notices No. 2320/Mines dated 04.09.2017 and 2970/Mines dated 09.11.2017 for INR 28,64,02,776.00 (Rupees Twenty Eight Crore Sixty Four Lakhs Two Thousand Seven Hundred Seventy Six only) and INR 18,88,222.00 (Rupees Eighteen Lakhs Eighty Eight Thousand Two Hundred Twenty Two only) respectively.
3	Details of payment, if any made to Dept. of Mines and Geology, Govt. of Odisha	The Proponent has made the payment as demand raised based on the Hon'ble Supreme Court order with an amount of INR 28,64,02,776.00 (Rupees Twenty Eight Crore Sixty Four Lakhs Two Thousand Seven Hundred Seventy Six only) vide online Treasury Challan Ref. No. 27DDFEAD8A dated 28.12.2017.
4	Validity of mine lease	The Government has executed the Supplementary Lease Deed on 14.06.2017 which is valid up to 31.03.2020.
5	Status of Mine whether working or not	The mine is in operation with due compliance of the Hon'ble Supreme Court Order.
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 the past production figure from 1970 to till current year is duly authenticated by the Mining Officer, Baripada has been submitted by the PP.

The mining operations will be through semi mechanized opencast mining system, involving shovel-dumper combinations, deep hole drilling and blasting. The total water requirement will be 80 m³ /day for mining, green belt, dust-suppression and drinking water purposes. The water required will be sourced from the bore well, rain water harvesting pond and PHD supply. Bore well water will supply through overhead tank and water tankers to mine site. Permission for 80m³/day of ground water has already been obtained. RWSS (Rural Water Supply System) has agreed to provide 80m³/day vide letter no.135 dated 28.06.2006. PP reported that an area of 125.429 hectares land is already degraded / utilized for mining, dumping, office, road, green

belt etc. An area of 146.966 hectares (excluding safety zone area 9.50 hectares) is anticipated to be degraded / utilized at the end of the conceptual planning period. In the post mining stage out of 163.599 ha of mined out area, rehabilitation /plantation will be carried out over 34.588 ha.

PP reported that the power demand for the mine is estimated to be 5 MW/Month. The power requirement will be met from the State grid and backup power from DG Sets. All required amenities/ facilities required for the mining activities like site office, rest shelter, Canteen etc., are available at the site. These facilities will be suitably upgraded for the expansion. The proposed mine expansion is expected to generate about 102 supervising staffs and 1222 skilled, semi-skilled & un skilled persons from local tribals. The total project cost for the mine expansion for plant and machinery and preoperative expenses are expected to be Rs. 30.0 Crores. The Project proponent reported that there is no National Parks, Wildlife Sanctuary, Biosphere Reserve and Tiger Reserve (existing/proposed) is located within 10 km of the lease area as per letter No.3945 (3F) dated 21.09.2007 of Divisional Forest Officer, Rairangpur. However, Wildlife Management Plan and Site Specific Conservation Plan has been approved by the PCCF (WL) and Chief Wildlife Warden, Orissa, Bhubaneswar vide Letter No.4465/1WL(C)(FC)308/08 dated 19.07.2008. PP has deposited Rs.65.00 Lakhs against the approval order. Karida Nadi is flowing at a distance of 12.47 km (W) from the lease area. Kharkhai River 10.0 km (SE), Chanchada Nadi 11.9 km (W) are found in the outside buffer zone of mine area. EC compliance report has submitted for approval on 16.01.2018 for period from 01.10.2017 to 31.03.2018 to Regional Director of MoEF&CC, Bhubaneswar.

The total geological reserve as on 18.02.2018 for Iron is 18.007 million tonnes and the mineable reserve is 13.626 million tonnes. It estimated that about 0.577 million tonnes mineral rejects will be generated during period 2018-19 and 2019-20, which will be blended with high grade iron ore. There will be about 0.927Mm³ of waste from mines is to be likely generated during the period 2018-19 and 2019-20 respectively. About 0.075Mm³ of waste generated shall be dumped at existing dump No. KTD-1 and ND-2. The balance 0.698Mm³ will be utilized for backfilled in Rajpal, N-Incline, 2550(N) and Part of West Block quarries covered by 7.12 ha and remaining 0.154Mm³ of waste will be used for maintenance of internal road and peripheral works. As per the field position the Iron ore has been exhausted within the Rajpal, N-Incline, Part of West Block quarries and the part of 2550(N) quarry will be exhausted during the year 2018-19. Accordingly backfilled has been carried out in the exhausted part of the quarries of Rajpal, N-Incline, Part of West Block & 2550(N) area from 2018-19 onwards as a part of the reclamation. Existing depth of working is up to RL 760mRL, in Kochar Quarry (as on 31.03.2018). There are 18 numbers of existing dumps having an area 12.38 ha with different heights (varying from 2m-20m). Out of 18 numbers of existing dumps, 3 numbers of dumps namely Part of KD-3, Part of Kishuntany dump and part of FD-6 are present within mineralized area which will be proposed to re-handle during the year 2018-19 and 2019-20. Ultimate depth of working will be 621mRL in the Eastern Part and 315mRL in the Western Part of the quarries. No intersection of ground water table is expected in the conceptual stage for iron ore quarry. The life of the iron ore mine is estimated to be 12 years (from 31.02.2018) considering the production capacity 1.1 MTPA.

The Committee noted that as per the Certificate provided by the Mining Officer, Govt. of Odisha dated 18.06.2018, the PP has not enhanced the production capacity after grant of EC on

29.01.2008 and mined out the mineral within the EC capacity of 0.75 million TPA of Iron Ore. The PP has submitted an affidavit dated 18.06.2018 in compliance of Ministry's OM dated 30.05.2018 in respect of the order of Hon'ble of Supreme Court dated 02.8.2017. The Committee also noted that the PP has made the production of 615952.580 TPA in 2017-18 and 738009.580 TPA in 2016-17 (i.e. about 82-98 % in last two financial years).

It is informed to 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**. Further, the TOR may have the specific conditions as recommended by CSIR-NEERI on carrying capacity study as per **Annexure III**. PP shall also submit the details of final mine closure plan in the EIA/EMP Report.

(2.5). Increase in production of ROM Iron ore from 2.85 MTPA to 7.0 MTPA, dry processing of low grade ore of 1.06 MTPA and installation of wet beneficiation plant 1.44MTPA capacity (Total proposed handling will be 8.06MTPA) of Sanindpur Iron & Bauxite Mine of M/s Rungta Sons (P) Ltd. located in Villages Oraghat & Sanindpur, District Sundargarh, Odisha. (File No. J-11015/238/2016.IA.II(M); Proposal No. IA/OR/MIN/60649/2016)-Consideration of TOR

Project Proponent, vide their letter dated 17.07.2018, requested to withdraw the proposal as the PP want to submit the revised application based on the modification in mine plan. The Committee accepted the request of PP and **withdraw** the proposal.

(2.6). Expansion of production capacity of limestone from 9.10 MTPA to 14.10 MTPA by M/s Wonder Cement Ltd., located at Villages – Bhattkotari, Lasravan, Phalwa and Rasulpura, Tehsil– Nimbahera, District– Chittorgarh, Rajasthan (ML area: 740.93 ha) (File No. J-11015/69/2018-IA-II(M); Proposal No. IA/RJ/MIN/74953/2018)-Consideration of TOR

The proposal of M/s Wonder Cement Ltd. is for expansion of Limestone mine with production capacity from 9.10 MTPA to 14.10 MTPA in the mine lease area of 740.93 ha. The mine is located at Villages Bhattkotari, Lasravan, Phalwa and Rasulpura, Tehsil Nimbahera, District Chittorgarh, Rajasthan. The mine site located in the Latitude - 24039'14.4" N & 24040'27.67" N and Longitude - 74035' 13.51" E & 740 37'46.16" E.

The total mine lease area is 740.93ha. Mining operations are carried out by fully mechanized open cast method, utilizing Heavy Earth Moving Equipment (HEME). Blasting is carried out to create fragmented material. The lease area is predominantly outcropping with limestone and is practically devoid of any overburden except for small patches of shale. Top soil generated during the plan period will be stacked separately and used for plantation. Total water requirement after proposed expansion of the project will be 175KLD. Out of which 145 KLD water will be recycled and fresh water requirement for the project will be 30 KLD only. Groundwater will be used for drinking. Recycled water from ETP/STP will be used for sprinkling on haulage road for dust suppression. For drinking and sanitation, fresh water will be used and for other activities i.e. water sprinkling and green belt development rain water accumulated in the pit will be used. Fresh water will be sourced from dug well and bore wells in the area. Total power requirement after proposed expansion of the project will be 1.75MW. Additional power required for proposed expansion will be 0.75 MW and will be sourced from existing captive power plant of 40 MW. Total cost of the Project is Rs.30 Crores. Cost for Environment Protection for the Proposed Expansion Project is Rs.3 Crores (Capital cost) and Recurring cost is Rs 10 lakh/annum. Total manpower will be 200. Preference will be given to local people.

PP reported that at present 2 nos. of 1400 TPH capacity Limestone Crusher are installed in the mine and are in operation and with the expansion of Limestone mine production from 9.1 MTPA to 14.1 MTPA, PP has proposed one additional crusher plant of 1400 TPH. Therefore, there will be three crushers in the mine lease area. PP has also mentioned that they have collected the baseline data from March 2018 to May 2018 and requested to consider the baseline data for preparation of EIA/EMP report. The Committee deliberated the issues and accepted the request of PP.

The Committee noted that the Ministry has earlier accorded the EC vide letter No. J-11015/319/2012. IA.II (M), dated 19.12.2013 for expansion of Limestone mine with production capacity from 3.75 MTPA to 9.10 MTPA in the mine lease area of 740.93 ha. Based on the production details provided by the Govt. of Rajasthan, **PP has not enhanced the production capacity and mined out the mineral within EC capacity; hence there is no violation w.r.t. production capacity.**

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.

(2.7). Bailadila Iron Ore Mine, Deposit-11 Mining Lease of by M/s NMDC Limited with production capacity of 11.30 Million tons per annum ROM Iron Ore, located at Village Kirandul, Tehsil Dantewada, South Bastar Dantewada District of Chhattisgarh (874.924 ha) (File No. J-11015/70/2018-IA-II(M); Proposal No. IA/CG/MIN/75153/2018)-Consideration of TOR

The proposal of M/s NMDC Limited is for Bailadila Iron Ore Deposit-11 Mining Lease with production capacity of 11.30 Million tons per annum (ROM) of Iron Ore in the mine lease area of 874.924 ha. The mine is located at Village Kirandul, Tehsil Dantewada, South Bastar Dantewada District of Chhattisgarh. The Deposit 11 M.L is located between Latitude 18°37'34.6066" to 18°41'26.1792" N and Longitude 81° 13'13.2276" to 81°15'18.0396" E and falls in SOI Toposheet E44J2/J6. The topography of the area is hilly terrain.

The total Mine lease area is 874.924 ha. The entire mine lease area is in the forest compartment no.s 1842, 1844, 1845, 1846, 1849 and 1852 to 1854 of Bailadila Reserve Forest. Forest clearance for diversion of 874.924 Ha forest land is also obtained from MoEFCC vide letter no: 9-98/97-FC dated 22/12/1999. No additional land acquisition is involved.

PP reported that initially the mining lease of Bailadila Deposit-11 was granted on 12/9/1967 for a period of 30 years and was valid upto 11/9/1997. The 1st renewal of mining lease was obtained on 17/8/2005 for a period of 20 years and it was valid upto 12/9/2017. The validity of mining lease was extended upto 31/3/2020 as per M.M (D.R) Amendment Act, 2015. As per rule 3(3) of Mineral (Mining by Government Company) Rules 2015, the lease period was further renewed for period of 20 years by Mineral Resource Department, Government of Chhattisgarh, Raipur vide letter no: 4-55/2017/XII dated 11/5/2018. The lease is now valid upto 10.9.2037. The lease deed is under execution. The approval of Modified Mining Plan for Bailadila Deposit-11 for the period 1-4-17 to 31-3-2020 was also obtained from IBM, Raipur vide letter no: 2565 dated 9/12/2016 for a production capacity of 5.00 MTPA ROM Iron ore. As the lease renewal order was issued by Government of C.G upto 10.9.2037, the Mining Plan for the period 1.4.2020 to 31.3.2025 shall be prepared for production capacity of 11.30 MTPA ROM Iron ore.

PP reported that they have already obtained Environmental clearances for Bailadila Deposit-11A, 11B and 11C from Ministry during various time periods under EIA 1994 / 2006 notification depending upon the development of mines. The EC for Bailadila Deposit-11B was obtained vide letter no: J-11015/416/2005-IA.II (M) dated 11/09/2006 under EIA Notification 1994 for 7.0 MTPA ROM iron ore capacity. The EC for Deposit-11A obtained vide letter no: J-11015/83/2011.IA.II(M), dated 31/10/2011 under EIA Notification 2006 for 2.8 MTPA ROM Iron ore capacity. The EC for Deposit-11C (1.5 MTPA) was obtained as part of Integrated E.C of Bailadila Deposit-14/11C Project (12 MTPA), vide letter no: J-11015/483/2007-IA.II(M) dated 11/9/2007 under EIA notification 2006. Thus, the total EC capacity available for Bailadila Deposit-11 ML for Deposit-11A, 11B and 11C mines is 11.30 MTPA ROM Iron ore. NMDC is submitting six monthly environmental compliance reports regularly to RO, MOEFCC, Nagpur for the conditions stipulated in EC letters of Kirandul complex and also being uploaded in NMDC and MoEFCC portal.

Deposits	Date of EC grant	EC capacity	Validity of EC	Examination of proposal w.r.t. violation angle
Deposit-11A	31/10/2011	2.8 MTPA	Under EIA Notification, 2006 and mentioned that EC is valid upto 09.09.2017	PP has not enhanced the production capacity after grant of EC in 2011.
Deposit-11B	11/09/2006	7.0 MTPA (ROM)	Under EIA Notification, 1994	PP has not enhanced the production capacity after grant of EC in 2006.
Deposit-11C	11/09/2007	1.5 MTPA	Under EIA Notification, 2006	PP has enhanced the production capacity in 2008-09 (1.614 MTPA), 2014-15 (1.619 MTPA) & 2015-16 (1.682 MTPA) after grant of EC as per the information provided by the Mining Officer, State Govt.; hence it is a violation case w.r.t. this EC. The Ministry may examine the issues related to violations.

PP reported that mining operations are fully mechanized opencast method. The mines adopt using shovel dumper combination and various process involved are drilling, blasting, excavation, quality control, ore processing (crushing & screening), loading of products, sub grade stockpile and waste disposal. Drilling is done with blast hole drills. Blasting is done with SME explosives. Project Proponent reported that the presently, total of 3 locations identified for dumping of waste rock extending over total area of 46.058 Ha and for life of mines, the waste rock dump area will increase to 163.322 Ha which is as per approved Modified Mining Plan. The dumps will be properly dressed, benched, sloped at low angle with terracing to maintain within 28°. Stabilization of dumps will be taken up by planting agave or other soil binding shrubs or grasses over the slopes including application of coir geo-textile

Project Proponent reported that there are national parks/sanctuary/Eco-sensitive zone located within 10 km radius from the mining lease area boundary. The PCCF (Wildlife), Forest Department, Raipur has approved the conservation plan for total expenditure of INR.28.40 Cr for entire Bailadila (Kirandul & Bachel) complex vide letter dated 4th February 2017. NMDC also deposited the funds with Ad-hoc CAMPA account. The water requirement for existing operations is about 1500 KLD which is sourced from Kirandul Nala, Bachel Nala, Galli nala and Malangir Nala. The mining activity will not puncture the ground water table during its life time. Occupational Health Centre which is a part of 89 bedded hospital with all required facility and qualified doctors and staff is functioning for all mining projects of NMDC at Kirandul complex.

The capital cost of the project is about Rs. 469.63 Cr. EMP cost will be about Rs.12.00 Cr per annum. NMDC mining projects at Kirandul Complex employs 1591 people directly and about 1000 people are employed through different contractors. Local people are given the preference for employment under semi-skilled and unskilled categories.

Based on the information submitted and presentation made by PP, the proposal was **deferred** as the **PP has enhanced the production capacity in 2008-09 (1.614 MTPA), 2014-15 (1.619 MTPA) & 2015-16 (1.682 MTPA) after grant of EC as per the information provided by the Mining Officer, State Govt.; hence it is a violation case w.r.t. Deposit 11C. The Ministry may examine the issues related to violations.**

(2.8). Sonadih Limestone Deposit (ML-2) of by M/s Nuvoco Vistas Corp. Ltd. with Limestone Production of 9,90,113 TPA over an area of 64.815 ha, located at Raseda Village Balodabazar, Tehsil of Balodabazar-Bhatapara District, Chhattisgarh (File No. J-11015/71/2018-IA-II(M); Proposal No. IA/CG/MIN/74704/2018)-Consideration of TOR

The proposal of M/s Nuvoco Vistas Corp. Ltd. is for Sonadih Limestone Mines with proposed production capacity of 9,90,113 TPA in the mine lease area of 64.815 Ha. The mine lease area is located at village- Raseda, Tehsil - Balodabazar, District- Balodabazar-Bhatapara, Chhattisgarh. The location of the Project site falls under Survey of India toposheet no 64 K/1 AND 64 K/2 and The area falls between Latitudes 21⁰43'31"N to 21⁰44'25"N and Longitudes 82⁰11'47" to 82⁰12'36"E. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

The proposal of TOR was earlier placed before the EAC in its meeting held during April 27-28, 2017 wherein the during the presentation, PP informed that the company has been acquired by M/s Nuvoco Vistas Corp. Ltd. and LoI was transferred in the name of M/s Nuvoco Vistas Corp. Ltd. on 04.04.2017; however, no document is furnished in support of the same. The Committee asked the PP to submit supporting document. Further, Committee noted that the application should come in the name of M/s Nuvoco Vistas Corp. Ltd. and accordingly the proposal was deferred. Now, PP has submitted the fresh proposal and accordingly the proposal is placed before the EAC.

PP reported that total area granted for Prospecting License (PL) was 92.165 ha. The area applied for M.L. was 71.449 Ha. However, during the recommendation for mining lease, the area has been reduced to 64.815 Ha. The State Govt. of Chhattisgarh has issued a letter of intent for sanction of mining lease vide letter No. AF 3- 41/2010/12, Naya Raipur dated 17/10/2016. Total area is forest land and PP has submitted the forest clearance proposal vide Proposal no. FP/CG/MIN/25113/2007 dated 24.03.2017. The validity of the M.L. is 50 years as per LoI. The Committee noted that in Para 5 of the LoI letter issued by State Govt. only clause 10(A)(2) is mentioned whereas the save clause is for 10(A)(2)(b). In this regard, the PP submitted that the State Govt. of Chhattisgarh has mentioned their case to Ministry of Mines vide letter dated 18.04.2017 wherein it is clearly mentioned that the Prospecting license is converted to ML vide provisions under clause 10(A)(2)(b) of MMDR (Amendment) Act, 2015. Mining Plan has been approved by Indian Bureau of Mines, vide letter No. balodaba/chup/khyo/1064/2017/Raipur, dated 03.03.2017.

The mine has total mineable reserves of 147,17,362 Tonnes. The method of mining will be fully mechanized using drilling machine along with compressor for drilling, blasting and transportation of limestone. The Mining activity is proposed to be concentrated in two pits with four production benches and one development bench of variable height. The general surface level of the area is 246 mRL, maximum surface level of the area is 255 mRL and minimum is 242 mRL. The entire applied lease area is under forest land (bade jhad ka jungle). The land is still virgin and no mining activity has been done in the area till date. There is reportedly no National Park, Wildlife sanctuary or sensitive area located within 10 km radius of the proposed mine. The total manpower required for the project is about 58. Total Project Cost is Rs.22.7 Crores. The water requirement of the project is estimated to be 20 KLD. Water is required for mining operations/establishment mainly for sprinkling on haulage roads and at faces for suppression of dust. The PP has said that water is proposed to be sourced from Bore-well/Secondary sources. The groundwater is not likely to be encountered during the mining. It was suggested by the committee that workers may be tested for Mercury before start of mining operations and follow-up testing may be done after every six months to ascertain the impact of mercury from limestone mining operations.

The Committee noted that the State Government has issued a letter of Intent on 17.10.2016 in favour of M/s Lafarge India Pvt. Ltd. for 64.815 ha. Govt. of Chhattisgarh, vide letter dated 3rd November 2017, has issued a letter which inter-alia mentioned that as informed by the lessee that the name of M/s Lafarge India Pvt. Ltd. has changed to M/s Lafarge India Ltd. w.e.f 12.03.2016. Further, the company name has been changed from M/s Lafarge India Ltd. to M/s Nuvoco Vistas Corp. Ltd. w.e.f. 19.05.2017. **Accordingly, the name of the company has been changed in LoI. However, from the order dated 02.02.2016 of the Competition Commission of India, it is clear that Lafarge Holcim Switzerland divested this business. Therefore, it is not a case of name change from M/s Lafarge India Ltd to M/s Nuvoco Vistas Corp. Ltd. rather it is an enterprise sale from M/s Lafarge India Ltd to M/s Nuvoco Vistas Corp. Ltd. which is a separate company with different RoC registration number. The Committee is of the view that the question whether LoI can be sold along with business as per the MMDR Act need to be legally examined. This issue is critical because if LOI cannot be sold then this amounts to a new LoI which cannot be issued. Ministry may, therefore, examine the legal validity of LoI issued to M/s Nuvoco Vistas Corp. Ltd.**

Based on the information submitted and presentation made by PP, the Committee **deferred** the proposal and the proposal may be considered after receipt of above mentioned information.

(2.9). Enhancement of production for existing Ball, China Clay and Silica Sand Mining Project by M/s Dariyav Kanwar, (M.L. No. 07/94), located N/v Litariya, tehsil Jaitaran, Dist. Pali, Rajasthan (MLA: 86.90 ha) (File No. J-11015/39/2017-IA-II(M); proposal No. IA/RJ/MIN/62995/2017) Consideration of TOR

PP did not attend the meeting. The Committee is of the view that the project may be **deferred and delisted and based on the request of PP it may be relisted.**

(2.10). Amendment in Environmental Clearance with increase in the mine lease Area from 163.90 Ha to 211.9887 Ha for the Mining Project "Soapstone, Red Ochre and China Clay (M L No.-81/82)" at Near village-Kakroliya Ghati, Tehsil-Kotri, District-Bhilwara, Rajasthan by M/s Deedwaniya & Sons (File No. J-11015/408/2005-1A.II(M); Proposal No. IA/RJ/MIN/75361/2005) - Amendment in EC

The proposal of M/s Deedwaniya & Sons is for amendment in Environmental Clearance No. J-11015/408/2005-IA.II (M) dated 15.01.2007, w.r.t. increase in the Mine Lease Area from 163.90 Ha to 211.9887 Ha. The mine is located near village-KakroliyaGhati, Tehsil-Kotri, District-Bhilwara, Rajasthan.

The Committee noted that the Ministry has granted the EC vide letter no J-11015/408/2005-IA.II(M) dated 15.01.2007 for production of 60,000 TPA of China Clay, 5000 TPA of Soapstone and 30,000 TPA of red ochre involving the mine lease area of 163.90 Ha. State Govt. of Rajasthan, vide letter dated 24.12.2013 informed that due to calculation and closing error the mine lease area has been increased from 163.90 Ha to 211.9887 Ha and accordingly lessee has to take necessary amendments in the EC. The Committee noted that PP has not applied the amendments earlier and now applied after 4.5 years. **This is non-compliance of EC. The Ministry may take necessary action viz. to issue Show cause Notice as per provisions of the E (P) Act, 1986.**

Based on the information submitted and presentation made by PP, the Committee **deferred** the proposal and sought the following requisite information/clarifications: -

- (i). State Govt. of Rajasthan, vide letter dated 24.12.2013, informed that due to calculation and closing error the mine lease area has been increased from 163.90 Ha to 211.9887 Ha and accordingly lessee has to take necessary amendments in the EC. The Committee noted that PP has not applied the amendments earlier and continued the mining operations. Now PP has applied the amendments in EC after 4.5 years. This is non-compliance of EC. The Ministry may take a decision as per provisions of the E (P) Act, 1986.
- (ii). PP has not submitted the (i) certified production details from DMG since inception of mine; and (ii) CTE/CTO since inception of mine, to verify the compliances of the order of Hon'ble Supreme Court dated 02.8.2017 (Common Cause Vs Union of India &Ors.) in CWP No. 114/2014.
- (iii). The Committee also noted that **it was a violation case at the time of issuance of EC in 2007 and accordingly the Ministry has requested State Govt. of Rajasthan** (Secretary, Environment Department) to take necessary action as per the provisions of the E(P) Act, 1986; However, there is no communication received from the State Govt. about the action taken. In this regard, State Govt. of Rajasthan (Secretary Environment) may be requested for the detailed action on the violation.

- (iv). The Committee is of the view that certified compliance report of earlier EC conditions may be requested from the Regional office of the MoEFCC, Lucknow before further appraisal of the proposal.

(2.11). Amendment in Environmental Clearance for Mining Project "Soapstone (M L No.-15/95)" of M/s Ratan Lal Deedwaniya, located at village-Sahroli, Tehsil-Kotri, District- Bhilwara, Rajasthan (File No. J-11015/248/2006-IA.II (M); Proposal No. IA/RJ/MIN/75413/2007)-Amendment in EC Proposal w.r.t. life of mine from 13 years to 37 years.

The proposal of M/s Ratan Lal Deedwaniya is for amendment in EC w.r.t. life of mine from 13 years to 37 years. The mine is located at village-Sahroli, Tehsil-Kotri, District- Bhilwara, Rajasthan in ML of 38.125 ha.

The Committee noted that the Ministry has granted the EC vide letter no J-11015/248/2006-IA.II(M) dated 18th May 2007 for production of 50,000 TPA of Soapstone involving the mine lease area of 38.125 ha. Lease is valid upto 29.01.2026 as per Govt. of Rajasthan letter dated 12.12.2015.

Based on the information submitted and presentation made by PP, the Committee **deferred** the proposal and sought the following requisite information/clarifications: -

- (i). The Committee also noted that it **was a violation case at the time of issuance of EC in 2007 and accordingly the Ministry has requested State Govt. of Rajasthan (Secretary, Environment Department)** to take necessary action as per the provisions of the E(P) Act, 1986; However, there is no communication received from the State Govt. about the action taken. In this regard, State Govt. of Rajasthan (Secretary, Environment) may be requested for the detailed action on the violation.
- (ii). PP has not submitted the (i) certified production details from DMG since inception of mine; and (ii) CTE/CTO since inception of mine, to verify the compliances of the order of Hon'ble Supreme Court dated 02.8.2017 (Common Cause Vs Union of India &Ors.) in CWP No. 114/2014.
- (iii). Details of approved mine plan/scheme of mining w.r.t. life of mine which increased from 13 years to 37 years.
- (iv). The Committee is of the view that certified compliance report of earlier EC conditions may be requested from the Regional office of the MoEFCC, Lucknow before further appraisal of the proposal.

(2.12). Amendment in Environmental Clearance for Mining Project "Quartz, Feldspar and Mica (M L No.-33/81)" located at village-Daulatagarh, Tehsil-Asind, District-Bhilwara, Rajasthan by M/s Gajendra Enterprises (File No. J-11015/248/2005-IA.II (M); Proposal No. IA/RJ/MIN/75420/2006)-Transfer of EC Proposal

The proposal is case of transfer of EC from M/s Gajendra Enterprises to M/s International Minerals. The EC was granted by the Ministry, vide letter no. J-11015/248/2005 IA.II (M), dated 12th October, 2006 in the name of M/s Gajendra Enterprises for Mining of "Quartz, Feldspar and Mica with production capacity of Quartz 20,000 TPA, Feldspar 27,000 TPA and Mica 180 TPA in an area of 60ha.

The Committee deliberated the information submitted by PP and is of the view that this is a **case of transfer of EC and the Ministry may examine as per the provisions of Rule 11 of the EIA Notification, 2006 and take necessary action as proposed above.**

(2.13). Sand Stone Mining Project (M.L. No. 02/2007) situated near Village Bhuteshwarki Gal Chokdi, Tehsil Bhopalgarh& District Jodhpur, Rajasthan over an area of 22.793 ha. (File No. J-11015/1234/2007-I.A. II(M); Proposal No. IA/RJ/MIN/7326/2008) Amendment in EC Proposal

PP did not attend the meeting. The Committee is of the view that the project may be **deferred and delisted and based on the request of PP it may be relisted.**

(2.14). Raj Kumar Pareek, M.L. No. 01/1980, Near Village Kachola, Area 99.56 Hact., Tehsil - Mandalgarh, District - Bhilwara(Rajasthan) (File No. J-11015/246/2006-IA.II(M); Proposal No. IA/RJ/MIN/11247/2006)-Amendment in EC Proposal

PP did not attend the meeting. The Committee is of the view that the project may be **deferred and delisted and based on the request of PP it may be relisted.**

(2.15). Ball Clay, Fire Clay, Red and Yellow ochre mining lease M.L. No. 45/2005, Area 95.99177 Ha. near village-HandlaBhatian, Tehsil-Kolayat, District Bikaner, Rajasthan by M/s Daulat Singh & Sons. (File No. J-11015/304/2005.IA.II(M); Proposal no. IA/RJ/MIN/71580/2006)- Amendment in EC Proposal

PP did not attend the meeting. The Committee is of the view that the project may be **deferred and delisted and based on the request of PP it may be relisted.**

(2.16). Expansion of Iron Ore Mine with production capacity from 0.25 Million TPA to 0.6 Million TPA (ROM) by M/s Shri Bajrang Power & Ispat Limited, located at Compartment No: 641 & 642, Durgukondal Forest Range, Bhanupratappur (East) Forest Division, Hahaladdi & Chahchad Villages, Tehsil - Durgukondal, Uttar Bastar Kanker District, Chhattisgarh (M.L.A. 75ha)-Amendments in Environmental Clearance

The proposal of M/s Shri Bajrang Power & Ispat Limited is for exemption of General EC conditions no. 10, *"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"*.

The Committee noted that the Ministry has accorded the Environmental Clearance vide letter no. J-11015/150/2016-IA(II)(M) dated 21st February, 2018 for Expansion of Iron Ore Mine with production capacity from 0.25 Million TPA to 0.6 Million TPA (ROM). The mine is located at Compartment No: 641 & 642, Durgukondal Forest Range, Bhanupratappur (East) Forest Division, Hahaladdi & Chahchad Villages, Tehsil – Durgukondal, Uttar Bastar Kanker District, Chhattisgarh.

Based on the information submitted and presentation made by PP, the Committee **has not accepted the request of PP to exempt the general EC condition no. (10), w.r.t. 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"**. **However, the Committee accepted the request of PP for extension of time for compliance of the condition. The Committee recommended for extension of time and accordingly, PP shall comply the above-mentioned EC condition by 31.12.2018.**

(2.17). Amendment in Environmental Clearance of M/s Shree Cement Ltd w.r.t. mention the crushers (5 x 1200 TPH) & ML No. (9/93) issued for expansion of Limestone Production capacity from 19.6 Million TPA to 25.3 Million TPA (34.4 Million TPA (ROM basis) (ML Area – 750 ha, ML No. 9/93), located near Villages – Nimbeti and Jawangarh, Tehsil – Jaitaran, District – Pali, Rajasthan (File No. J-11015/226/2015-IA.II (M); Proposal No. IA/RJ/MIN/56863/2015)-Amendments in EC

The Proposal of M/s Shree Cement Ltd. is for Amendment in Environmental Clearance no. J-11015/226/2015-IA.II (M), dated 11th May, 2017 w.r.t. mention the crushers (5 x 1200 TPH) issued for expansion of Limestone Production capacity from 19.6 Million TPA to 25.3 Million TPA (ML Area – 750 ha, ML No. 9/93). The mine lease is located near Villages – Nimbeti and Jawangarh, Tehsil – Jaitaran, District – Pali, Rajasthan.

The Environmental Clearance was granted by the Ministry, vide letter no. J-11015/226/2015-IA.II(M), dated 11th May, 2017 for expansion of Limestone Production capacity from 19.6 Million TPA to 25.3 Million TPA (34.4 Million TPA (ROM basis) in ML Area of 750 ha (ML No. 9/93). The mine is located near Villages – Nimbeti and Jawangarh, Tehsil – Jaitaran, District – Pali (Rajasthan). The EC was further amended vide letter no. J-11015/226/2015-IA.II (M), dated 27th November, 2017.

PP reported that at 19.6 Million TPA capacity of limestone, 4 Nos. of crushers (4x1200 TPH) have already been installed and for expansion from 19.6 to 25.3 Million TPA limestone, one additional crusher of 1200 TPH was proposed to install. PP has mentioned that as per RSPCB

office order no. CD&SCMG(Gen-03)/RSPCB/1235-1271, dt. 24.01.2017, CTE condition no. 23 and CTO condition no. 22, crushers capacities (5 x 1200 TPH) & ML no. (09/93) are to be mentioned in Environmental Clearance along with ML no. However, in the EC, crusher is mentioned but capacities are not mentioned. Therefore, PP requested to amend the EC to mention the crusher's capacities and ML No. as all these information was incorporated in Form-1, EIA/EMP Study Report and Approved Modified Mining Plan submitted to the MOEF&CC while seeking the EC.

The proposal of EC was earlier considered by the Expert Appraisal Committee in its meeting held during **May 14-15, 2018** wherein the EAC **deferred** the proposal. The Committee deliberated the issues for inclusion of 5 Nos. of crushers (5x1200 TPH) in the EC. The Committee is of the view that PP first clearly whether PP had made the EIA/EMP report on the basis of impact study of crushers which were installed and yet to be installed within the Mine lease area. The Committee also of the view that PP needs to submit the details of crushers viz. process, technology, pollution load on environment, air pollution control devices installed and its efficiency, analysis of air pollutants and details of impact study etc. The Committee deliberated the issues for inclusion of 5 Nos. of crushers (5x1200 TPH) in the EC. The Committee is of the view that PP first clearly whether PP had made the EIA/EMP report on the basis of impact study of crushers which were installed and yet to be installed within the Mine lease area. The Committee also of the view that PP needs to submit the details of crushers viz. process, technology, pollution load on environment, air pollution control devices installed and its efficiency, analysis of air pollutants and details of impact study etc.

In this context, PP has mentioned that the EIA/EMP report submitted while seeking EC at 25.3 Million TPA limestone (ROM 34.4 Million TPA) includes the impact study of already installed four crushers and one proposed crusher. The details of crusher viz. process and technology are submitted by the PP.

PP reported that there is no violation of order dated 02/08/2017 of Hon'ble Supreme Court in the matter of common cause in CWP no. 114/2014. No demand has been raised by Dept. of Mines & Geology, State Govt. No payment has been made to Dept. of Mines & Geology, State Govt. Based on the production details provided by the PP, the PP has not enhanced the production capacity after grant of EC. **However, PP has not submitted the authenticated past production details authenticated by the DMG, State Govt. of Rajasthan to ascertain the violation, if any made by the PP.**

The Committee also noted that PP vide letter dated 10.07.2018 has reported that they have submitted the production details from 1996-2017 which is duly authenticated by the DMG, State Govt. of Rajasthan; However, the authenticated production details is provided only from 1996-97 to 2012-13. **PP has not submitted the authenticated production details from DMG from 2013-2018. PP needs to submit the authenticated past production details from DMG from 2013-2018 or in a single letter since inception of mine to ascertain the violation, if any, of the order of Hon'ble Supreme Court dated 02/08/2017** in the matter of Common cause in CWP no. 114/2014. No demand has been raised by Dept. of Mines & Geology, State Govt.

Based on the information submitted and presentation made by PP, **the Committee is not satisfied with the presentation/report submitted by the PP. The project proponent has**

not submitted the modeling report to ascertain whether the input factor w.r.t. crushers have been taken care at the time of preparation of the EIA/EMP report or not. The Committee deferred the proposal.

Day 2: Dated: July 20, 2018 [Friday]

(2.18). Mining of 21428 TPA of Soapstone form mining lease area 6.683 Ha located at village Pokhari&Bintoli, Tehsil & District- Bageshwar, State-Uttarakhand stone by M/s Nirmala_Dafoti [File No. J-11015/78/2018-IA. II (M); Proposal No. IA/UK/MIN/62391/2017; Consultant: M/s Overseas Min-Tech Consultant]-Cat. B2 EC Regarding

The proposal of M/s Nirmala Dafoti is for the production of 21,428 TPA of mining/extraction of Soap stone from an area of 6.683 ha located at village Pokhari & Bintoli, Tehsil & District-Bageshwar, State-Uttarakhand. The mine site is located between latitude 29° 48' 53.4" to 29°49'07.8 N and Longitude 79°50'37.6" to 79°50'52.4" E. The Mining Lease Area is a part of the Survey of India Topo-sheet No. 530/15.

The Project Proponent submitted a Cluster Certificate issued by Mining Officer, Bageshwar as per which there are three other mining leases of area 1.979ha, 1.740ha and 4.924ha within 500 meters of the proposed project. The mining lease have already been granted to ML having area 1.979ha & 1.740ha. The Environmental Clearance has also already been granted to these mining lease before 15.01.2016. Thus, the total cluster area is **11.607 Ha (6.683+4.924)**. Although the Cluster area is less than 25 Ha but as one of the mining lease is more than 5 Ha. It is informed to the Committee that a proposal is under consideration in the amendments in the EIA Notification. The SEIAA, Uttarakhand is not operational and thus the project is considered in the Ministry for grant of EC.

The Proponent submitted that Letter of Intent (LoI) for grant of mining lease over 6.683 ha has been issued in favor of M/s Nirmala Dafoti by Government of Uttarakhand vide letter no 936/VII- 1/08/Soapstone/2016 dated 26/07/2016 for a period of for 50 years through e-auction process. But in the same letter is has mentioned that PP needs to comply with the conditions of LoI within 6 months. **The Committee noted that LoI was issued on 26.07.2016 and was valid till 25/01/2017 and PP needs to re-validate the same.**

The total mining lease area is 6.683 ha out of which 0.479 ha is Govt. land, 5.681 ha is agriculture land & 0.523 ha is other (public use land). NOC has been obtained from land owners and only on that basis letter of intent & mining plan has been approved.Total water requirement will be 10.0 KLD which will be provided daily from the springs /nallas from the nearby village and will be supplied to mine through tankers & permission has been taken from gram Panchayat. The PP also submitted a NOC issued from Gram Panchayat Nayal for withdrawal of 10 KLD water for the mining operations. Ultimate working depth is 12 m below surface level. Total Manpower required for the project is 67 for supervisory, operation of machineries, mining & mineral sorting and Environment Protection Measures. Maximum employment will be local.

The Mining Plan with PMCP has been approved by Director Geology and Mining Unit, Directorate of Industries, Uttarakhand, Dehradun vide letter No. 1687/Main Mineral/ MA0Pla0 – TOC0/ 57/ Bhu Khanij/ 2015-16 dated 30/11/2016. The method of mining shall be opencast mechanized mining without drilling & blasting. The excavator will be used for extraction of soil and mineral, draggers will be used. The Vehicles trucks/dumpers will be used for transportation of mineral from PWD road to Haldwani. The bench height & width will be 3 meters. **The PP in its presentation mentioned that aerial ropeway shall be installed if feasible. The Committee noted that Machinery proposed by PP particular draggers & aerial ropeway is not mentioned in the mining plan. Further, installation of aerial ropeway required EC under Category 7(g) of EIA Notification, 2006.**

The Project Proponent submitted that Lr. No 369/9.2 dated 11.08.2017 issued by DFO, Bhageshwar wherein it has mentioned that no forest land is fall within the mining lease area and Schedule-1 Species such as Leopard/Panther and Asiatic Black Bear is present near the mining lease area. The DFO also certified that there is no National Park/wildlife Sanctuary or any other Eco-Sensitive is lies within 15 Km of the mining lease area. The DFO also certified that PP has submitted the wildlife conservation plan for sechedule-1 species and the amount earmarked for the same is ₹25.50 Lakh. **The Committee observed that Conservation Plan is not submitted to Chief Wild Life Warden rather it is submitted to DFO. The PP needs to submit the Conservation Plan to Chief Wild Life Warden for approval.**

The Proponent submitted the Environmental Management Plan wherein it has mentioned that amount proposed for providing amenities/facilities for mine workers shall be ₹ 60,000 (Capital) (for shelter, safe drinking water, sanitation facility) & ₹1.3 Lakh (Recurring) which include 40,000 for drinking water facility, ₹ 30,000 for occupational health surveillance program, ₹ 25,000 for providing fuel for cooking and ₹ 35,000 for education for children. The PP submitted that for environmental protection activities 8 Lakh is proposed which include ₹50,000 for water spraying, ₹1.5 Lakh for construction of retention wall, check dams, water drains, mobile toilets etc., ₹ 1.5 lakh for environment monitoring, ₹ 1.0 lakh for green belt development and ₹ 3.5 lakh wildlife conservation plan. The PP submitted that the budget proposed under ESR is ₹ 6.6 Lakh and activities proposed are a) Rain water harvesting (₹ 40,000), b) Village development programs, social scheme at Gram Panchayat, Contribution towards educational institute, hospitals, poverty eradication programmes, construction of sanitary toilets, cleanliness programme at village (₹ 2.0 Lakh), women empowerment through self-help group (30,000), Common Vocational Training Centre (25,000), Maintenance of tracks , village foot-path etc.(65,000) , medical examination and Occupational health surveillance program for worker and habitants cost of insurance for workers and mules (3 Lakh). In addition to this PP submitted that Rs 3.5 lakh is proposed under Corporate Social Environment Responsibility which will be spent on the advice of District Environment Authority/Regional Environment Authority.

The Proponent submitted that the total cost of the project is ₹20 Lakh (including land cost). The Capital Cost for Environment Protection is ₹4.50 Lakh with Recurring cost of ₹8.0 Lakhs per annum. The Proponent submitted that no litigation is pending against the project. The Project proponent submitted that 67 (Skilled and unskilled persons) persons will be engaged for the project.

Based on the presentation made and document submitted the made the following observation.

- a) The documents submitted by the online is not legible and Committee warned the PP/consultant to take due care while uploading the documents online.
- b) The Committee observed that mining lease is coming under cluster situation with cluster area of 11.607Ha. But the EMP submitted by the PP is not for the cluster.
- c) The PP submitted that in the mining lease area Gul&Gadhera (Seasonal) is passing. Therefore, on both side of Gul&Gadhera a retention walls of 1-meter height shall be erected. The area is prone to heavy rainfall and to retard the speed of water check dams shall be constructed of 0.3 m height at an interval of 20-30 m. The Committee was of the view that 1-meter retention shall not provide sufficient protection. The PP also admitted that previously they have constructed the retention wall of 3 meter height but the same was damaged due to heavy rainfall.The Committee thus was of the view that PP should submit the detail plan for the protection of the Gul&Gadhera. The Committee also asked the PP to submit the photograph of retention wall constructed for the adjacent mine lease of the same PP.
- d) The Committee was of the view that PP should provide the details of all Statutory provision applicable for this project, particular distance to be left on the both side of Gul&Gadhera (Seasonal) passing through the mining lease and accordingly revise the mining plan.
- e) On viewing the KML file on Goggle Earth, the Committee noted that mining has been carried out at the lease boundary. It seems that PP has carried out mining outside the mining lease for which EC has already been granted. The Committee was of the view that a clarification may be sought from the DMG, Utrakhand in this regard that PP has not extended the mining activity beyond the lease boundary.
- f) The Committee observed that total excavation is 37758 Tonne (Soapstone 21485, waste 14285 Tonne and Top Soil 2045 Tonne). But PP applied for 21485 TPA. Thus, the Committee was of the view that PP should apply for total excavation 37758 TPA and prepare the EMP accordingly.
- g) The PP submitted that 3305 saplings shall be planted on 2.250 Ha areas. The Committee was of the view that plant species shall be selected in consultation with local people, Forest Department and as per CPCB Guidelines.
- h) The PP submitted that material shall be transported in 50 KG bags. The Committee was of the view that material shall be transported in bags of not more than 25 KG each.
- i) The PP submitted that garland drains shall be constructed. The Committee was of the view that PP should submit the dimensions of the garland drain and its location on the plan, area, budgetary provisions and other details.
- j) The LOI submitted by the PP is not valid and PP did not submit the LOI after revalidating.

- k) The chemical analysis report of the mineral needs to be submitted to ascertain the percentage of Silica.

Based on the information submitted and presentation made by PP, the Committee **returned the proposal in present form** and the proposal may be considered after submission of above mentioned requisite information.

(2.19): Mining of 4.0 LTPA of Dolomite from Malkapuram Dolomite Mine having mining lease area 73.113 Ha, located at Kochervu and Malkapuram Villages, Dhone Mandal, Kurnool District, Andhra Pradesh by M/s Sri Balaji Works [File No. J-11015/460/2012. IA. II (M)]; Proposal No. IA/AP/MIN/9059/2012;]-Reconsiderations of EC

The proposal of M/s Sri Balaji Works is for the production of 4.0 lakh Tonnes of Dolomite from an area of 73.113 Ha located at Kochervu and Malkapuram Villages, DhoneMandal, Kurnool District, Andhra Pradesh. The proponent submitted that the Government of Andhra Pradesh had granted LoI no. 12361/MI. (1)/2009 dated 18.06.2012. The mine site is located between 15°20'39.20" to 15°21'02.60"N latitude, & 77°54'37.60" to 77°55'41.50"E longitude. The Mining Lease Area is a part of the Survey of India Topo sheet No. 57/E/15 & 57 I/3. 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/9059/2012 applied online for grant of ToR on 11.12.2012 submitted Form-1 and Pre-Feasibility Report. The proposal was considered in EAC meeting held on 13-15th March 2013, wherein, the Committee recommended for grant of ToR. The ToR was issued vide Lr. No. J-11015/460/2012. IA. II (M) dated 30.04.2013. As the Public Hearing was delayed extension in ToR was granted vide Lr. No.J-11015/460/2012. IA. II (M) dated 13.04.2016.

The PP after conducting Public Hearing applied online vide proposal No IA/AP/MIN/9059/2012 on 07.04.2017 for grant of EC and submitted the EIA/EMP report. The proposal was considered in EAC meeting held on **May 29-30, 2017** wherein the Committee deferred the proposal as the PP did not attend the meeting. The proposal was then considered in EAC meeting held on **28th June 2017** wherein the Committee deferred the proposal for want of requisite information. The PP submitted the desired information vide LR No SBW/MOEF&CC/2017 dated 06.12.2017. As the documents submitted by PP were not complete in all respect the requisite information was sought from PP on 11.01.2018. The PP vide Lr No SBW/MOEF&CC/2018 dated 19.02.2018 submitted the information and proposal was then re-considered in EAC meeting held on **March 22-23, 2018** wherein the Committee deferred the proposal for want of requisite information. The vide LR No SBW/MOEF&CC/2018 dated 30/06/2018 submitted the information and the proposal is considered in EAC meeting held on **19-20 July 2018**. The submission made by the PP and the observation of the committee are as follows: -

(a) Proponent should submit an undertaking to the effect that mining will not be carried out in the agricultural area, the agricultural area will be excluded at the time of execution of lease deed and mining plan will be revised for the reduced area.

The PP has submitted an undertaking vide LR dated 30.06.2018 wherein, it has mentioned that *"The mining will not be carried out in the agricultural area, the agricultural area will be excluded at the time of execution of lease deed and mining plan will be revised for the reduced area."*

(b) Proponent should submit a plan clearly showing the no mining area. The area of no mining zone needs to be provided in the same plan with geo-locations.

PP submitted a plan clearly showing the area of mining and no-mining Zone. The Latitude & Longitude. The Committee observed that mining in the western side (between pillar no 1,2,8,15,65,68, and 69) of the mining lease is not possible as the area of mining is less, a road is passing through the ML and formation of proper bench in this case would be difficult. The PP also agreed with the same and submitted that no mining shall be carried out in the western part of the mining lease. The Committee thus asked the PP to submit the final area of mining and no mining zone by the end of the day. Committee noted that PP has submitted the map but did not provide the details of survey number which will be excluded and what will be the final area of the mining.

(c) The PP should submit the District Survey Report (DSR) as required as per S.O 141(E) dated 15.01.2016. The Ministry should also get the clarification on the same from the concerned authorities.

PP submitted a copy of DSR as required as per S.O 141(E) dated 15.01.2016 and also informed that it is available on the website of the State Govt. of Andhra Pradesh at <http://www.kurnool.ap.gov.in/newsTitles.apo?mode=getNewsDetails&id=871>.

(d) PP should submit the detailed activity-wise time bound action plan for implementation of Enterprise Social Commitment (ESC), Environmental Management Plan (EMP), and Occupational Health and also provide the budget for the same.

The Committee asked the PP to revise the EMP, CER and Occupational Health Plan. PP vide LR SBW/MoEF&CC/2018 dated 20.07.2018 submitted that the total budget for CER shall be ₹28.7 Lakhs which includes a) ₹ 1.20 Lakhs for construction of rainwater harvesting structures at shallow areas of village Kannnappakunta (4pit) and Kamalapuram (2 pits), b) ₹ 2.50 Lakhs for construction of bore well to the nearby village (Kannnappakunta near to agriculture fields), c) ₹ 14.00 Lakhs for strengthening of road (connecting Kannnappakunta and Kamalapuram-3.5 km), d) ₹2.00 Lakhs for repairing & deepening of the non-working bore wells , e) ₹3.00 Lakhs for distillation of village ponds, providing bus shelter, f) ₹5.0 Lakhs for provision of computer to the school and g) ₹1.00 Lakhs for supporting sanitary needs for girls students (napkins).

PP submitted that budget (capital cost) earmarked for occupation health shall be ₹ 1.05 Lakh pre-medical examination of 21 persons, 0.63 Lakh providing personnel protection equipment to 21 persons), and recurring cost for occupation health shall be ₹0.85 Lakh pre-medical examination, 0.65 Lakh for wear and tear replacement of personnel protection equipment of 21 persons. The capital cost shall be spent before commencement of mining operation and recurring cost annually.

PP submitted that the budget for implementation of EMP shall be ₹15.8 Lakhs (capital) and ₹16.0 Lakh (recurring) which includes a) ₹ 11.0 Lakhs (Capital) & ₹4.0 Lakh (recurring) for deploying of water tanker for dust suppression- 5 kl capacity, b) ₹ 1.05 Lakh (Capital) & ₹0.85

Lakh (recurring) pre-medical examination of 21 persons, ₹0.63 Lakh (Capital) & ₹0.65 Lakh (recurring) for providing personnel protection equipment to 21 persons), ₹2.5 Lakh (Capital) & ₹0.5 Lakh (recurring) for greenbelt development in 6.63 Ha area @1500 saplings/Ha, ₹0.50 Lakh for construction of septic tank followed by soak pit (3 kl capacity), and ₹0.12 Lakh for rainwater harvesting pit (storm trenches and pit within ML area), and environmental monitoring ₹ 10.0 Lakh.

The PP submitted that other issues will be taken up under CSR @ ₹ 12.2 Lakhs/annum for repairing of non-working bore wells, deepening of non-working bore wells, de-siltation of village ponds, providing bus shelter, provision of merit scholarship for higher education, conducting health camps, financial support to the local village Panchayat in constructing and improving the drainage and sanitation system of Kannappakunta village, construction of farms ponds in agriculture lands.

Based on documents submitted and discussion held the Committee was of the view that PP has not provided the survey number of the area which will be excluded from the mining lease and also the area of the mining and no-mining zone. The Committee also noticed that justification for the change in the mining plan previously submitted by PP was that "Based on the revised ML boundaries authenticated by Govt. of Andhra Pradesh, Department of Mining & Geology and as per the NOC and condition issued by Govt. of Andhra Pradesh, Forest Department the PP has revised the mining plan and obtained approval on 2.11.2017." The PP also submitted in its previous presentation that "there are no change in the survey numbers, jurisdiction, mining lease area and production capacity".

The Committee noted that on perusal of the mining plan it has found that there are changes in the modified mining plan and such changes was not brought to the notice of the Committee neither the PP has submitted any justification for the same. The Committee was thus of the view that PP should submit a letter from the DMG, AP confirming that there are no changes in the modified mining plan as compared to previous mining plan submitted during the public hearing except for leaving a safety barrier of 50 meters for the adjacent forest area. **The DMG, AP should verify that there is no change in in modified mining plan w.r.t to production planning, waste generation, Mineable Reserves, Life of mine, Method of blasting, type of explosive, drilling & blasting parameters, financial assurance, area put in use during the plan period, type of machinery, land use at conceptual stage etc.** The Committee therefore **deferred** the proposal and was of the view that proposal can only be considered after receipt the above information. **The Committee also observed that the proposal was considered in many times before the EAC; however PP is unable to provide the satisfactory requisite information and accordingly the Committee warned the PP to submit the information accurately.**

(2.20) Building Stone Quarry (Minor Mineral) with proposed production capacity of 5,00,000 MTA for an area of 12.4408 ha of Sy. Nos. 184/1A, Elappara Village, Peermade Taluk, Idukki District, Kerala by M/s Kizhakethalackal Rocks – (F.No. J-11015/72/2018-IA-II(M) & Online No.IA/KL/MIN/75654/2018)- Consideration of EC as Category 'B2' minor mineral

The proposed minor mineral (Building Stone) quarry project in the lease area of 12.4408 ha for production of 5,00,000 MTA is located in hilly area at Sy. No. 184/1A, Village Elappara,

Peermade Taluk, Idukki District, Kerala. The proposed mine is a fresh mine and has no vegetation in that area. Most part of the mine area is exposed and other land is covered with native trees, shrubs, herbs, grass, climbers, bushes etc. The highest elevation of the mine area is 1300 m. MSL and lowest is 1085 m MSL. As the proposed area is hilly, the drainage of the mine area is towards NW to SE. No habitants are located in the mine area.

Letter of Intent for mine lease of 12.4408 ha has been issued by the Directorate of Mines and Geology, vide letter dated 8.5.2018. Form-1, Pre-feasibility Report, Approved Mining Plan and Environmental Management Plan have been submitted. Cluster Certificate from the Geologist, Department of Mines and Geology vide letter dated 28.6.2018 has been provided which states that there are no mining leases within 500 m radius of the proposed mine lease. Accordingly, the proposed project is to be considered by SEIAA as Category 'B2' project. The category 'B2' and minor mineral project requires submission of Form-I, Pre-feasibility Report, Approved Mine Plan, Environmental Management Plan and District Survey Report. Category 'B2' projects does not require ToR, EIA studies and Public Hearing/Consultation. As the SEIAA Kerala is not functional at present, the proposal is considered at the Central Level by MoEFCC.

The Committee noted that the Project Proponent has applied in ToR category. PP needs to submit the online application in the EC category. **The Committee also noted that the exact composition of mineral is not clear to the project proponent as it is only granite or building stone or mixture of granite and building stone.** The Committee further noted that Ministry may confirm whether the proposed mining lease in Village Elappare is falling in Western ghats ESZ or not. Further, their form-1 does not mention the total handling of material which includes Useful mineral, waste, overburden and top soil. Further, project proponent is not clear about how drilling and blasting activities. Certificate from Forest Department regarding involvement/non-involvement of forest land within the mine lease is not submitted along with the application. Certificate from Wildlife Department regarding presence of notified protected areas and Schedule-I species within 10 km radius of the project is not submitted along with their application.

Based on the information submitted and presentation made by the PP, the Committee after deliberations returned the application in the present form with following suggestions:

- (i). Project Proponent should apply in the EC category instead of ToR application.
- (ii). Certificate from Forest Department stating the involvement/non-involvement of Forest within the mine lease.
- (iii). Certificate from Wildlife Department regarding presence of wildlife protected areas and Schedule-I species within mine lease area as well as 10 km radius from the proposed mine lease.
- (iv). PP should clarify the mineral(s) for which mining will be carried out. A chemical composition of the mineral shall be submitted.
- (v). Details of type of rock and geology, method of mining, machinery details, blasting details etc. needs to be provided;
- (vi). Details of haulage roads, slope at different sections needs to be provided;
- (vii). 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).

- (viii). 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;
- (ix). Test Reports of Free Silica Concentration need to be submitted as the granite contains 40% Silica.
- (x). Details of Occupational health along with budgetary provisions needs to be elaborated;
- (xi). Details of connectivity from mine to crusher and its transportation plan needs to be elaborated;
- (xii). Details of total handling of material shall be submitted in the form-1.
- (xiii). In case of large hole dia blasting, justification shall be provided how the drilling rig and other machinery will be taken to the mining site as it is located in the hilly area.

(2.21): Mining of 947368 m³ of Sand, Bajri and Morrum in River Yamuna by M/s Prime Vision Industries Ltd from mining lease area 52.63 Ha located at village: Dareya Baramad, Gata No. 1/1, Tehsil: Sadar, District: Saharanpur, Uttar Pradesh. [File No. J-11015/73/2018-IA-II (M); Proposal No: IA/UP/MIN/75643/2018; Consultant: M/s Overseas Min-Tech Consultant Jaipur.]-ToR Regarding

The proposal of M/s Prime Vision Industries Ltd is for production of 947368 m³ of Sand, Bajri and Morrum in River Yamuna from mining lease area 52.63 Ha, located at the village: Dareya Baramad, Gata No. 1/1, Tehsil: Sadar, District: Saharanpur, Uttar Pradesh. The Project Proponent submitted that mining lease area is coming under Survey of India Topo-Sheet No 53F/8 and falls between Latitude: 30° 05' 23.11" N to 30° 05' 56.08" N & Longitude: 77° 22' 50.55" E to 77° 23' 30.42" E. The Mining lease lies in seismic Zone IV as per IS: 1893 (Part-I):2002. **PP did not attend the meeting; However, the Committee observed the following.**

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 is more than 50 Ha. The Project Proponent applied online on 30.06.2018 and submitted Form-1, Pre-Feasibility Report and Approved Mining plan and the proposal was placed in the EAC meeting held on 19-20 July, 2018. The Proponent submitted that Letter of Intent (LoI) for grant of mining lease over 52.63 ha area has been issued in favor of M/s Prime Vision Industries Ltd. by Government of Uttar Pradesh vide letter no 421/ खनिज/ 2017-18 dated 15.03.2018 for a period of 5 years through e-auction process.

The Proponent submitted that mining plan was approved by Department of Geology & Mining, Govt of Uttar Pradesh vide Lr. No. 229/मांत्लाना/ 2017 dated 07.05.2018. The mining operation shall be carried out by Open Cast Semi-mechanized method. Light weight excavator will be used for digging & loading of mineral in dumpers and tippers. No drilling & blasting shall be carried out. PP submitted that no waste or mineral reject will be generated. The PP submitted that the total Geological Reserve is 1578900 M³ and the mineable reserves is 947368 M³ (60% of Geological Reserve). PP submitted that annually 1042074 M³ of material (66% of the total geological reserves) will be replenished. The Mining shall be carried out up to a depth of 3 meters and a barrier of 7.5 shall be left from the lease boundary.

The Project Proponent submitted that there is no Forest & Agricultural land in the Mining

lease area and it is on undulated river bed. The entire 52.63 Ha is Govt. waste land. The Project Proponent submitted that total water requirement for the Project shall be 9.58 KLD [0.88 KLD for drinking, 3.2 KLD for dust suppression and 5.5 KLD for greenbelt & plantation]. The ground water table is 9-8 Meters below ground level. The Project Proponent submitted that there is no Ecological Sensitive Area such as National Park, Wildlife Sanctuary, Biosphere Reserves, & mountains falls within 10 KM of the Mining lease. The Project Proponent submitted that the total Project Cost shall be 4.0 Crores and give employment to around 52 persons.

The proposal was placed in the instant EAC meeting held during 19-20 July 2018 but the PP did not attend the meeting. The KML file shown to the Committee. The Committee observed that in the EAC meeting held on 14th -15th May 2018 rejected the proposal No. IA/UP/MIN/73380/2018 of M/s Prime Vision Industries Private Ltd. as large No, of agriculture fields were within the mining lease area and major portion of the mining lease is falling on the bank of the river. **The Committee observed that in the instant case the complete mining lease is having agricultural fields and it is not falling on the river bed.** The Committee also noted that coordinates as proposed by PP in PFR is not matching with what provided in the Mining Plan. The Committee noted that Capacity mentioned by the PP in the Form-1 is in m³ and the area is mentioned as '0' Ha. The Committee therefore **rejected the proposal** and suggested the Ministry to inform the DMG of the State Government / SEAC/SEIAA about the recommendations of the Committee of this proposal.

(2.22):Mining of Soapstone with proposed production capacity of 21597 TPA from Bhardwari, Gol, Pokri Soapstone Mine having mining lease area 11.160 Ha, located at Village: Bhardwari Gol Pokhri Taluka: Gangolihat District: Pithoragarh State: Uttrakhand by M/s K.S. Minerals [File No. J-11015/74/2018-IA-II (M); Proposal No: IA/UP/MIN/70000/2018; Consultant: M/s Udaipur Min-Tech Private Limited]-Consideration of EC Cat. B2 Regarding

The proposal of M/s K.S Minerals is for production of 21,597 TPA of Soapstone from Bhardwari, Gol, Pokri Soapstone Mines having mining lease area 11.160 Ha located at Village: Bhardwari Gol Pokhri Taluka: Gangolihat District: Pithoragarh State: Uttrakhand. The Project Proponent submitted that mining lease area is coming under Survey of India Topo-Sheet No 53 O/13 & 53 O/14 and falls between Latitude: 29° 45' 31.58" N to 29° 45' 38.83" N & Longitude: 79° 56' 47.70" E to 79° 56' 4.85" E. The Mining lease lies in seismic Zone V.

The Project Proponent submitted a Cluster Certificate issued by Mining Officer Pithoragarh vide LR No 310 dated 03.10.2017 as per which there are two other mining leases within 500 meters of the proposed project and the total cluster area is 19.269 Ha. It is informed to the Committee that a proposal is under consideration in the amendments in the EIA Notification. The SEIAA, Uttarakhand is not operational and thus the project is considered in the Ministry for grant of EC.

The Project Proponent applied online on 29.09.2017 and submitted Form-1, and Pre-Feasibility Report, copy of letter of Intent, approved Mining plan and EMP. As the proposal was not complete in all respect essential details was sought on 12.10.2017, 04.04.2018 and 12.06.2018. The PP replied to the EDS on 05.03.2018, 10.05.2018 and 30.06.2018 respectively. The proposal is now placed before the present EAC meeting.

The Proponent submitted that Letter of Intent was granted vide Lr No 719/VII-1-13/177-ख/2010 dated 10.06.2013. The LoI was valid for 6 months and the same renewed for 5 more months vide LR. 1078/VII-1/2015/177-ख/2010 dated 30.07.2015. The same was further renewed for 10 months vide LR No. 1305/VII-1/177-ख/2010 dated 05.12.2016. The Govt. Uttarakhand, vide Lr No. 612/जि०टा०फो०पिथो०भू०निरी०/2017-18 dated 09.03.2018 wherein it has mentioned that EC is awaited for the above mining lease and action shall be taken only after grant of EC.

The Proponent submitted that Mining Plan was approved by Department of Geology & Mining, Govt. of Uttarakhand, vide Lr. No. 2021 dated 02.02.2017. The mining operation shall be carried out by Open Cast Semi-mechanized method. The mining shall be carried out in three pits viz. Pit-1, Pit-2 and Pit-3. The average thickness of soil has been considered as 0.50m & it shall be stacked separately. The PP submitted that the soapstone shall be extracted with the help of cow bar, chisel, pickaxe, hammer, spade as well as by means of an excavator and different grade of soapstone will be stacked separately near the mining faces. The height of the width of the benches shall 3 Meter & 4 Meter respectively. The slop of the benches shall be kept between 70-75 degree. PP submitted that the Soapstone is soft mineral and therefore, no drilling and blasting shall be required. The soapstone shall be dressed manually & stacked separately. No further beneficiation shall be undertaken during the first five years. The different grade of soapstone will be filled into 50kg plastic bags & transported the road side by mules. From roadside the soapstone bags will be loaded into trucks through manually and transported to Haldwani. Activities like waste dumping, stacking ore, subgrade mineral rejects, beneficiation depositing tailing etc. shall be carried out within lease area. A 50 m barrier from habitation & PWD road has been considered as restricted zone for mining & no mining & allied activities shall be carried out within restricted zone. Retaining wall shall be erected away the nala to check the sedimentation along nala. The PP submitted that weathered soapstone and reject (mainly fine fragments of soap stone contaminated with iron and highly siliceous and gritty in nature with more than 3% iron content) will be the waste of the applied area. During the plan period of mining activity total waste will 12,113 m³ including O.B and rejects. Quantum of O.B will be less and will be kept at the stacking yards. Backfilling will be done after complete exploitation of the ore. The PP submitted that the total geological reserves available are 1, 09,437 tonnes of Soapstone. The expected life of the mine is 5 years.

The Project Proponent submitted that project does not involve clearance under Wildlife Protection Act, 1972, Forest Conservation Act, 1972 and CRZ Notification 2011. The proponent submitted that entire mining lease area of 11.160 Ha is an agricultural land. The Project Proponent submitted that total water requirement for the Project shall be 10.7 KLD [3.2 KLD for domestic use, 6.0KLD for dust suppression and 1.5 KLD for green belt]. The PP submitted that the water for the project shall be sourced from nearby villages and also that the water from the mine during rainy season will be collected and utilized for dust suppression measures. The PP submitted that domestic and service building effluents are collected by a sewerage system and biological treatments is adopted by means of septic tanks and soak pits.

The PP submitted the list flora fauna duly authenticated by DFO as per which there are

two Schedule-1 Species viz. Sloth Bear & Indian Leopard. The PP has also submitted the Conservation Plan of schedule-1 species found in the study area. The Budget earmarked for the same is ₹ 10 Lakh (Capital) and ₹ 6.0 Lakh (Recurring). The PP submitted that 1850 species shall be planted every year around the mining site in consultation with Govt. Body/Local authorities. The PP submitted the EMP for the cluster of total area 19.629 Ha. The Committee noted that EMP is not prepared for entire cluster also the EMP uploaded and EMP submitted during the meeting is different. The Committee thus asked the PP to submit the EMP for entire cluster.

The Project Proponent submitted the Lr No. 562/छत्तीस-08/2017-18 dated 15.12.2017 issued by DM, Pithoragarh to Director, DMG, Uttarakhand wherein it has mentioned that DSR for Soapstone has already been submitted. PP also provided a copy of DSR. The PP submitted that the amount earmarked for the EMP shall be ₹ 16.0 Lakh (Capital) & ₹ 11.0 Lakh (recurring) which includes a) ₹ 8.0 Lakh (Capital) & ₹ 1.5 Lakh (recurring) for Dust Suppression (overhead Sprinklers & water tanker), b) ₹ 2.4 Lakh (recurring) for pollution monitoring, c) ₹ 3.5 Lakh (Capital) & ₹ 2.4 Lakh (recurring) for construction of garland drain, d) ₹ 3.0 Lakh (recurring) for Green belt development, and e) ₹ 4.5 Lakh (Capital) & ₹ 1.5 Lakh (recurring) for construction & maintenance of haul roads. The PP submitted that the amount earmarked for the CER shall be ₹ 1.4 Lakh which includes a) ₹ 0.5 Lakh for tank for drinking water facilities, b) ₹ 0.4 Lakh for solar lamp distribution in village and c) ₹ 0.5 Lakh for construction of community toilets.

Based on the information furnished and presentation made by the PP, the Committee **returned in the present form** and PP may apply for EC after addressing the following issues:

- (i). The Committee observed that as per mining plan the total maximum excavation will be 44323 Tonne (Soapstone 21597, waste 12459 Tonne and Top Soil 1241 Tonne). But the PP applied for 21597 TPA. Thus, the Committee was of the view that PP should apply for total excavation 44323 TPA and prepare the EMP accordingly.
- (ii). The Committee noted that EMP is not prepared for entire cluster also the EMP uploaded and EMP submitted during the meeting is different. The Committee thus asked the PP to submit the EMP for entire cluster.
- (iii). The revised list of species to be planted for green belt development needs to be submitted.
- (iv). The chemical composition of the mineral clearly providing the % of free silica needs to be submitted.
- (v). The employment details need to be changed as mining engineer is shown part time.
- (vi). The PP should clearly specify the requirement of the water and also provide NOC for withdrawal from concerned authorities.
- (vii). PP needs to submit the revised KML file as same is not matching with the lease map.
- (viii). PP did not submit the plates of the mining plan and same needs to be provided.
- (ix). The lease area is under Natural Hazard and subsidence is expected. The PP thus needs to submit the detailed safety & disaster management plan for subsidence, Slope Stability and inrush of water in the mining lease area.
- (x). The Mining Plan should be verified and corrected for leaving the statutory barriers for mine boundary, from water bodies, land allocated for public use, provision of garland drains with its complete specification, provision of retention wall etc.
- (xi). PP has applied online for ToR it is suggested that PP should apply on the portal for EC.

(2.23): Mining of 0.60 MTPA of Limestone from Ittigehalli Limestone Mine having mining lease area of 80.94 ha, located at village-Ittigehalli, Tehsil- Hosadurga, District- Chitradurga, Karnataka by M/s Mysore Housing Co. Pvt. Ltd [File No.J-11015/75/2018-IA_II(M);Proposal No: IA/KA/MIN/74795/2018; Consultant: M/s Perfect Enviro Solutions Pvt. Ltd.] –ToR Regarding

The proposal of M/s Mysore Housing Co. Pvt. Ltd is for production of 0.60 MTPA of Limestone from Ittigehalli Limestone Mine having mining lease area of 80.94 ha. The mine is located at village-Ittigehalli, Tehsil- Hosadurga, District- Chitradurga, Karnataka. The Project Proponent submitted that mining lease area is coming under Survey of India Topo-Sheet No 57 C/05 and falls between Latitude: 13°83'46.53" N to 13°82'26.78" N & Longitude: 76°28'50.64" to 76°48'32.12" E.. The Mining lease lies in seismic Zone II.

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 is greater than 50 Ha. The Project Proponent applied online on 27.06.2018 and submitted Form-1 and Pre-Feasibility Report.

The Project Proponent submitted that the mining lease was first granted on 18.01.1983 under ML No.1862 for a period of 20 years for mining of Limestone & Dolomite minerals to Shri. B. Ramaswamy. Later, the lease was transferred to M/s. Mysore Housing Co. Pvt. Ltd for extraction of limestone. The lessee Shri B. Ramaswamy has been appointed as Director of the company. Subsequently the lease was renewed for another 20 years in 2003, w.e.f. 18.01.2003 under ML No. 2473 over an area of 80.94 ha. Lease will be valid for 50 years from the date of grant i.e. 17.01.2033 as per MMDR Act 2015, for the purpose of supplying limestone to consumer industry/ or various buyers. The PP submitted a copy of lease deed granted vide ML no. 2473. The Committee noted that as per approved mining plan, the mining lease was granted initially in 18.01.1983 and lease was first renewed on 29.10.2004 (w.e.f. 18.01.2003) for 20 years. The Committee observed that as the owner is the same there is no change in legal ownership of this mining lease only the name of the Company was mentioned in lease deed document during 1st Renewal.

The Proponent submitted that review and updation of the mining plan was approved by IBM vide letter no. 279/769/2003/BNG/42 dated 12/04/2018. The mining operation shall be carried out by Open Cast mechanized method with drilling and blasting. The height and width of the bench shall be 6m & 10m respectively. PP submitted that material will be dislodged with the help of blasting and rock breaker, the excavation & loading is by deploying excavator & wheel loader, transportation through dumpers and drilling by using wagon drill. The PP also submitted that one Mobile Crushing and screening Plant RM 100 of capacity 100 TPH shall be installed. PP submitted that no waste or mineral reject will be generated. The PP submitted that the total Geological Reserved is 23.61 Million Tons as per which life of mine shall be 40 years. However, the proved reserve is 7.329 million tons as per which life of mine shall be 12 years. The PP submitted that the depth of ultimate pit will be 600 MRL and it will not intersect the ground water level. The PP submitted that the area is stony topography having no soil cover therefore generation of top soil shall be insignificant. The top soil generated shall be used for afforestation

in 7.5m boundary barrier zone. The PP submitted that the waste consists of Murrum and Manganiferous Phyllites, which is nontoxic in nature. It is proposed to handle about 1.5 Million Tons of waste during first five-year plan period which will be dumped temporarily at in earmarked area of 2.3 ha at north eastern side of the lease area. The PP submitted that 0.30 million tons per annum of waste will be generated due to advancement of mining faces, which will be used in backfilling.

The Project Proponent submitted that the project does not involve clearance under wild life protection act 1972, forest conservation act 1980 and CRZ notification 2011. The PP submitted that the mining lease area is a government revenue land having rocky terrain. The Project Proponent submitted that total water requirement for the Project shall be 21 KLD [2 KLD for drinking & domestic, 19 KLD for Sprinkling and allied activities & plantation]. The PP submitted that the Water will be drawn from existing bore well of the company located outside the lease area. The Project Proponent submitted that there is no Ecological Sensitive Area such as National Park, Wildlife Sanctuary, Biosphere Reserves, & Mountains falls within 10 KM of the Mining lease. The Project Proponent submitted that the total Project Cost shall be ₹ 242 lakhs and give employment to around 80 persons.

It is informed to the Committee that Ministry has raised EDS on 05.05.2018 wherein the PP was asked to submit Clarification from the State Mines and Geology Department that no mining has been carried out in the lease since January 1983 when the lease was first granted. In case mining had been carried out, then please provide past production details from inception of the mine till date duly authenticated by the State Mines and Geology Department. The PP replied to EDS on 24.05.2018 vide letter dated 22.05.2018 wherein PP has submitted past production details since 1985 to 2018 duly authenticated by Department of Mining and Geology Government of Karnataka vide letter no. MGD/DDC/ML/1862/2473/2018.19/169 Dated 18.05.2018.

It is informed to the Committee that the Ministry has raised EDS on 12.06.2018, wherein, the PP was asked to submit the past production details financial year wise, copy of consent to operate issued by SPCB from time to time. Notice given to IBM and DGMS for discontinuance of the mining activity. Details of Mining Plan approved by Indian Bureau of Mines on the basis of which mining was carried out. The PP replied to EDS on 27.06.2018 and inter-alia submitted the following: -

- (a) The lease was granted on 18.01.1983; however, the mining activity could not be taken up till 1994 due to very poor market conditions. However, for testing and exploration purpose very small quantity of limestone was removed and supplied to various cement plant for assessing the suitability and for establishing the market. From 1985 till 1994 total of 5768 Metric Tons was removed from mine for testing and exploratory purpose in 10 years averaging 576.8 tons/year. Since 1995 till date there has been no removal/production of limestone from the mine. Year wise production detail from the mine since 1985 till date is given below: -

SL. No.	Year of Production	Production in Metric Tons

1	1985	Nil
2	1986	2718
3	1987	250
4	1988	500
5	1989	500
6	1990	1200
7	1991	250
8	1992	250
9	1993	400
10	1994	1000
11	1995-2018	Inoperative-No production

(b)The certified copy giving production detail since 1985 till 1994 from Deputy Director, Dept. of Mines and Geology, Chitradurga and also submitted its English translation. Since mining had not commenced, hence no notices of commencement or discontinuance were given to IBM and DGMS. Similarly, no Consent to operate (Consent for Operate) was obtained from SPCB Karnataka.

(c) No mining plan was prepared as the mining activity did not commence. First Mining plan was approved in 2003 but again no production could be taken up till date due to adverse market condition.

(d) Since there is improvement in the market conditions and PP is now planning to commence mining operation accordingly, mining plan been updated and has been approved on 12.04.2018 for the production capacity 0.60 Million Tons. The mining activity will now be taken up after obtaining the EC.

(e)The production schedule under the approved Mine Plan for Plan from 2018 to 2023 is given as under:

Year	Total Production (Million Tons)
1 ST Year	0.60
2 nd Year	0.60
3 rd Year	0.60
4 th Year	0.60
5 th Year	0.60
Total	3.0

Based on the information furnished and discussion held the Committee has the following observations: -

- (a) The committee observed that the mineral mentioned in the mining lease deed are Limestone & Dolomite, but the past production details submitted by the PP is only for Limestone. The PP submitted that as per exploration carried out Dolomite is not available in the mining lease. PP submitted that initially when the application for grant of mining lease was made it was for the larger area which also include the Dolomite but the lease was granted for reduced area which does not involve Dolomite. The Committee was of the view that PP should get a certificate from DMG clearly stating the past production financial year wise for both the minerals. It has observed that 1000 tons has been mined in 1994. **Thus, it is requested that PP should submit the month wise details of production for F.Y 1993-94 and 1994-95 to ascertain the violation, if any, made by PP.**
- (b) The Committee observed that previously Term of Reference was granted for this project for enhancement in production from 2390 TPA to 0.6 MTPA vide Lr. No J-11015/516/2008-IA. II(M) dated 25.02.2009 but the same was expired.

In view of the above, the Committee **deferred** the proposal and asked the PP to submit the following: a) Clarification whether the mining lease was transferred or renewed in 2003. In case of the transfer PP needs to provide the documents in support of transfer of mining lease, and (b) Past production details duly authenticated by DMG, A.P. financial year wise for both the minerals Limestone & Dolomite. The past production details for F.Y. year 1993-94 and 1994-95 should be month wise to ascertain the violation, if any.

(2.24): The Expansion of Production from 10 MTPA to 24 MTPA from Khanak Minor Mineral Mining Project (ML area 258.30 Ha) located at village Khanak, Tehsil Tosham of District Bhiwani, Haryana by M/s Haryana State Industrial & Infrastructural Development Co. Ltd. (HSIICD) [File No. J-11015/76/2018-IA-II (M); Proposal No: IA/HR/MIN/75221/2018; Consultant: Central Institute of Mining and Fuel Research, Dhanbad.]-Consideration of ToR

The proposal of M/s Haryana State Industrial & Infrastructural Development Co. Ltd. (HSIICD) is for expansion of production (Stone & Associated Minerals) from 10 MTPA to 24 MTPA from Khanak Minor Mineral Mining Project (ML area 258.30 Ha) located at village Khanak, Tehsil Tosham of District Bhiwani, Haryana. The Project Proponent submitted that mining lease area is coming under Survey of India Topo-Sheet No 44 P/13 and falls between Latitude: 28° 53' 36.51" N to 28° 54' 48.46" N & Longitude: 75° 50' 39.39" E to 75° 52' 50.70" E. The Mining lease lies in seismic Zone IV as per IS: 1893 (Part-I):2002.

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 Project Proponent applied online on 27.06.2018 and submitted Form-1 and Pre-Feasibility Report for prescribing Term of Reference. The PP vide email dated 30.06.2018 informed that they have applied afresh vide proposal No IA/HR/MIN/75625/2018 due to technical reasons and requested Ministry to consider the proposal No IA/HR/MIN/75625/2018 for appraisal. The proposal is now placed in the EAC meeting held on 19-20 July, 2018.

The Proponent submitted that mining lease deed executed in Form ML-1 was granted in favour of HSIICD on 3.01.2015 for a period of 20 years. As per the mining lease deed the mineral to be mined is Stone and Associate Mineral. **The Committee observed that it is not clear that what are the associated minerals available in the mining lease and asked the PP to provide the details of the same.**

The Proponent submitted that Mining Plan was approved by Department of Geology & Mining (DMG), Govt. of Haryana vide Memo No 4442 dated 09.10.2014 for 10 MTPA. Lr. No. 2021 dated 02.02.2017. The Mining Plan was modified for increase in production from 10 MTPA to 24 MTPA and modified mining plan was approved by DMG, Haryana vide Lr No DMG/HY/ML/Khanak/MP/2018/1441-44 dated 21.03.2018. The mining operations will be by mechanized opencast method which include excavation, blasting, sorting of mineral & transportation by trucks to the end uses. Crushers of 1200 TPH will be installed. The mine working will involve removal of topsoil. Top soil (where ever available) will be stacked separately and will be simultaneously used in plantation. Drilling and blasting will be undertaken for Stone excavation. The excavated Stone will be loaded on trucks and send to crusher. Big boulders of excavated Stone will be broken into required size before loading into trucks. The Project Proponent submitted that the total water requirement for the proposed mining project will be 40 KLD for drinking, dust suppression, Green belt, washing and servicing utilities for equipment will be sourced from nearby villages. No waste water will be generated during mining operation, however domestic waste water generated from mine office will be disposed in soak pits via septic tank. The waste generated in mining shall be disposed of simultaneously and as such there will not be creation of any waste dump. Hence, waste dump management is not involved.

The Project Proponent submitted that project does not involve clearance under Wildlife Protection Act, 1972, Forest Conservation Act, 1972 and CRZ Notification 2011. The proponent submitted that entire mining lease area of 258.30 Ha is Govt. land. The Project Proponent submitted that there is no Ecological Sensitive Area such as National Park, Wildlife Sanctuary, Biosphere Reserves, & mountains falls within 10 KM of the Mining lease. The Project Proponent submitted that the total Project Cost shall be 30 Crores and give employment to around 521 persons.

Based on the information furnished and discussion held, the Committee has the following observation.

- a) It is informed to the Committee that the **Ministry has received a complaint against the same project from Vigilance Division of the Ministry. The Compliant is regarding non-compliance of EC Condition, mining operation are not as per approved mining plan, damage due to blasting and dust related issues. The Complaint is under examination in the Ministry.**
- b) The PP mentioned in the Form-1 that a Court Case CWP No.6993/2018 in the Punjab and Haryana High Court and Civil Suits no. CS 59/ 2018 and CS 80/ 2018 in Sub Divisional Court, Tosham, Dist.: Bhiwani are pending. The matter of the cases are similar and are regarding tenders for hiring mining machineries and vibration and dust pollution due to blasting.

- c) The Committee observed that material handling will be around 80000 TPD and require around 3200 Tippers of 25 Tone capacity. Further, the PP has not achieved the rated production of 10 MTPA and now applied for expansion up to 24 MTPA. In this regard PP submitted that, there was restriction in mining plan and as per which the maximum production shall be achieved in the fifth year but now they have modified the mining plan. Further in the last three months they have achieved the production to a tune of 2 MTPA.
- d) The Committee observed that PP submitted the past production details duly authenticated by DMG vide their Memo No BWN/Khanak/1400 dated 25.06.2018 as per which the production (including waste) is as follows:

Year	Stone (MT)	Overburden /Waste (MT)	Total (MT)	Remarks
03.01.2015 to 02.01.2016	0.00	0.00	0.00	
03.01.2016 to 02.01.2017	1193.40	0.00	1193.40	
03.1.2017 to 02.01.2018	2149799.92	51236.07	2201035.99	
31.01.2018 to May 2018	3909649.55	138665.44	4048314.99	Up to May 2018
Total	6060642.87	189901.51	6250544.38	

- e) During the meeting PP submitted another past production certificate issued vide Memo No BWN/Khanak/1528 dated 19.07.2018 wherein following is mentioned

Year	Stone (MT)	Overburden /Waste (MT)	Total (MT)	Remarks
2014-15	0.00	0.00	0.00	Leas Period starting from 03.01.2015
2015-16	0.00	0.00	0.00	
2016-17	93875.830	00.00	93875.830	Production started on from 01.12.2016
2017-18	4617043.630	142653.610	4759697.240	
2018-19	2004355.390	78223.700	2082579.090	Production up to 03.06.2018
Total	6715274.850	220877.310	6936152.160	

The Committee asked the PP that whether the HSIICD has permission/clearance for dispatch of waste/overburden. The PP submitted that they have obtained permission form State Govt. of Haryana for dispatch of mineral after paying the royalty.

Considering the above facts, the Committee was of the view that Ministry should examine the proposal in light of S.O. 804(E) dated 14.03.2017 and Common Cause Order dated 02.08.2017. The Committee was also in view that as the Ministry has already issued letter to various authorities for inspection of the mine the matter can only be considered after receiving the inspection report form Regional Office, Chandigarh, DGMS Ghaziabad and DMG, Haryana.

The Committee therefore **returned the proposal in the present form.** The committee also asked the Ministry to seek clarification from PP regarding associate mineral present in the mining lease, if any.

(2.25): Mining of 0.06 MTPA of Iron Ore from Sondenahalli Iron and Ore Mine having mining lease area of 64.35 ha. Located at Sondenahalli village, Chikkanayakanhallitaluka, Tumkur District of Karnataka by M/s Tumkur Minerals Pvt. Ltd [File NO. J-11015/77/2018-IA_II(M); Proposal No: IA/KA/MIN/75303/2018; Consultant: Mineral Engineering Services] – Consideration of ToR

The proposal of M/s Tumkur Minerals Pvt. Ltd. is for production of 0.06 MTPA of Iron ore from Sondenahalli Iron and Ore Mine having mining lease area of 64.35 ha. Located at Sondenahalli village, Chikkanayakanhalli taluka, Tumkur District of Karnataka. The Project Proponent submitted that mining lease area is coming under Survey of India Topo-sheet No.: 57-C/11. The Latitude & Longitude of all corner boundary point/ pillars LBS - A: N 13° 21' 57.63107"; E 76° 42' 03.47099" LBS - B: N 13° 21' 23.02287"; E 76° 42' 18.11179" LBS - C: N 13° 21' 23.74449"; E 76° 42' 15.43868" LBS - D: N 13° 21' 25.49564"; E 76° 41' 50.82524" LBS - E: N 13° 21' 59.53624"; E 76° 41' 49.74653" LBS - F: N 13° 22' 00.35111"; E 76° 42' 00.17973". The Mining lease lies in seismic Zone II.

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 is greater than 50 Ha. The Project Proponent applied online on 06.06.2018 and submitted Form-1 and Pre-Feasibility Report. The proposal is now placed in the EAC meeting held on 19-20 July, 2018.

The Project Proponent submitted that the mining lease was first granted to Shri H. Noor Ahmed, for a period of 20 years from 11/11/1993 to 10/11/2013. Subsequently on 18/4/2006, the lease was transferred to Tumkur Minerals Pvt. Ltd. Ramanashree Chambers, 37 Lady Curzon Road, Bangalore. The PP submitted that he has obtained Environmental Clearance vide Letter No. J-11015/332/2005. IA II(M) dated 7th February 2006 for a rated capacity of 0.403 million tons per annum under the provisions of EIA notification 1994. In view of MMDR Amendment Act, 2015, the lease period is extended for 50 years from 11-11-1993 to 10-11-2043. The PP also submitted that the lease period is extended for 50 years from 11-11-1993 to 10-11-2043 under ML No.2175 vide letter No.CI 6 MMM 2015 dated 16.03.2015 by Gov. of Karnataka for mining of Iron ore, clay and Manganese mineral for an extent of 62.60 Ha.

The PP submitted that the Modified Mining Plan was prepared in respect of Sondenahalli Iron Ore Mine under Rule 10 of MCDR, 1988 for the period 2004-05 to 2008-09 and was approved vide letter no. MP/TMK/Fe-51-SZ07/2001-02 dated 20/7/2004. The PP submitted that the Central Empowered Committee vide letter No. 2-61/CEC/SC/2012 dated 5-11-2012, has approved the Reclamation & Rehabilitation Plan prepared by ICFRE and the annual production of iron ore is fixed at 0.06 million tonnes per annum also as the mining lease is due for second renewal a mining plan of reduced capacity (4, 03,000 TPA to 60,000 TPA) was prepared as per recommendation of CEC and approved by IBM vide Letter No. 279/782/2003/BNG/9 dated 01-01-2014 for the period 2013-14 to 2017-18. The approved Mining Plan was valid up to 31st March 2018. Subsequently Review and updation of Mining Plan for five-year period with effect

from 01-04-2018 to 31-03-2022 is also approved by Indian Bureau of Mines vide letter No. 279/782/2003/BNG/219 dated 23/25.04.2018 for capacity of 60,000 TPA.

The PP submitted that the mine is being developed by conventional opencast method without drilling & blasting operations. PP submit that for extraction of hard strata a ripper dozer will be used, for breaking hard to semi hard overlying lateritic/lumpy formation Heavy-duty ripper dozers will be deployed and for Semi hard over burden formations grading into softer ones will be handled with front-end loaders and the hydraulic excavators. The PP submitted that for handling of ore stocks at mine-sites, wheel loaders are provided to keep in tune with quantum of handling also for maintaining waste disposal sites, dozers will be uses. PP submitted that for transportation of waste & ore within the lease area 10 tonner trucks/tippers will be utilized. PP submitted that for Loading purpose 2 Hydraulic excavators & 1 wheel loaders shall be used and for haulage Fleet of 10 tonnes tippers and for size classification partly dry crushed & screened in mobile plant at mine site shall be used. The PP submitted that the total Mineable reserves is 6.977 MT of + 45 to 65% Fe₂ O₃ with ore: waste =1: 2.82 as per which life of mine shall be 116 years. The PP submit that Present pit bottom 942 m above MSL & at conceptual stage it shall be at 900 m MSL. The PP submitted that No liquid effluents will be generated. PP also submitted that the solid waste generated during removal of overburden and side burden are non-toxic and does not contain any leachable heavy metals. The waste rock consists of laterite, phyllitic clay, limonitic and manganiferous clay. The PP submitted that during insuring mining plan period generated waste will be dumped on the existing surface dump and subsequently after plan period exhausted portion of pit is available for backfilling. About 0.419 million tonnes of waste is expected to be generated during the next five years (from 2018-19 to 2022-23). The PP submitted that Present waste dumping activities are confined to surface and during the plan period entire quantity of generated waste will be dumped on the existing surface dump. The PP submitted that while building up, dumps will be properly graded and terraced, each terrace shall be maintained at 8-12m with 12-15m berm width, and with provision of contour drainage.

The Project Proponent submitted that the project does not involve clearance under wild life protection act 1972, forest conservation act 1980 and CRZ notification 2011. The PP submitted that the mining lease area is government non forest revenue land is rocky, barren and mineralized. The Project Proponent submitted that total water requirement for the Project shall be 180 KLD of water used for dust suppression, afforestation & for drinking shall be supplied from neighboring bore wells. The PP submitted that the ground water table is expected to be below 823 m AMSL. The PP submitted that at conceptual stage, mine will go up to a depth of 900 m AMSL which will be much above the general ground water table in the area. The Project Proponent submitted that there is no Ecological Sensitive Area such as National Park, Wildlife Sanctuary, Biosphere Reserves, & mountains falls within 10 KM of the Mining lease.

The Project Proponent submitted that the total Project Cost shall be ₹ 200 lakhs and give employment to 29 people by direct employment which includes mine officials, skilled, semi-skilled and unskilled labour and more than 100 indirect employments, in contractual works for the local villagers.

Based on the information furnished and discussion held, **the Committee was of the view that on analysis of the KML file it has found that the mine work has been done**

outside the mine lease which is in continuation, The Committee observed that the PP obtained EC vide letter dated No. J-11015/332/2005. IA II(M) dated 7th February 2006 under EIA notification 1994. Further, the Hon'ble Supreme Court vide judgment dated the 7th February, 2018 in special leave to appeal (Civil) No. 32138 of 2015 in the matter of Goa Foundation versus M/s Sesa Sterlite Ltd. &Ors. has reiterated that the validity of the environmental clearance for mining projects granted under the EIA Notification, 1994 shall be five years. The Ministry has notified S.O. 1530(E) dated 6th April, 2018 as per which the mining projects which were granted Environmental Clearance under EIA Notification, 1994, and but not obtained environmental clearance for expansion/modernization/amendment under the EIA Notification, 2006, shall make application within six months from the date of issue of this notification in Form-1 as given in Appendix-II of the EIA Notification, 2006, for grant of environmental clearance under the provision of the EIA Notification, 2006, and all such application shall be considered by the concerned Expert Appraisal Committee or the State Level Expert Appraisal Committee, as the case may be, who shall decide on the due diligence necessary including preparation of Environmental Impact Assessment Report and public consultation and the application shall be appraised accordingly for grant of environmental clearance.

Based on the document submitted and presentation made the Committee was of the view that as per KML file there is sign of mining in continuation of ML of the PP. The Committee therefore **deferred** the proposal and ask the PP to submit the following, (a) Copy of mining lease deed executed after transfer of the same, b) Mining lease boundary duly authenticated by State Government, (b) Clarification from State Government that mining carried out in continuation to mining lease by PP is within the ML before reduction of area by CEC, (c) Past production details duly authenticated by DMG since inception of the mines for all the Minerals viz. iron Ore, clay and Manganese, (d) copy of production schedule proposed and achieved as per approved mining plan and subsequent scheme of mining, (e) The Mining lease area as per lease deed is 64.35 but in the extension letter it has shown as 62.60 Ha , the PP should submit the lease renewal documents after correcting the same and f) justification for not transferring the EC after transfer of mining lease.

(2.26): Mining of 25000 TPA (ROM) of Soapstone from M/s Devbhoomi Mines Mine having mining lease area of 17.824 ha. Located Village - Devli, Tehsil - Kanda, District - Bageshwar in the Uttarakhand by M/s Devbhoomi Mines {File No. J-11015/17/2018-IA_II (M); Proposal No: IA/UK/MIN/62697/2017; Consultant: Enviro Infra Solutions Pvt. Ltd] – Re-consideration of Cat.B2 EC proposal

The proposed project is for the mining of 25000 TPA (ROM) of Soapstone by M/s Devbhoomi Mines from mining lease area 17.824 ha situated near Village - Devli, Tehsil - Kanda, District - Bageshwar in the Uttarakhand State. The mine lease area lies in Latitude 29°50'0.24" N to 29°50'25.08"N and Longitude 79°51'5.4"E to 79°51'23.40" E.

The Project Proponent submitted a Cluster Certificate issued by Mining Officer, Bageshwar Vide LR No 1063(1)/रीडर-खनन/2016-17 dated 09/05/2017 as per which there are no any working mines within 500 meters of the proposed project. The mining lease have already been granted to ML having area 17.824 Ha. The proposed Soapstone mining project is category "B2" as per EIA Notification dated 14th September 2006 and its subsequent amendments by MoEFCC, New

Delhi. The proposal does not require ToR and should be appraised by SEIAA. As the SEIAA, Uttarakhand is not operational and thus the project is considered in the Ministry.

The Proponent submitted that Letter of Intent (LoI) for grant of mining lease over 17.824 ha has been issued in favor of M/s Devbhoomi Mines vide LR No. 1093/VII-I/2016/10-सोपस्टोन/2016 dated 14.07.2018 issued by Industrial Development Division-I, Govt of Uttarakhand for a period of 50 years thereby by extending the time period of the LoI further 6 months Vide Lr No. 1011/VII-I/2016/10-सोपस्टोन/2016 dated 24-06-2018. The PP submitted the Mining Plan with PMCP has been approved by Director Geology and Mining Unit, Directorate of Industries, Uttarakhand, Dehradun vide letter No. मुख्यखनिज -/माप्ला/बागे/भूखनिई/2016-17 dated 09/11/2016. The method of mining shall be opencast semi-mechanized mining in quite a systematic manner by forming 6m high benches. The top and inter-burden to be scrapped with the help of JCB machine, dozer, shovels, pickaxe, spade & crowbar. The soil will be filled into the bags, loaded on mules and unload into stockyard. The mineral will be loaded over trucks by the manual labour.

The total mining lease area is 17.824 which is private agricultural land and free from forest land. NOC has been obtained from land owners for the exploration of Soapstone in their respective land. Total water requirement will be 3.0 KLD which will be supplied by pipe line of Uttaranchal Jal Sansthan. Ultimate working depth is 18 m below surface level. Total Manpower required for the project is 56 for extraction/collection shorting, handling and loading of soapstone in mining area, besides, watch and ward and plantation activity with proper maintenance. The Proponent submitted the Environmental Management Plan wherein it has mentioned that a total 234 No. plants will be planted on 0.234 Ha area up to the end of life of mine outside the lease area. Local native species like Peach, Pears, Apricot, Plumk, Mehal, Kaphal, Chilmora etc. shall be planted. The Proponent submitted that the total cost of the project is 17 Lakh.

The Project Proponent submitted that Lr. No Memo/2017 dated 22.04.2017 issued by DFO, Bhageshwar wherein it has mentioned that no forest land is fall within the mining lease area and Schedule-1 Species such as Leopard/Panther and Asiatic Black Bear is present near the mining lease area. The DFO also certified that there is no forest land falls within the proposed mining lease over an area measuring 17.824 Ha. The DFO also certified that PP has submitted the wildlife conservation plan for sechdule-1 species and the amount earmarked for the same is 8.0 Lakh (capital cost) and 3.5 Lakh (Recurring Cost). **The Committee observed that Conservation Plan is not submitted to Chief Wild Life Warden rather it is submitted to DFO. The PP needs to submit the Conservation Plan to Chief Wild Life Warden for approval.** The Proponent submitted that No National Park, Wild Life Sanctuaries, Tiger Reserves, Wildlife Corridors, etc. within 10 km radius of the mine lease area.

The PP applied online on 22.02.2017 and the proposal was considered in EAC Meeting held during 20-21 March 2017. The Committee deferred the proposal for want of requisite information. The Ministry Vide LrNo J-11015/17/2018-IA. II (M)dated 10 July 2017 asked the PP to submit the requisite information. The PP submitted the information online and the proposal was considered in EAC meeting held on 24 July, 2017 the committee after due deliberation deferred the proposal and asked the proponent to submit requisite information. The Ministry vide LrNo J-11015/17/2018-IA. II (M) dated 07/06/2018 asked the PP to submit the requisite information. The PP submitted the requisite information online and proposal is now placed in EAC

meeting held on 19-20 July, 2018. The information submitted by PP and observation of the Committee are as follows:

(a) A letter from the State Mines and Geology department revalidating the LoI.

The PP submitted a letter fromby Industrial Development Division-I, Govt. of Utrakhand vide LR No. 1011/VII-I/2016/10-सोपस्टोन/2016 dated 24-06-2018 wherein the State Government has given further extension of 6 months.

(b) A letter from the State Mines and Geology department certifying that no mining had taken place in the mine lease area and the reason for the presence of quarried pits mentioned in the mine plan.

The PP submitted a letter vide LR No. 125/खनन/गौ0खनि0/जन0बागे0/2018-19 dated 14.06.2018 wherein it has mentioned that there is mining operation is going on in the mining lease area.

(c) As the area was prone to cloud burst, a detailed impact assessment/chemical analysis study is to be submitted by the proponent that the run-off will not leach into the surrounding agriculture fields or water bodies.

The PP submitted a detailed impact assessment/chemical analysis study.

(d) The species to be planted in the greenbelt are to be revised.

The PP submitted revised greenbelt species to be planted which includes Bakain, Kanaul, Timla, Gethi.

Based on the information submitted by PP and presentation made, the Committee noted that PP has submitted the proposal for 25,000 TPA (ROM) of soapstone but the total excavation will be 41,025 TPA (25000 Soapstone, 9615 TPA Soil and 6410 inter-burden). The Committee therefore **returned in the present form** and PP may apply for EC and provide activity wise budget of EMP, CER, and Occupational Health Plan.

(2.27): Mining of 18,00,000 TPA of Boulder, Gravel and Sand (Minor Minerals) from Dangri River Bed having mining lease area of 45 Ha located at Village Shamtoo, District – Panchkula, Haryana. by M/s Ganesh Enterprises [File No. J-11015/31/2018-IA_II(M); Proposal No: IA/UK/MIN/72297/2017; Consultant: Voyants Solution Private Limited] – Re-consideration of ToR Regarding

The proposal of M/s Ganesh Enterprises is for production of 18 Lakh TPA of Boulder, Gravel and Sand minor mineral from Dangri River Bed having mining lease area of 45 Ha located at Village Shamtoo, District – Panchkula, Haryana. The mining lease area is located on Survey of India Topo-sheet no. H43K14. The area falls between Latitude - 30°37'6.574" N to 30°37'40.71" N Longitude - 76°58'52.34" E to 76°59'29.10" E. The Mining lease area falls in seismic zone IV.

The PP applied online for grant of ToR on 01.03.2018 and the proposal was considered in EAC Meeting held during April 23-24, 2018. The committee after due deliberation deferred the proposal for the grant of ToR asked the proponent to submit additional information. The Ministry vides LR No. J-11015/31/2018-IA-II(M) dated 16th May 2018 asked the PP to submit the requisite

information. The PP submitted the information online on 30.06.2018 and the proposal is now placed in EAC meeting held on 19-20 July, 2018. The submission made by the PP and observation of the Committee are as follows:-

(a) Plan and Sections clearly showing the area of mining/mining zone. The agricultural fields should not be included in the mining zone and only river bed area should be taken in account while determining the mining zone.

The PP submitted that the contour plan and sections of lease area have been prepared based on the DGPS survey of river bed mining lease. PP also submitted a plan and section showing the lease boundary, agricultural fields, restricted area for mining, river creek, working mining area/mining zone i.e. Block -A and B, after excluding agricultural land and restricted area for mining (Block-C) for proposed mine lease.

(b) After determining the mining zone production quantity to be calculated and same needs to be submitted along with the sections based on which the production quantity is calculated.

The PP submitted that the mining zone has been determined after survey of restricted area and agricultural land within mining lease. Available area for mining was calculated 193591.183 square meter. Density of mineral was considered for river bed matrix comprising of boulder, gravel and sand mineral as 2 g/cc (2ton/cum). The depth of mining has been considered 3m from ground surface of river bed. PP also submitted the calculation of reserve which results a) 2700000 MT -total geological reserve b) 19.3591 Ha -Net mining area, c) 1160000 MT- Mineable reserve (d) 11,60,000 MT - Targeted production (with 100% replenishment /year). PP submitted that after 3m of mining from existing river bed profile, in subsequent years the mining will be done for replenished river bed material.

(c) The project is located on non-perennial river bed and prior replenishment study report is required to be submitted at the time of consideration of projects for the environmental clearance to ascertain the annual excavation quantity. Thus, the proponent should submit the methodology for conducting the replenishment study.

The PP submitted that Methodology for conducting the replenishment study wherein it is mentioned that (a) Baseline levels of the mining lease area will be taken by DGPS as mean sea level and reduced levels (MSL & RL). The entire mining lease will be divided suitably into 25m × 25 m grids with by laying cross-section across the width of river and along the direction of flow of the river. Each grid will be suitably numbered for identification. The base line levels (MSL & RL) of the corner points of each grid will be recorded. (b) Grids, where mine working shall be carried out will be identified, along with delineation of such grids, which cover area under no mining zone i.e. safety barriers from the river bank, safety barriers at lease boundary, restrictions areas as per condition of LoI/ Mining Lease deed, restriction as per Mineral Concession Rule of the Concerned State, restrictions as per sustainable sand mining management guidelines 2016 etc. (c) Replenishment study will be carried out on mined out area of the lease by observing ground levels at grid points (pillars) in two stages viz., (i) before commencement of mining operation preferably during pre-monsoon preferably during first week of June; (ii) after the replenishment /deposition on river bed during monsoon preferably in during

first week of October. (d) Actual replenishment will be calculated based on the level difference on each grid corresponding to levels observed during pre-monsoon and levels observed on same grid point after monsoon is over. The replenishment in any grid shall be the level difference in meter multiplied by the area of grid. Summation of replenishment for different grids shall be the total replenishment in the mined-out area for the particular period. No mining will be carried out during monsoon period. (e) Based on the replenishment after rains, the depth to which mining shall be carried out during post and pre-monsoon period shall be determined for each year of mining.

(d) Based on the production quantity transportation planning needs to be done and detailed transportation plan and route need to be submitted.

The PP submitted that based on the production quantity transportation planning has been done by estimating number of trucks required to transport mineral including transport route i.e. haul road and paved road like ODR, MDR, SH and NH nearby project area. Based on the production and 25 tons of dumper and trucks to be use 174 trucks per day will be required. If we consider mining operation 12 hours per day the traffic density will be increased by 15 trucks per hour. PP submitted that on considering both incoming and outgoing trucks 30 trucks per hour will increase on present traffic condition.

The PP submitted that the Total production is 1161547.098 TPA (say 11,60,000 MT per Annum), No of working days (Excluding 52 Sundays and 45 Rainy Days) is 268 days, Daily production is 4328.35 MT, Vehicle required per day is 173.13 say 174, Working time for mining is 12 hours, Vehicle required per hour is 14.5 or 15, Considering to and from movement from mine to crusher, number of trucks /hr is 30.

PP also submitted the detailed transportation plan and routes superimposed on google earth image (Satellite image) and on survey of India topo-sheet including haul road paved road (MDR, ODR and state highway).

PP submitted that the transportation planning has been done by haul road and paved road verification on site. The PP also submitted the details of road configuration and distance from mine lease are provided in detail.

(e) A plan needs to be submitted clearly showing the mining leases in the upstream and downstream with their area and quantity.

The PP submitted there are two mining leases in the upstream viz. Rattewali Block/PKLB10 (area 45 Ha, production capacity 19 LTPA) & Shamtoo 1 block/PKLB11 (area 46.5 Ha, production capacity 20 LTPA) and two mining leases in downstream viz. Sukhdarshanpur block/PKL B 13 (area 37.38 Ha, production capacity not mentioned) & Khatauli block/ PKL B 14 (area 24.15 Ha, production capacity not mentioned)

The PP submitted that Production quantities are not shown for Khatauli and Sukhdarshanpur block because estimation has not done. The PP also submitted the location plan of mines on upstream and downstream of Shamtoo-2 Block-PKL-12.

(f) The proponent should verify the kml file.

PP submitted that the Kml file has been verified for mine lease area and working mine area excluding agricultural and restricted area. PP also submitted the revised kml file of mine lease as per khasra details and clear section separately. The PP submitted that the total mine lease area as per DGPS survey is 47.8 Ha and area considered for mining is 19.4 Ha. **The Committee observed that as per LOI mining lease area is 45 Ha as per DGPS survey is 47.8 Ha there is increase of 2.8 Ha.**

Based on the Documents submitted and presentation made the Committee has made the following observations:

- a) The Committee observed that the plan and section submitted by the PP shows that levels outside the mining area proposed by the PP are in the range of 339.10-340 on western side and between 338.10-340 in the eastern side. However, the levels of the river bed where mining is proposed by the PP are in the range of 334.40-335.65. Thus, the level difference is in the range of 3.70-4.35 meter. The level difference at section AA' is around 4.5 m and at section BB' is around 3.875 m. The Committee observed that as per Standard EC Conditions "*the depth of mining in riverbed shall not exceed one meter or water level whichever is less, provided that where the Joint Inspection Committee certifies about excessive deposit or over accumulation of mineral in certain reaches requiring channelization, it can go up to 3 meters on defined reaches of the river*". The Committee was of the view in the instant case the level of riverbed is already 3.87-4.5 meters as proposed by PP and more than one meter as per Google earth elevation profile. In addition to this PP reported that it is a non-perennial river and water flows only during the rainy season. **Further on analyzing the Google earth images over a period of time it has observed that water is not visible even in the Month of August-September and no replenishment was visible for these mining leases. In absence of water flow there is no possibility of any replenishment.**
- b) The Committee observed that proposal was considered in the Ministry as the PP has submitted that General Condition is applicable for this project but it has observed that being a Category B1 case of cluster situation, the proposal is exempted from applicability of GC as per Notification vide S.O. 2269 (E) dated 1.07.2016 and should be consider in SEIAA but as the proposals of mining leases in cluster were applied separately and cluster certificate for all the mining leases were not submitted by all the PPs the proposal was considered by the EAC.
- c) The Committee observed that there is a discrepancy in the mining lease area as allocated by State Government and as reported by PP after carrying out DGPS Survey.
- d) The Committee observed that PP has reported that there are two mining leases in the upstream and two mining leases in the downstream of this mining lease. The Capacity of the mining leases in downstream is not reported by PP. **The total production capacity considering the mining leases in upstream comes out to be 57 LTPA. Committee was of the view that it would not be possible that this much quantity of the mineral will be replenished every year in this reach of the river bed as it is a non-perineal river.** The Google images over the timeline shows that there was hardly any

replenishment of the mineral. The Committee also observed that material shall be supplied to nearby crusher zone. The EIA report submitted by other proponent for mining leases Rattewali Block-10 shows that air quality of the area will be above the National Air Quality Standards even in the controlled case scenario after setting up of the project. The Committee observed that mining of the **huge quantity (57 LTPA for Cluster) & availability of crusher zones in the area will further worsen the air quality of the region.** In addition to this there are agricultural land on the both the side of the mining lease and the mining beyond the permissible limit may affect the water regime of the area. There are villages with 100-200 meters of the mining leases in this cluster.

The Committee deliberated the issues and considering the above facts, the Committee **deferred** the proposal for grant of Terms of Reference and suggested that the Ministry may seek the clarification from concerned Department of Mining & Geology who is responsible for granting LOI/mining lease in this area, (i) Whether the provision of Sustainable Sand Mining Guidelines 2016 has been followed while selecting the stretch of river bed or not?, and (ii) Whether all the provision of Ministry's Notification S.O.141 (E) dated 15.01.2016 has been followed while preparing Districts Survey Report or not? and (iii) reason for verification in the mining lease area if any.

(2.28): Mining of 12,50,000 TPA of Boulder, Gravel and Sand minor mineral from Dangri River Bed having mining lease area of 31.59 Ha located at Village Kot & Dabkori, District – Panchkula, Haryana. By Krishna Enterprises [File NO.J-11015/32/2018-IA_II (M); Proposal No: IA/HR/MIN/72516/2018; Consultant: Voyants Solution Private Limited] – Re-consideration of ToR Regarding

The proposal of M/s Krishna Enterprises is for production of 12.5 Lakh TPA of Boulder, Gravel and Sand minor mineral from Dangri River Bed having mining lease area of 31.59 Ha located at Village Kot & Dabkori, District – Panchkula, Haryana. The mining lease area is located on Survey of India Topo-sheet no. H43K14. The area falls between Latitude - 30038'14.61" N to 30039'11.14" N Longitude - 76057'16.64" E to 76057'48.78" E. The Mining lease area falls in seismic zone IV.

The PP applied online for grant of ToR on 28.03.2018 and the proposal was considered in EAC Meeting held during April 23-24, 2018. The committee after due deliberation deferred the proposal for the grant of Environmental Clearance and requested the proponent to submit a) Plan and Sections clearly showing the area of mining/mining zone. The agricultural fields should not be included in the mining zone and only river bed area should be taken in account while determining the mining zone, b) After determining the mining zone production quantity to be calculated and same needs to be submitted along with the sections based on which the production quantity is calculated, c) The project is located on non-perennial river bed and prior replenishment study report is required to be submitted at the time of consideration of projects for the environmental clearance to ascertain the annual excavation quantity. Thus, the proponent should submit the methodology for conducting the replenishment study, d) Based on the production quantity transportation planning needs to be done and detailed transportation plan and route need to be submitted, e) A plan needs to be submitted clearly showing the mining leases in the upstream and downstream with their area and quantity and f) The proponent should

verify the KML file. The PP vide Lr. No dated 30.06.2018 submitted the information and proposal is placed in EAC meeting held on 19-20 July, 2018.

The information submitted by PP and observation of Committee are as follows:

(a) Plan and Sections clearly showing the area of mining/mining zone. The agricultural fields should not be included in the mining zone and only river bed area should be taken in account while determining the mining zone.

PP submitted that the Plan & Sections of lease area have been prepared based on the DGPS survey of river bed mining lease. Plan and section showing the lease boundary, agricultural fields, restricted area for mining, river creek, working mining area/mining zone i.e. Block –PKL B-8 (1 to8) and Block PKLB-9 (1 to 5), after excluding agricultural land and restricted area for mining plan sections are submitted with area details of each block.

(b) After determining the mining zone production quantity to be calculated and same needs to be submitted along with the sections based on which the production quantity is calculated.

PP submitted that the mining zone has been determined after survey of restricted area, sand availability and agricultural land within mining lease. Available area for mining was calculated including all segments 113640.408 m²for PKLB-8 and 34861.454 m²for PKLB-9. Total available area of mining is 148501.862 m² or 14.85 Ha. Density of mineral was considered for river bed matrix comprising of boulder, gravel and sand mineral as 2 Tonne/m³. The depth of mining has been considered 3 m from ground surface of river bed. The PP also submitted the map to show location of all segments within mining lease. The PP submitted that Total geological reserves are 1895400 MT (31.59 × 10,000 × 3 × 2), The net minable area is 148501.862 m² and section wise reserves calculation are as follows:

Sr No.	Block Name	Segment Name	Area of Segment (sq. meter)	Density of Mineral (g/cc)	Depth of Mining (m)	Estimated Mineral Quantity (MT)
1	PKL B-8	PKL B-8(1)	14208	2	3	85249
2	PKL B-8	PKL B-8(2)	19642	2	3	117854
3	PKL B-8	PKL B-8(3)	1394	2	3	8366
4	PKL B-8	PKL B-8(4)	502	2	3	3014
5	PKL B-8	PKL B-8(5)	1209	2	3	7257
6	PKL B-8	PKL B-8(6)	8719	2	3	52316
7	PKL B-8	PKL B-8(7)	3114	2	3	18684
8	PKL B-8	PKL B-8(8)	64850	2	3	389101
9	PKL B-9	PKL B-9(1)	4832	2	3	28993
10	PKL B-9	PKL B-9(2)	13595	2	3	81572
11	PKL B-9	PKL B-9(3)	6770	2	3	40618
12	PKL B-9	PKL B-9(4)	217	2	3	1304
13	PKL B-9	PKL B-9(5)	9447	2	3	56681

(c) The project is located on non-perennial river bed and prior replenishment study report is required to be submitted at the time of consideration of projects for the environmental clearance to ascertain the annual excavation quantity. Thus, the proponent should submit the methodology for conducting the replenishment study.

Methodology for conducting the replenishment study: (As Suggested by MoEF&CC) 1. Baseline levels of the mining lease area will be taken by DGPS as mean sea level and reduced levels (MSL & RL). The entire mining lease will be divided suitably into 25m × 25 m grids with by laying cross-section across the width of river and along the direction of flow of the river. Each grid will be suitably numbered for identification. The base line levels (MSL & RL) of the corner points of each grid will be recorded.

Grids, where mine working shall be carried out will be identified, along with delineation of such grids, which cover area under no mining zone i.e. safety barriers from the river bank, safety barriers at lease boundary, restrictions areas as per condition of LoI/ Mining Lease deed, restriction as per Mineral Concession Rule of the Concerned State, restrictions as per sustainable sand mining management guidelines 2016 etc.

Replenishment study will be carried out on mined out area of the lease by observing ground levels at grid points (pillars) in two stages viz., (a) before commencement of mining operation preferably during pre-monsoon preferably during first week of June; (b) after the replenishment /deposition on river bed during monsoon preferably in during first week of October.

Actual replenishment will be calculated based on the level difference on each grid corresponding to levels observed during pre-monsoon and levels observed on same grid point after monsoon is over. The replenishment in any grid shall be the level difference in meter multiplied by the area of grid. Summation of replenishment for different grids shall be the total replenishment in the mined-out area for the particular period. No mining will be carried out during monsoon period.

Based on the replenishment after rains, the depth to which mining shall be carried out during post and pre-monsoon period shall be determined for each year of mining. At the time of consideration of project for environmental clearance prior replenishment study report will be presented to EAC to ascertain annual excavation quantity.

(d) Based on the production quantity transportation planning needs to be done and detailed transportation plan and route need to be submitted

PP submitted that based on the production quantity transportation planning has been done by estimating number of trucks required to transport mineral including transport route i.e. haul road and paved road like ODR, MDR, SH and NH nearby project area also based on the production and 25 tons of dumper and trucks to be use 133 trucks per day will be required. PP submitted that on considering mining operation 12 hours per day the traffic density will be increased by 11 trucks per hour and on considering both incoming and outgoing trucks 22 trucks per hour will increase on present traffic condition.

PP submitted the detailed transportation plan and routes superimposed on Google earth image (Satellite image) and on survey of India topo-sheet including haul road paved road (MDR,

ODR and state highway). The PP submitted that transportation planning has been done by haul road and paved road verification on site and the details of road configuration and distance from mine lease are provided in detail.

(e) A plan needs to be submitted clearly showing the mining leases in the upstream and downstream with their area and quantity

The PP submitted that as per cluster certificate from mining officer Panchkula dated on 28/03/2018 Memo No. 4125, there is no other mining contract/lease in the radius of 500 meter of Kot Block/PKL-8&9.

(f) The proponent should verify the KML file.

The PP submitted that the KML file has been verified and excluded restricted area, agricultural field and trees. Sand availability areas where replenishment is possible considered for mining zone and total 13 segments were identified for mining for both blocks PKLB – 8&9. Details of all segments with their area and mineral quantity have also been submitted. The mining lease area as per LoI is 31.59 Ha but as per DGPS Survey is 37.6 Ha.

Based on the Documents submitted and presentation made the Committee has following observations:

- a) The Committee observed that there is a discrepancy in the mining lease area as allocated by State Government and as reported by PP after carrying out DGPS Survey.
- b) The Committee noted that as per Standard Conditions of Sustainable Sand Mining Guidelines, 2016 *"The depth of mining in Riverbed shall not exceed one meter or water level whichever is less, provided that where the Joint Inspection Committee certifies about excessive deposit or over accumulation of mineral in certain reaches requiring channelization, it can go up to 3 meters on defined reaches of the River."* But in the instant case as reported by PP after DGPS survey the initial level of the mining lease is already more than one meter as compared to adjacent surface level. In some locations it is up to 8 meters as visible from Google earth and Bharat GIS profile report. The PP reported that it is a non-perianal river and water is only available during the rainy season that for few hours. **On analyzing the Google earth images over a period of time it has observed that water is not visible even in the month of August-September. In absence of water flow there is no possibility of any replenishment.**
- b) The Committee observed that this river bed is not continuous rather it almost vanishes within 2 KM into the agricultural fields. The Committee also observed that material from this mining lease cannot be extracted on continual basis, even in the current situation material is not available in entire river bed rather it is available in pockets. The same thing is also reflected from the survey carried out by PP that mining could be possible in some segments. Another issue is the replenishment of the material. Committee was of the view that it would not be possible that this much quantity of the mineral will be replenished every year in this reach of the river bed as it is a non-perineal river. The Google images

over the timeline shows that there was hardly any replenishment of the mineral. The Committee also observed that material shall be supplied to nearby crusher zone. The EIA report submitted by other proponent for mining leases Rattewali Block-10 shows that air quality of the area will be above the National Air Quality Standards even in the controlled case scenario after setting up of the project. The Committee observed that mining of the **huge quantity (more than 57 LTPA in the nearby area) & availability of crusher zones in the nearby area will further worsen the air quality of the region.** In addition to this there are agricultural land on the both the side of the mining lease and the mining beyond the permissible limit may affect the water regime of the area.

The Committee deliberated the issues and considering the above facts, the Committee **deferred** the proposal for grant of Terms of Reference and suggested that the Ministry may seek the clarification from concerned Department of Mining & Geology who is responsible for granting mining lease in this area, (i) Whether the provision of Sustainable Sand Mining Guidelines 2016 has been followed while selecting the stretch of river bed or not?, and (ii) Whether all the provision of Ministry's Notification S.O.141 (E) dated 15.01.2016 has been followed while preparing Districts Survey Report or not? and (iii) reason for verification in the mining lease area if any.

(2.29): Mining of 1.0 MTPA of limestone from Kanakadripalli Limestone Mine having mining lease area of 435.24 Ha located at Petnikota & Itikyala Villages, Kolimigundla Mandal, Kurnool District, Andhra Pradesh by M/s Ramco Cements Limited. [File NO. J-11015/18/2017-IA_II(); Proposal No: IA/AP/MIN/62752/2018; Consultant B.S Enviro-Tech Pvt. Ltd] - Re-consideration of ToR Regarding

The proposal of M/s Ramco Cements Limited is for the mining of 1.0 MTPA limestone in a mine lease area located at Petnikota & Itikyala Villages, Kolimigundla Mandal, Kurnool District, Andhra Pradesh. The proponent submitted that the mine lease area is spread over an area of 435.24 Ha out of which 419.08 Ha. is patta lands and 16.16 ha. is of Govt. land under the jurisdiction of Petnikota & Itikyala Villages, Kolimigundla Mandal, Kurnool District, Andhra Pradesh. Government of Andhra Pradesh. The proponent submitted that the Industries & Commerce (M-III) Department, issued Order vide Memo No. 576/M.III (1)/2015, dated: 16.10.2015 for extension of lease.

The PP applied online for grant of ToR on 23.02.2017 and the proposal was considered in EAC Meeting held during 20-21 March 2017. The Committee deferred the proposal for want of requisite information. The PP vide LR NO dated 14.08.2017 submitted the information and the proposal was considered in EAC meeting held during September 19-20, 2017. The committee after due deliberation deferred the proposal as the Committee observed on viewing the KML file on Google that the Mining has already been carried out in the mining lease area and asked the Ministry to seek clarification from State Mine & Geology Department, Andhra Pradesh. The Ministry vide LR No J-11015/18/2017-IA-II(M) dated 05th October, 2017 sought the information from PP. The PP vide LR No RCL/MoEF&CC/2018-19/14 dated 12th June 2018 submitted the LR No 1306239/R4-1/2018 dated 04/06/2018 issued by State Mine & Geology Department, Andhra Pradesh and the proposal is now considered in EAC meeting held on 19-20 July, 2018.

The information submitted by PP and observation of the Committee are as follows:

(a) Whether mining has been done in the Kanakadripalli Limestone Mining lease or not. If done, whether it was done by the lease holder M/S Ramco Cements Limited or someone else and

The PP vide LR No RCL/MoEF&CC/2018-19/14 dated 12th June 2018 submitted the LR No 1306239/R4-1/2018 dated 04/06/2018 issued by State Mine & Geology Department, Andhra Pradesh wherein it has mentioned that a) as per ADM&G, Benaganapalle inspection report the lessee Company by M/S Ramco Cements Ltd. has not started mining operations and not done any mining in the subjects mining lease area, some local villagers have done the same for their livelihood

(b) Past Production data, if any, pertaining to Kanakadripalli Limestone Mining Lease

Further as the lessee has not started any mining operation, the question of past production data does not arise.

During the presentation Committee observed that Industries (M-III) Department, Govt. of Andhra Pradesh vides Memo. No. 576/M.III (1)/2015 dated 16.10.2015 granted extension of three years the date of issue of this memo to enable the lease company to establish the Cement Plant for (4) mining leases granted vide G.O. No. 136,137,138 & 139, Ind & Com (M.II) Dept, dated 15.02.2000. **The Committee observed that this extension is valid till 15.10.2018 and within this short period it would not be possible for the PP to establish the Cement Plant.** The Committee therefore **rejected** the proposal and asked the PP to apply afresh after getting the extension of the mine lease.

(2.30): Mining of 20,00,000 TPA Boulder, Gravel and Sand minor mineral from Dangri River Bed having mining lease area of 46.50 Ha located at Village Shamtoo and Rattewali, District – Panchkula, Haryana. by M/s Starex Minerals [File No. J-11015/33/2018-IA.II (M); Proposal No: IA/HR/MIN/73803/2018; Consultant: M/S Envitra Sustainable Solutions India Pvt. Ltd] – Re-consideration of ToR Regarding

The proposal of M/s Starex Minerals is for production of 20.0 Lakh TPA of Boulder, Gravel and Sand minor mineral from Dangri River Bed having mining lease area of 46.50 Ha located at Village Shamtoo and Rattewali, District – Panchkula, Haryana. The mining lease area is located on Survey of India Topo-Sheet no. H43K14. The area falls between Latitude - 30037'42.26" N to 30038'33.59" N Longitude - 76059'13.61" E to 76059'18.54" E. The Mining lease area falls in seismic zone IV.

The PP applied online for grant of ToR on 29.03.2018 and the proposal was considered in EAC Meeting held during 23-24 April, 2018. The committee after due deliberation deferred the proposal for the grant of ToR for want of requisite information. The ministry vides Lr. No. J-11015/33/2018-IA II (M) (Pt.) dated 17th May 2018 asked the PP to submit the additional information. The PP submitted the requisite information online on 10/07/ 2018 and proposal is now placed in EAC meeting held on 19-20 July, 2018.

The information submitted by the PP and the observation of the committee are as follows:

(a) Plan and Sections clearly showing the area of mining/mining zone. The agricultural fields should not be included in the mining zone and only river bed area should be taken in account while determining the mining zone.

PP submitted the Plans & Sections showing the area of mining/mining zone.

(b) After determining the mining zone production quantity to be calculated and same needs to be submitted along with the sections based on which the production quantity is calculated.

PP submitted the Calculation after determining the mining zone production quantity as total area is 46.50 HA out of which 3.56 Ha area is under agriculture. Thus area available for the mining is 42.940 Ha. The Geological reserve is 2110109.29 MT, and Mineable Reserve is 1899098 (considering 90% recovery). The PP also submitted that now they have proposed to reduce the capacity 16.0 LTPA by deducting the reserves located in setback area safety zone.

(c) The project is located on non-perennial river bed and prior replenishment study report is required to be submitted at the time of consideration of projects for the environmental clearance to ascertain the annual excavation quantity. Thus, the proponent should submit the methodology for conducting the replenishment study.

The PP submitted that interim replenishment study report. Wherein, it has mentioned that it is non-perennial river. The Borehole lithology shows that up to 3 meter boulders are not available and only silt, coarser sand, cobbles and gravels are available. The Committee observed that in the report submitted by the PP mainly the sheave analysis was carried out and detailed methodology for replenishment study is not properly addressed.

(d) Based on the production quantity transportation planning needs to be done and detailed transportation plan and route need to be submitted.

The PP submitted that for excavation of 16.0 LTPA around 20 tippers of 20 ton capacity shall be engaged. The number of tippers per day will be 298. The PP also submitted a map showing the transportation route. Most of the route proposed by PP is through nearby villages (Shamtoo & Rattewali).

(e) A plan needs to be submitted clearly showing the mining leases in the upstream and downstream with their area and quantity.

PP submitted that there are two mining leases viz. Shamtoo-Block-2/PKLB and Rattewali/PKLB-10.

(f) The proponent should verify the KML file.

PP did not provide any comments for the verification of the KML file.

(g) Cluster Certificate from Department of Mines & Geology, Haryana as per S.O. 141 (E) dated 15.01.2016.

The PP submitted the LR No 818 dated 24.01.2018 issued by Mining officer Panchkula wherein it has mentioned that Shamtoo-Block-2/PKLB and Rattewali/PKLB-10 mining contract/lease are in the radius of 500 meter of this mining lease. **The Committee observed that the total cluster area is thus 136.5 Ha and the total production considering all the mining leases is 57 LTPA.** The Committee observed that proposal was considered in the Ministry as PP submitted that General Condition is applicable but it has observed that being a Category B1 case of cluster situation the proposal is exempted from applicability of GC as per S.O. 2269 (E) dated 1.07.2016 and should be consider in SEIAA but as the proposals of mining leases in the mining leases were applied separately and cluster certificate was also not submitted by PP the proposal was considered by EAC.

Based on the Documents submitted and presentation made the Committee has following observations:

- a) The Committee observed that the minable reserved is that previously in the Form-1 the PP has submitted that the restricted area 12.25 Ha and the Mineable area is 34.25 Ha and Mineable Reserves are 2055000 MT. But the now the PP has submitted that the Mineable area is 42.940 Ha and the Mineable reserves is 1899098. This is contradicting and seems that PP has not calculated the reserves properly. Further, the specific gravity is considered in 1.82 Tonne/m³ and in the same river bed other mine owners is considering the specific gravity 2.0 Tonne/m³. The Committee observe that in DSR submitted by the other PP for the same mining lease area does not provide the specific gravity of the mineral. The Committee also observe that initial levels of the river bed level submitted by the PP is already 1-3 M below the surrounding ground level and as per Google earth profile also there is a difference of 1-3 meters. The Committee also observed that on analyzing the satellite imaginary over the period of time hardly any replenishment is visible.
- b) The Committee observed that there is a discrepancy in the mining lease area in the cluster and thus the area of this mining lease also needs to be verified by the DMG.
- c) The Committee noted that as per Standard Conditions of Sustainable Sand Mining Guidelines, 2016 *"The depth of mining in Riverbed shall not exceed one meter or water level whichever is less, provided that where the Joint Inspection Committee certifies about excessive deposit or over accumulation of mineral in certain reaches requiring channelization, it can go up to 3 meters on defined reaches of the River."* But in the instant case as reported by PP the initial level of the mining lease is already more than one meter as compared to adjacent surface level. In some locations it is up to 3 meters as visible from Google earth and Bharat GIS profile report. The PP reported that it is a non-perianal river and water is only available during the rainy season that too for the few hours. **On analyzing the Google earth images over a period of time it has observed that water is not visible even in the month of August-September. In absence of water flow there is no possibility of any replenishment.**

d) The Committee also observed that material from this mining lease cannot be extracted on continual basis as the it is a perineal river. The Google images over the time show that there was hardly any replenishment of the mineral. The Committee also observed that material shall be supplied to nearby crusher zone. The EIA report submitted by other proponent for mining leases Rattewali Block-10 shows that air quality of the area will be above the National Air Quantity Standards even in the controlled case scenario after setting up of the project. **The Committee observed that mining of the huge quantity (57 LTPA for entire cluster) & availability of crusher zones in the area will further worsen the air quality of the region.** In addition to this there are agricultural lands on the both the side of the mining lease and the mining beyond the permissible limit may affect the water regime of the area.

The Committee deliberated the issues and considering the above facts, the Committee **deferred** the proposal for grant of Terms of Reference and suggested that the Ministry may seek the clarification from concerned Department of Mining & Geology who is responsible for granting mining lease in this area, (i) Whether the provision of Sustainable Sand Mining Guidelines 2016 has been followed while selecting the stretch of river bed or not?, and (ii) Whether all the provision of Ministry's Notification S.O.141 (E) dated 15.01.2016 has been followed while preparing Districts Survey Report or not? and (iii) reason for verification in the mining lease area if any.

(2.31). Proposed Limestone Mine (Area: 415.097 Ha) with Production Capacity of 1.5 million TPA (ROM) from Bela Cement Limestone Mine -01, located at Villages Devra, Tehsil-Rampur Baghelan, and Village-Kothar Tehsil-Amarpatan, District-Satna, Madhya Pradesh of M/s UltraTech Cement Ltd.-Reconsideration of ToR

The proposal of the M/s UltraTech Cement Ltd is for limestone production of 1.5 million TPA (ROM) from Bela Cement Limestone Mine -01 located at Villages Devra, Tehsil-Rampur Baghelan, and Village-Kothar, Tehsil-Amarpatan, District-Satna, Madhya Pradesh. The mining lease comes under Survey of India Topo-Sheet No. 63 H/2 and falls between Latitude: 24° 29'55" N to 24° 31' 33" N and Longitude: -81° 07'52" E to 81° 09' 26" E. The mining lease falls in seismic Zone -II as per IS: 1893 (Part-I) : 2002

The proposal was earlier considered in EAC Meeting held on 18-19th January, 2018 wherein the Committee deferred the proposal as the PP did not attend the meeting. The proposal is re-considered in EAC Meeting held during 22-23rd March, 2018. The KML file was analyzed on Google Earth. The Committee observed that there are habitations inside the mining lease area, there are agricultural lands in the mining lease area and there is a road passing through the mining lease area. The Committee asked the proponent to provide the number of project affected families (PAFs) in the mining lease area. As the information pertaining to (PAFs) is not available with the PP the Committee **deferred** the proposal and was of the view that project may be considered only after submission of the following: -

- I. Number of villages in the mining lease area
- II. Details pertaining to Project Affected Families viz. number of families, number of household within ML, number persons having land within ML area, cropping pattern, source of livelihood, average annual income of PAFs etc.

III. Letter from DMG to the effect that no mining has been carried out by the PP in this area.

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 total mining lease area is 415.097ha. The area falls in two revenue villages viz. Devra and Kothar.
- II. Project Proponent reported that pertaining to Project Affected Families viz., number of families, number of household within ML, number of persons having land within ML area are shown in the following table:

S. No.	Name of the Villages	Total Number of Project Affected families	No. of families having land within ML	No. of household within M.L. area.	Land + Homestead
1	Devra	285	239	25	21
2	Kothar	167	156	7	4
	Total	452	395	32	25

III. PP also reported that the number of affected families having only homesteads in Village Devrais 25 and in village Kothar is 7. Apart from this one Government Primary School falls in Village Kothar (Khasra No. 130/2-Government Land) with total 235 numbers of students including girls and boys.

IV. PP has submitted the letter from Office of Collector (Department of mines), District-Satna, vide no 1685/Mineral/2018, dated 11.06.2018 which inter-alia mentioned that during inspection of Aaraji Kha no. 31,32,33,34,35 of Village kothar of Tehsil – Amarapatan, a old excavated pit was found which was collated with Official Records. After Collation, it was observed that as per the Provisions of Rule 68 (1) of Major Mineral Rule 1996 M.P., Temporary Permit for Limestone in total area of 1.610 ha of Aaraji Kha no. 31,32,33,34,35 of village Kothar was granted in favour of M/s. Dilip Buildcon Limited Company vide Official letter no. 502/Mineral/2013 Satna dated 08.03.2013. After issuance of temporary permit, an objection was submitted by M/s. Jai Prakash Associates Limited, cement division, J P, Rewa Plant, Rewa. In objection, it is written that Prospecting Licence was issued to the above Company for total area of 415.460 ha in Village Kothar of Tehsil- Amarpatan for area of 184.565 ha and in Village Kothar of Tehsil Amarpatan for area of 184.565 ha and in Village Devra of Tehsil Rampur - Baghelaun in District - Satna vide Order no. F-2-4/2008/12/1 Bhopal dated 25.11.2009 of Mineral Resources Department, Government of M.P., Bhopal wherein above granted temporary Permit of Aaraji Kha no. 31,32,33,34,35 is included. After inspection, Objection was found correct and work was stopped by cancelling granted temporary Permit vide Official Letter no. 952/Mineral/2013 Satna dated 27.05.2013. **Mining operation has been carried out by M/s. Dilip Buildcon Limited Company in the above Area. Excavation operation has not been carried out by M/s. UltraTech Cement Limited.**

After detailed deliberations, the Committee is of the view that the no of PAF's are 452 which are very high in number and also agricultural lands in involved; **Therefore, the EAC recommended for a site visit by a sub-committee comprising Dr. Hemant S.**

Sahasrabuddhe (EAC Member), Dr. Tushar Kant Joshi (EAC Member), and Prof. A. K. Bhatnagar (EAC Member). Dr. Ramesh RA (E) may assist the sub-Committee. The sub-Committee may give the report on present status of environmental conditions and PAF's in the area, and after getting the site visit report on the above observation, the EAC may further reconsider this project. Accordingly, the proposal has been deferred and shall be taken up in the subsequent EAC meeting.

(2.32). Proposed Mudhvay Sub-Block B for Mineral Limestone Mining of 4.38 Million TPA limestone (ROM basis: 12.88 Million TPA which includes 4.38 Million TPA limestone production, 8.14 Million TPA over-burden & 0.36 Million TPA inter-burden excluding top-soil), Mining Lease area of 233.5 ha and installation of 1200 TPH capacity crusher near Village Mudhvay, Tehsil Lakhpat, District Kachchh, Gujarat by M/s Shree Cement Limited Unit: Bhuj Cement Plant- (F.No.J-11015/23/2018-IA.II(M)& online application No. IA/GJ/MIN/73109/2018)- Amendment in ToR.

The Terms of Reference for the mining of Limestone with capacity of 4.38 Million TPA limestone (ROM basis: 12.88 Million TPA which includes 4.38 Million TPA limestone production, 8.14 Million TPA over-burden & 0.36 Million TPA inter-burden excluding top-soil) and installation of crusher with capacity of 1200 TPH in the lease area of 233.5 ha near Village Mudhvay, Tehsil Lakhpat, District Kachchh, Gujarat has been prescribed vide Ministry's letter dated 12.4.2018.

Project Proponent vide online application 24.5.2018 requested for adding a condition in the ToRs in regard to groundwater extraction. It was mentioned that the proposed mine will intersect the groundwater table at 13 m bgl. The mine water will be abstracted for mining. The water will be treated and used in Plant and mine activities. The committee noted that **there are already several conditions stipulated in the ToRs in regard to groundwater extraction, impact of mining on groundwater, permission from competent authority for drawl of groundwater, water requirement & availability of its source, hydro geological study incase mine working intersects with the groundwater, permission from Central Ground Water Authority for pumping ground water, etc.** The Committee did not feel any necessity of amending the ToR as it already stipulates conditions w.r.t ground water. **The Committee after deliberations rejected the project for amendment in ToR.**

It is informed to the Committee that there is a **complaint received against the project proponent on the above-mentioned proposal. The Committee suggested that Ministry may examine the complaint received and take necessary action.**

The meeting ended with thanks to the Chair.

Standard Terms of Reference (TOR) for Mining Project

- 1) The Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors..
- 2) Department of Mining & Geology, State Government shall ensure that mining operation shall not commence till the entire compensation levied, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- 3) Year-wise production details since 1993-94 should be given, clearly stating the highest production achieved in any one year prior to 1993-94. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1993-1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
- 4) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 5) 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.
- 6) 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).
- 7) 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.
- 8) 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.
- 9) 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.
- 10) 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.

- 11) 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.
- 12) 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.
- 13) 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.
- 14) 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.
- 15) 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.
- 16) 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.
- 17) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 18) 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.
- 19) 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.
- 20) 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.

- 21) 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.
- 22) 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).
- 23) 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.
- 24) 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.
- 25) Air quality modelings 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.
- 26) 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.
- 27) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
- 28) 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.
- 29) 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.

- 30) 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.
- 31) 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.
- 32) 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.
- 33) 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.
- 34) 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.
- 35) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- 36) 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.
- 37) 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.
- 38) 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.
- 39) 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.
- 40) 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.

- 41) 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.
- 42) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 43) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- 44) A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.
- 45) 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.
- 46) The activities and budget earmarked for Corporate Environmental Responsibility (CER) shall be as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 and the action plan on the activities proposed under CER shall be submitted at the time of appraisal of the project included in the EIA/EMP Report.
- 47) The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
- 48) Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgement of Hon'ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.
- 49) 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.

Standard TOR for Beneficiation Project

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

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

lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.

- 28) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled I fauna found in the study area, the necessary plan along with 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

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
Next year allocation = Average of EC Capacity and Last year production						

- 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) Overburden/ 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.	<p>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.</p> <p>All the water bodies (rivers, nallas, ponds etc.) shall be monitored. National/State level research/ academic institutes may be</p>	SPCB	Continuous Annually

	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.		
	<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 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.	Respective District Administration	Annually
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 / Academic Institutes	Upto 45% by 2020 and upto 40% by 2025

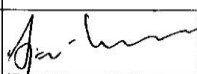
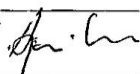
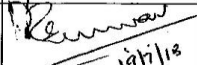
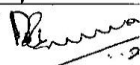
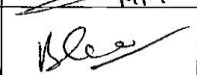
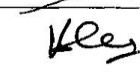
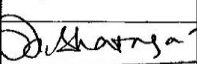
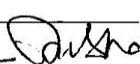
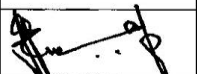
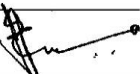
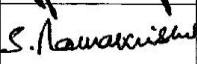

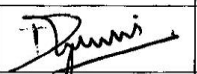
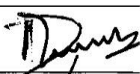


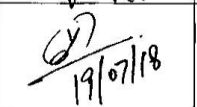
The data so generated for the region should be made available on the website of Department of Steel & Mines and also at MoEF&CC website, so that it can be effectively utilized by Individual Mine Lease Holders for preparing EIA/ EMP reports. This will meet the requirement for separate one season baseline 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.

Attendance

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

Sl. No.	Name and address	Designation	Date: 19/07/2018	Date: 20/07
1.	Dr. Ajai Kumar B-1302, Bestech Park View 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 Maharana Manzil, 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, Laxmikant Niwas, Salan Gaon, 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, Mausam Bhawan, 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.	Member Secretary, Dr. R.B. LAL Non Coal Mining Vayu Wing, Indra Paryavaran Bhawan, Ministry of Environment, Forest & CC, Jorbagh Road, Lodhi Road, New Delhi-110003	Member Secretary	