

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

SUMMARY RECORD OF 24th MEETING OF THE RECONSTITUTED COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The Twenty Fourth 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 **November 27-28, 2017**. The list of participants is annexed. After welcoming the Committee Members, discussion on each of the Agenda Items was taken up ad-seriatim.

Date: 27th November, 2017 (Monday)

1.1 Deliberation & Circulation on the Minutes of the 23rd EAC Meeting:

The Minutes of the 23rd Meeting of EAC held during October 23-24, 2017 were circulated to the members of the Committee. The members made brief deliberations on the proposals placed in the last meeting and discussed upon the proposals related to the change in definition of ROM (Run of Mine) in the recently notified Mineral Concession Rules, 2016. The deliberations were specifically centred on understanding the wider ramifications on admissibility of such proposals.

2. As had been noted in previous meeting, the representative official from Ministry of Mines again explained that there is no change in definition of ROM in any of the recently notified statutes by the Ministry of Mines; however, the Committee informed that the very definition of ROM was first introduced in the Mineral Concession Rules, 2016 which is same as being understood in all mining plans and schemes invariably.

3. **After detailed deliberations on the issue, the Committee felt that in view of the fact that concept of ROM is same as it was perceived earlier, the proposals seeking inclusion of Total excavation as equivalent to ROM are apparently cases of expansion in production and hence, all such proposals may be asked to apply online as a fresh proposal. Further, the Ministry may also like to take a clarification on this matter from Ministry of Mines/ Indian Bureau of Mines. Apart from this, such kind of proposals may be returned to PPs clearly saying that they may apply under fresh proposal.**

Consideration of Proposals of EC & ToR

(2.1) Expansion of production capacity of Shri Bajrang Iron Ore Mine of M/s Shri Bajrang Power & Ispat Limited from 0.25 Million TPA to 0.6 Million TPA (ROM) in M.L. area of 75 Ha located at Compartment No: 641 & 642, Durgukondal Forest Range, Bhanupratappur (East) Forest Division, Hahaladdi & Chahchad Villages, Tehsil – Durgukondal, Uttar Bastar Kanker District, Chhattisgarh (IA/CG/MIN/53139/2016) – Consideration of Environmental Clearance regarding
File No. J-11015/150/2016-IA.II(M)

The proposal of M/s Shri Bajrang Power & Ispat Limited is for enhancement of production capacity from 0.25 Million TPA to 0.6 Million TPA (ROM) in respect of Shri Bajrang Iron Ore Mine in M.L. Area of 75 Ha. 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. The Mining Lease Area is a part of the Survey of India Topo sheet No. 64/D/16 with an average altitude of 550 m above MSL. The mine site is located between 20°11'13.00"N - 20°11'56.50"N latitudes and 80°54'2.50"E - 80°54'22"E longitudes. The PP presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

2. The proposal of ToR was earlier considered by the EAC in its meeting held during May 23-24, 2016 wherein the Committee recommended for grant of ToR. The Ministry issued Terms of Reference (ToRs) for the preparation of the Environmental Impact Assessment (EIA) Report and Environmental Management Plan (EMP) vide their letter no. J-11015/150/2016-IA.II (M) dated 10.06.2016. The EIA Report/ EMP, in compliance with prescribed ToR, were submitted to Ministry on 12.10.2017 for appraisal. The instant lease area got first EC vide letter no. J-11015/515/2007-IA.II (M) dated 02.03.2009 for 0.25 Million TPA (ROM). As per the past production details, the mineral production has not gone beyond the EC granted limit of 0.25 Million TPA. PP submitted that mining operations commenced on 09-02-2015.

3. PP reported that total lease area of 75 Ha is forest land for which Forest Clearance was obtained vide letter No. F.No.8- 34/2009-FC dated August, 2014. The forest clearance was obtained for 76.50 Ha which include land for approach roads also. PP submitted that mine lease does not form part of any Protected Area, Eco-sensitive Zone and it is not falling within the distance of 10 km boundary of any National Park and Wildlife Sanctuary and the same is mentioned in MoEFCC R.O Inspection report also. The list of authenticated flora and fauna along with approved Wildlife Conservation Plan of ₹3.5 Crores for 20 years in respect of Schedule-I species found in the study area viz. Sloth Bear, Indian Peafowl and Indian Rock Python was noted by the Committee. The Committee observed that a provision exists in the approved Wildlife Conservation Plan w.r.t budget enhancement based on local conditions. **The Committee asked the PP to present a certificate in support of its claim of 'No Forest land' issued by an official not below the rank of DFO as per the prescribed ToR.**

4. PP reported that the lease deed was executed on 21/11/2014 based on the

letter of intent issued by State Govt. vide letter no. F-3-60/2006/12 Raipur, dated 29 Feb, 2008. The Committee noted that the lease deed mentions the validity as 30 years i.e. up to 20.10.2034. The mining plan is approved by Indian Bureau of Mines, Nagpur vide its letter no. KNK/Fe/MPLN-995/NGP/2015 dated 30/03/2016 which mentions that mining will be done up to an ultimate depth of 520mRL. PP reported during the presentation that the mining lease is on a hill top and hence, water table intersection is not envisaged. The mining operations are likely to continue for another 12 years based on the estimated reserves and production rate of 0.60 million TPA. It has also been envisaged in EIA Report that a single pit will be formed at the end of mine life which will be partly backfilled and converted into water reservoir.

5. The Committee noted that the PP has mentioned in the presentation as well as mine plan that no reclamation shall be done through backfilling. PP explained that since exploration activities in the lease area have not been completed as yet, hence, it is not feasible to assess the depth of mining operations and accordingly, the reclamation/ backfilling plan is not framed as of now. However, PP mentioned that once exploration is complete and ultimate working depth is ascertained, the reclamation/ backfilling plan shall be chalked out and implemented. It was also submitted that the mineral ore exploration has been carried out up to 150meter in some places in lease area wherein extractable ore availability has been noticed up to 135 meters. A timeline of 31.03.2019 has been fixed for total exploration of lease area.

6. Based on PP's submissions, the Committee noted that the mining operations in the lease area have started in recent past (Feb-2015); however, due to absence of complete exploration details in lease area, the mine working estimations made by the PP w.r.t. conceptual stage (end of life of mine) seems to be provisional. Hence, Committee is of the view that until the exploration activities are complete in the mine lease, it is not possible to arrive at the overall environmental impacts arising from mining operations which are dependent on factors like location of dumps, mining vis-à-vis dumping sequence, identification of non-mineralised zone etc. which are required to be included in the EIA Report for impact assessment and associated mitigation plan. **Hence, Committee asked PP to present a tentative reclamation/ backfilling plan. The Committee also observed that since a timeline of 31.03.2019 has been fixed for exploration activities, the proposal of instant expansion can be considered for validity up to 31.03.2019, after which, PP has to again approach the Ministry and submit final approved mine plan clearly indicating the scope of mine working covering parameters like land-use at conceptual stage, reclamation & backfilling plan, dumping sequence, location of dumps etc.**

7. Public Hearing for the project was conducted on 18.07.2017 at District Office – Durgkondal, Tehsil - Durgkondal, District – North Kanker Baster, under the chairmanship Additional Collector, District – North Kanker Baster, Chhattisgarh. The representatives of Chhattisgarh Environment Conservation Board attended and coordinated the meeting. The proceedings of the Public hearing indicated that the local villagers have raised those issues during Public hearing which were directly

related to the development of the area. The PH highlighted issues related to employment to locals, repairing and maintenance of damaged road to nearby villages, loss of forest related livelihood, opening of health centre/ hospital in the area, improving the status of educational facility and providing infrastructural support, providing Protective equipment's to mine workers, red colour wastewater runoff/ drainage from mines, local development related issues like improved infrastructure, taking up plantation drive in the area to control air pollution etc. PP submitted that it is committed for social upliftment of the area and shall provide the basic amenities to nearby villagers like drinking water, infrastructural support to schools, hospitals, road construction etc. which will ultimately add to the economic benefits to the locals of the area. For the same purpose, it has made a provision of ₹50lakhs for 5 years. Similarly, an amount of ₹75 Lakhs (towards capital expenditure) and Rs. 32 Lakhs (towards recurring expenditure per annum) is earmarked for implementation of the environmental management plan. The Total project cost is ₹15Crores. **The Committee noted the submissions of the PP and explained to the PP that the expenditure made towards addressing the issues raised in PH shall be covered under Enterprise Social Commitment (ESC) which will be exclusive of CSR budget and contribution made to the District Mineral Fund. Further, the Committee noted that the measures proposed by the PP are not feasible considering the budgetary provisions made for achieving them hence, PP was asked to increase the ESC budget considering practical aspects in implementing the proposed measures.**

8. PP has reported that the daily water demand will be 87KLD after expansion out of which about 50 KLD will be used for dust suppression, 20 KLD for greenbelt and 17 KLD for Domestic facilities. As of now, the water requirement for 0.25 Million TPA equivalent mining operations is 45KLD. The water requirement is proposed to be met from ground water and water stored in mine pits. **The Committee asked the PP to furnish the permission obtained from CGWA/ State Groundwater Department for water drawl.** The primary baseline data for site specific micro meteorology data, ambient air quality, water quality, noise level, soil and flora & fauna was collected during Winter Season i.e. from December, 2016 – February, 2017. The baseline monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and the same were compared with respective prescribed ranges viz. NAAQS-2009 (for air monitoring), IS:10500-2012 (for surface water & ground water) and ambient noise limits prescribed by CPCB. The impact prediction carried out by the PP indicated incremental concentrations through modelling w.r.t. PM₁₀ and PM_{2.5}. The Committee, however, observed that due to expansion activities, the road transportation and involvement of heavy machineries will increase thereby increasing diesel consumption. **Hence, air pollution modelling w.r.t. SO₂ and CO also needs to be included in the impact prediction.** The Committee also noted that during PH, the local villagers have raised the issue of discharge of red water from mines/ hills which degrade their agricultural land thereby indicating that mine discharge/ runoff has not been taken care-off adequately. This issue has also been raised in the MoEFCC R.O. Compliance Report. The waste is reportedly dumped in existing OB dump, however, the same was observed to non-stabilized which may lead to soil erosion. The issue of land

reclamation/ backfilling has been discussed in preceding paras. The soil quality has been monitored and physico-chemical characteristics of soil were examined. The Committee noted that the soil is sandy loam in nature and is rich in Calcium, Magnesium, Potassium, Nitrogen and Phosphorus. Since the mine lease is on the top of a hill with ore body which is not extending up to ground level, the groundwater intersection is not proposed. The other infrastructural facilities like Mine office, Crusher, iron ore handling area etc. are reportedly constructed at the foot of the hills.

9. PP has reported that there is no seasonal nallah passing through the mining lease which may require diversion. PP reported that there is no court case/ litigation pending against the project. The Committee took note of the Compliance Report of MoEFCC R.O. Nagpur dated 27.07.2017 and noted that some conditions have either been partially complied and/ or not complied by PP. The issues raised in the inspection report requiring attention from PP's side are:- Blacktopping of main haul road, stabilisation of OB dump & timely desiltation of garland drains, irregular monitoring of groundwater, identification of land for fodder farming, development of green belt and undertaking plantation, furnishing of details pertaining to socio-economic development of the area, approval of groundwater withdrawal. **In view of the issues raised in Compliance Report, the Committee asked the PP to provide latest status of the compliances and remedial action taken on the observations made by MoEFCC R.O.**

10. The Committee deliberated on the proposal and deferred it as proposal contains multiple issues which need to be addressed (as mentioned in preceding paras). The PP is advised to submit the following:-

- Reclamation/ backfilling plan vis-a-vis progressive mining activity
- Air pollution modelling w.r.t. SO₂ and CO for impact prediction considering diesel consumption
- Latest status of the compliances and remedial action taken on the observations made by MoEFCC R.O.
- Permission obtained from CGWA/ State Groundwater Department for groundwater withdrawal
- Details of enhanced Enterprise Social Commitment (ESC) budgetary provisions considering practical aspects in implementing the proposed measures.

(2.2) Periyathirukonam Limestone Mine of M/s The India Cements Limited having production capacity of 2.34 Million TPA in M.L. area of 74.81 Ha located at Villages – Periyathirukonam, Reddipalayam and Edaiyattankudi, District & Taluk – Ariyalur, Tamil Nadu (IA/TN/MIN/61895/2017) – Consideration of Environmental Clearance regarding

File No. J-11015/8/2017-IA.II (M)

The proposal of M/s The India Cements Limited is for production capacity of 2.34 Million TPA (ROM) in respect of Periyathirukonam Limestone Mine in M.L. Area of 74.81 Ha. The mine is located at Villages – Periyathirukonam, Reddipalayam and

Edaiyattankudi, District & Taluk – Ariyalur, Tamil Nadu. The mining lease area falls in Survey of India Toposheet No. 58 M/4 and is located between Latitudes - 11° 03'39.45"N - 11° 04'18.54"N and Longitudes - 79° 09'01.03"E - 79° 09'56.38"E. The PP presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

2. The proposal of ToR was earlier considered by the EAC in its meeting held during February 20-21, 2017 wherein the Committee recommended for grant of ToR to the PP. The Ministry issued Terms of Reference (ToRs) for the preparation of the Environmental Impact Assessment (EIA) Report and Environmental Management Plan (EMP) vide their letter no. J-11015/08/2017-IA.II (M) dated 17.03.2017. The EIA Report/ EMP, in compliance with prescribed ToR, was submitted to Ministry on 04.10.2017 for appraisal. The instant lease is a fresh lease and hence, violation related aspects were not applicable.

3. The mining lease has been obtained from the Commissioner of Geology and Mining, Chennai, vide letter Rc.No. 13035/MM1/1999 dated 10.01.2017. The lease deed has been executed on 11.01.2017. The validity of mine lease is till 10.01.2067. The proposed mine lease area of 74.81 Ha is Patta-dry land owned by the company. The mineral reserve prospected by the Department of Geology and Mining, State Government of Tamil Nadu is 13.36 million tons and as per the proposed 2.34 MTPA (ROM basis) production capacity, the estimated life of mine is 10-12 Years. However, as per the suggestion of the EAC during TOR presentation, some fragmented mine lease area on the southern part was excluded from active mining area thereby reducing the area from earlier 54.52 Ha to 47.95 Ha. Accordingly, estimated reserves for mining were also reduced to 12.61 Million Tonnes. The fragmented lease area excluded from active mining is proposed to be specifically used for providing access to the locals and develop Plantation in the fragmented lease area. The Mining plan for the proposed limestone production was approved vide IBM letter no. TN/ALR/MP/LST-2022-MDS dated 12.04.2017. The estimated total waste generation from the mining operation is 7.69 million tons comprising of 2.4 million tonnes of top soil, 3.89 million tons of OB/IB & 1.4 million tons of mineral rejects.

4. The project site and surrounding area of 10 km radius from the mining lease boundary does not have any protected areas such as National Parks or Wildlife Sanctuaries, Reserve or protected forest. The letters from State Forest Department vide no.1772/2017/P dated 07.08.2017 and 1773/2017/P dated 10.08.2017 are furnished to that effect. The proposed mining method is mechanized opencast mine using heavy earth moving equipment's in combination with deep hole drilling, blasting and adaptation of non-conventional mining method of Ripper dozer/Rock breaker/Xcentric breaker. The authenticated list of flora and fauna from State Forest Department has been furnished vide letter no.1771/2017/P and 1774/2017/P dated 10.08.2017. The Wildlife Conservation Plan of ₹2.5 Lakh for 5 years in respect of Schedule-1 species found in the study area viz. Indian Peafowl was noted by the Committee. The Committee observed that the DFO has approved the plan vide its letter no. 2400/2017/P dated 13.09.2017. **However, the Committee suggested the**

PP to submit the same to the CWLW of the State and submit the proof of submission to the Ministry in compliance of ToR condition no. 17 and 18. The Committee also asked the PP to enhance the Peafowl Conservation Plan budget.

5. PP submitted that the PWD has categorised Ariyalur Block, wherein this lease is located, under “Safe Category”, however, mining operations are envisaged to be intersecting the ground water table in 2nd year. Accordingly, the detailed hydrogeological study report was submitted to State Ground and Surface Water Resources Data Centre, PWD along with application for NOC for working below Groundwater table and for pumping. **The Committee noted the submission of PP and asked the PP to provide the status of permission as intersection is envisaged in 2nd year only. The Committee also asked PP to ensure that mining operations be started after obtaining permission to intersect the ground water table.** It was also submitted by PP that a water body namely, Uppu odai (seasonal rainwater drainage channel), passes in between the lease area; hence, to prevent any impact on the drainage courses in the area, the following measures shall be taken as suggested in the lease order of the State Government:

- Safety distance of 50m is provided from the Uppu odai and an embankment of 8-9 m high is also proposed to be created on either side of the odai within the lease area to protect Uppu odai from the mine working.
- A safety distance of 50m is proposed to be left from the boundary of the shallow small pond located outside the lease area and the same shall not be disturbed.

6. The total water requirement for the project is 45 m³/day comprising of 1.5 m³/day for domestic activities; 38.5 m³/day for water sprinkling, dust suppression and green belt development and 5.0 m³/day for workshop etc. For drinking & industrial purpose, bore well water will be initially used. Later, on creation of mine floor sump, harvested rain water, seepage if any in the sump can be used for industrial purpose. PP submitted that mining operation will be commenced from north-western side of mining lease area such that during the first five year mining plan period about 31.50 Ha area will be opened up and about 11.48 hectares will be backfilled with Overburden, waste and reject. At the end of mine life, about 47.95 Ha area shall be opened up and an area of 18.85 Ha hectares be backfilled with mine waste and remaining area of 29.10 Ha be left and converted as water body. The backfilled area is proposed to be reclaimed back with good vegetative cover such that thick plantation shall be developed in 41.58 Ha (55.66%) comprising of 18.85 Ha of backfilled mined out void, 3.47 ha of protective bund & 19.26 ha of plantation areas and water body shall be developed in 29.10 ha (38.90%) lease area.

7. Public Hearing for the project was conducted on 09.09.2017 at Government Higher Secondary School, Periyathirukonam, Ariyalur Taluk, Ariyalur District, Tamil Nadu, under the chairmanship District Collector, District – Ariyalur, Tamil Nadu. The representatives of Tamil Nadu Pollution Control Board attended and coordinated the meeting. The proceedings of the Public hearing indicated that a total of about 477 persons attended the public hearing. The major issues raised by the local villagers

are related to proper implementation of the environmental management measures during mining operations, provision of employment for the locals, repairing and maintenance of damaged road, more initiatives by the company local infrastructure development, restriction on mine discharge water into nearby village ponds, taking up plantation drive in the area to control air pollution, undertake activities like development of educational/ sanitation/ drinking water/ healthcare facilities leading to positive socio economic impact, adverse impact of blasting operations; however, PP reported that most of the locals were supportive and welcoming the project. PP submitted that the proposed mining project will benefit this region in the fields of potential employment opportunities, improved per capita income for local people, improved social welfare facilities in respect of education, medical healthcare systems, communicational aspects, infrastructural build-up, etc. For the same purpose, it has made a provision of ₹10lakh per year which will be increased to ₹15 lakh per year at full production stage. It was also submitted that since the PP already have a Cement plant in the vicinity, it has already spent an amount of ₹327 lakhs in past 10 years under CSR **The Committee noted the submissions of the PP and explained to the PP that the expenditure made towards addressing the issues raised in PH shall be covered under Enterprise Social Commitment (ESC) which will be exclusive of CSR budget and contribution made to the District Mineral Fund.** Similarly, an amount of ₹66.5 Lakhs (towards capital expenditure) and ₹48 Lakhs (towards recurring expenditure per annum) is earmarked for implementation of the environmental management plan. The Total project cost is ₹4.5Crores with direct employment generation potential of 18 persons and indirectly job creation of more than 100 persons.

8. The primary baseline data for site specific micro meteorology data, ambient air quality, water quality, noise level, soil and flora & fauna was collected during March, 2017 – May, 2017. The baseline monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and the same were compared with respective prescribed ranges viz. NAAQS-2009 (for air monitoring), IS:10500-2012 (for ground water) and ambient noise limits prescribed by CPCB. No surface water source sampling was carried out as the same was reported dry during the study period. The impact prediction carried out by the PP indicated incremental concentrations through modelling w.r.t. PM₁₀ only. The Committee, however, observed that due to expansion activities, the road transportation and involvement of heavy machineries will increase thereby increasing diesel consumption. **Hence, air pollution modelling w.r.t. PM₁₀, SO₂ and CO also needs to be included in the impact prediction.** The soil quality has been monitored and physico-chemical characteristics of soil were examined. The Committee noted that the soil is black cotton soil and as per PP's submissions the top soil can be used for green belt development and plantation with enrichments. PP reported that there is no court case/ litigation pending against the project.

9. **The Committee deliberated on the proposal and deferred it as proposal contains multiple issues which need to be addressed (as mentioned in preceding paras). The PP is advised to submit the following:-**

- **Proof of submission of Conservation Plan to CWLW of the State and**

enhanced budgetary proposal of the Peafowl Conservation Plan

- **Air pollution modelling w.r.t. PM_{2.5}, SO₂ and CO for impact prediction**
- **Status of permission obtained from CGWA/ State Groundwater Department for groundwater intersection as the same is proposed in current scheme of mining**

(2.3) Enhancement of production from 3.17 Million TPA to 5.50 Million TPA (ROM) in respect of Limestone mines of M/s. Emami Cement Limited in M.L. Area of 395.05 Ha located at Villages - Kukurdih & Risda, Tehsil - Balodabazar, District – Balodabazar – Bhatapara, Chhattisgarh (IA/CG/MIN/27402/2015) – Re-consideration of Environmental Clearance regarding [File No. J-11015/135/2015-IA.II (M)]

The proposal of M/s. Emami Cement Limited is for enhancement of production capacity from 3.17 Million TPA to 5.50 Million TPA from limestone mine in 395.05 Ha M.L. Area. The mine located at Villages - Kukurdih & Risda, Tehsil - Balodabazar, District – Balodabazar – Bhatapara, Chhattisgarh. The mining lease area falls between 21°38'0.072"N to 21°39'48.105"N latitudes and 82°06'12.855"E to 82°07'30.230"E longitudes and on the Survey of India topo-sheet No. 64 K/2. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

2. The proposal of EC was earlier considered in EAC meeting held during August 29-30, 2017 wherein the Committee deferred the proposal for want of additional information in respect of the following:-

- Clarification from State Mining Department in respect of the impact of mining and blasting operations on the Kukurdih dam and its infrastructure including ground water table
- Detailed point-wise compliance status of Enterprise Social Commitment, status of green belt development, status of construction of catch drains, status of measures taken for control of pollution and other issues which are stated as 'partially complied'/ 'not complied' in the Monitoring Report dated 17.08.2017.
- Preparation of separate plans for Greenbelt development along boundary and Afforestation/ plantation within mine lease.

3. The PP had submitted its reply to MoEFCC for placement of the same before the EAC vide its letter dated 29.09.2017 and 31.10.2017. The same is summarized below:

- i. The Office of Director of Geology and Mining, Naya Raipur, Chhattisgarh has clarified vide its letter no. 7320/Mine02/No.A63/2015 dated 27.10.2017 that it shall be the responsibility of lessee to comply the conditions of legal permission issued by Mine Concession Rule, 1916, Contract Conditions, MCDR, 1916, DGMS guidelines and related rules & guidelines of other institutions which address the issue of mining and blasting operations on the Kukurdih dam and its infrastructure including ground water table. It has elsewhere mentioned in the letter that this dam is made up of soil and comes

under the category of Micro Irrigation Project. As per the Mining Plan approved by Indian Bureau of Mines, mining is approved after leaving about 350 meters (Buffer Zone) of protected area which is more than the stipulated distance of 50 meters.

- ii. All the partly complied conditions have been complied and the detailed point-wise compliance status of the same has been submitted to Regional Office, MoEFCC, Nagpur which has been subsequently forwarded by them to MoEFCC, New Delhi vide letter no. F.No.-5-62/2011Env/2748 dated 29.09.2017.
- iii. Separate plans for Greenbelt development along boundary and Afforestation/ plantation within mine lease are prepared.
- iv. The production started in the year 2016 and authenticated year wise production details have been furnished vide letter No-844/Khali2/Kh.P./2017 dated 01.09.2017 issued from Collector Office (Mineral), Balodabazaar, Chhattisgarh. Limestone crusher of capacity 1200 TPH with double rotor heavy-duty impactor is already installed in the non-mineralized barren zone i.e. southern part of south block for crushing of limestone. Coordinates of the crusher location are, Latitude 21°38'4.52"N and Longitude 82°06'44.24"E.

4. The Committee noted that the present proposal is not a violation case as per past production details. Further, the mining operations have been started in 2016-17. Accordingly, the instant proposal is also not covered in Supreme Court judgment. It was also noted that a crusher of 1200 TPH is already installed in the mine lease area. Further, as per the detailed report provided by State Department of Mines & Geology, the aspect of mining and blasting on the Kukardih earthen dam has been taken care of through the provisions contained in rules and guidelines framed under MMDR Act, 1957. The PP also informed that it has submitted the updated status of compliance to MoEFCC R.O. Nagpur vide its letter dated 08.09.2017 which was forwarded to MoEFCC, Delhi vide letter dated 29.09.2017. The Committee noted the compliance status of the various conditions *like construction of catch drains & their maintenance, monitoring of groundwater level in and around project area, management of waste generated from mining operations & its stabilisation through vegetation, modification in dump area from 22.84 Ha to 15.48 Ha, status of greenbelt development, status of Enterprise Social Commitment for addressing Public Hearing and Social Responsibility related issues, policy towards Corporate Environment Responsibility & in-house environment cell, status of eco-development measures, details of expenditure made on implementation of environmental safe guards etc.* The plan for greenbelt development and afforestation/ plantation have been revised such that for 1st five years after expansion the budget shall be kept as ₹15.45 lakhs per annum, from 6th-10th year budget shall be kept as ₹59.225 lakhs, 11th-20th year budget shall be kept as ₹84.975 lakhs, 21st-30th year budget shall be kept as ₹136.99 lakhs, 31st-40th year budget shall be kept as ₹120.1495 lakhs and from 41st-End of mine life budget shall be kept as ₹299.73 lakhs.

5. The Committee deliberated on the proposal and observed that the earlier EC was granted for integrated cement plant whereas the instant proposal is an expansion of mine component only. The PP has also presented the compliance

of EC conditions on the basis of integrated plant only covering budgetary aspects. Hence, it would be appropriate if the status of compliance of partially complied/ non-complied conditions, as noted by MoEFCC RO, is cross-checked by MoEFCC R.O. Nagpur and comments on status of compliance of EC conditions are furnished. Accordingly, the proposal is deferred for want of report/ comments from MoEFCC R.O. Nagpur.

2.4 J-11015/231/2012.IA.II (M) : Proposal of M/s BMM Cements Ltd for increase in limestone production from 1.0 MTPA to 4.5 MTPA of Gudipadu Limestone Mine (454.59 Ha) located at Gudipadu village, YadikiMandal, Anantapur District, Andhra Pradesh -Consideration of ToR.

Ref: Online proposal no. IA/AP/MIN/70547/2017

The proposal of the M/s BMM Cements Ltd for increase in limestone production from 1.0 MTPA to 4.5 MTPA of Gudipadu Limestone Mine (454.59 Ha) located at Gudipadu village, YadikiMandal, Anantapur District, Andhra Pradesh. The mine lease area falls in the Survey of India topo-sheet No. 57 E/16 & 57 I/4. The latitudes and longitudes of the Mine lease fall between Latitude: - N 15° 05' 03" to N 15° 07' 16" and Longitude: - E 77° 58' 12" to E 78° 00' 15".

2. The PP applied online for grant of ToR on 25.10.2017 and submitted the Form-1, Pre-feasibility Report, Copy of Mining lease deed and Past Production details duly certified by the Department of Mines and Geology, Govt. of Andhra Pradesh. PP engaged B.S Envi-Tech (P) Ltd. as consultant and submitted the certificate issued by NABET dated 18.09.2017 regarding validity of the certificate which is till 22.06.2018 or completion of assessment process whichever is earlier.

3. The proponent submitted that the mining lease over an area of 454.59hectares falling in Khasra Nos as per G.O Ms. No.199 Industries and Commerce (M-III) dated 04.12.2015 of Gudipadu village, Yadiki Mandal, Anantapur District, Andhra Pradesh was granted for a period of 20 years vide Department of Mines & Geology, Govt of Andhra Pradesh Lr. No. 3615/M1/2007 dated 15.12.2015 for a period of 20 years from date of execution of lease deed i.e. from 15.12.2015 to 14.12.2035.

4. PP submitted that out of the total mining lease area of 454.59 Ha, **52.96 Ha is Govt. Barren rocky land** and balance **401.63 Ha is company's own land**. PP submitted that there is no forest land involved in the Mining lease area and there is no protected area within 10 Km of the Mining Lease area.

5. PP submitted that the Environmental Clearance was granted vide Ministry's letter No. J-11015/231/2012-IA-II (M) dated 12-12-2014 for 1.0 MTPA of Limestone production. PP also submitted the past production details duly certified by the Department of Mining and Geology, Govt. of A.P vide LR. No. 3615/M1/2007 dated 18.10.2017 as per which the dispatches is well within the limit of earlier granted EC.

6. The proposal was considered in the EAC meeting held on 27th November,

2017. The committee noted that in the Form-1 submitted by the Proponent the name of the applicant and company is mentioned as M/S Sagar Cement Limited but the proposal submitted is for M/S BMM Cement Ltd. The Committee after due deliberation **deferred** the proposal and asked the PP to resolve the anomaly before it is considered by EAC.

2.5: J-11015/98/2017.IA.II (M): - Proposal of M/s Abhijeet Cement limited for limestone production of 0.45 MTPA from Badhreta Limestone Mine (190.326 Ha) located at Village Badhreta, Tehsil Kailaras, Distt. Morena, Madhya Pradesh -Consideration of ToR.

Ref: Online proposal no. IA/AP/MIN/70014/2017

The proposal of the M/s Abhijeet Cement Limited (ACL) is for limestone production of 0.45 MTPA from Badhreta Limestone Mine (190.326 Ha) located at Village: Badhreta, Tehsil: Kailaras, District: Morena, Madhya Pradesh. The mine lease area falls in the Survey of India topo-sheet No. 54 F 7,8,12. The latitudes and longitudes of the Mine lease fall between Latitude: - N26° 13' 30" to N 26° 14' 30" and Longitude:- E 77° 29' 30" to E77° 31' 30".

2. The PP applied online for grant of ToR on 14.10.2017 and submitted the Form-1, Pre-feasibility Report, Copy of Mining lease deed and Authorization letter in the name of Shri Padmakar Murodiya, GM to represent the company before EAC.

3. The proponent submitted that the mining lease over an area of 190.326 hectares falling in Khasra No 1381/16 of Badhreta village, Tehsil: Kailaras, District: Morena, Madhya Pradesh was granted for a period of 30 years vide Govt. of Madhya Pradesh letter No. 2-1/2008/12/1 dated 2/9/2008 and the lease deed was executed on 03.07.2010 and valid till 02.07.2040.

4. PP submitted that out of the total mining lease area of 190.326 Ha is Govt. revenue land. PP submitted that there is no forest land involved in the Mining lease area and there is no protected area within 10 Km of the Mining Lease area.

5. PP submitted that the Term of Reference was earlier granted vide Ministry's letter No. J-11015/284/2011-IA-II (M) dated 26-03-2012 for 0.45 MTPA of Limestone productions.

6. The Proponent submitted that minable mineral reserves are 8.433 Million Tons and with proposed production capacity the life of mine will be 15 years. The proponent mentioned that the mining of the deposit is worked by open cast fully mechanized mining with deep hole drilling & blasting. The crushing of blasted limestone for size reduction will be done at impact type crusher located at the centre of all the three mining leases and the transportation of crushed limestone to cement plant will be with the help of belt conveyor of appropriate size. The waste rock mostly is argillaceous limestone and purple shale which will be handled and dumped as per proposals of approved mining plan. The mining have been proposed in such a way that almost entire limestone of low-grade nature will be utilised by blending however

temporary stockpile of sub grade mineral will be made if required away from waste dump to avoid mixing. There are very little top soil cover is there in mining area which will be separately dumped so as to utilize it for plantation and reclamation activity.

7. The proponent submitted that Water requirement for the project will be 15 m³ /day which will be met from nearby surface water resources that is Kunwari River. In the due course of time when mining operation will be extended below ground level the pit will work as rain water harvesting pond thereby increase in ground water potential of the area is also expected.

8. The proposal was considered in the EAC Meeting held on 27th November, 2017. The KML file was analysed on DSS and it has found that Approx. 0.78 Ha area of Mining lease is falling inside Forest Compartment No. 262 under Morena Forest Division of Madhya Pradesh. Based on the presentation made by the PP and discussion held. The committee **deferred the proposal** and asked the PP to submit the following:

- a) Conceptual plan as per approved mining plan,
- b) Access route/road from each mine to crusher (along with dimension of the road viz. length, width etc.)
- c) Area already explored (area and depth) and time frame within which the geological exploration will be completed,
- d) Year-wise green belt development and afforestation planning,
- e) Proposed route for laying down the conveyor belt from crusher to plant and mine to crusher if any.
- f) Copy of letter No. 2-1/2008/12/1 dated 2/9/2008 issued by Govt. of Madhya Pradesh and
- g) Letter from State Forest Department certifying that no forest land is involved in the Mining lease area.

2.6: J-11015/99/2017.IA.II (M): Proposal of M/s Abhijeet Cement Limited for limestone production of 1.0MTPA from Mahewa-Saipura-Bhilampur Limestone Mine (268.520 Ha) located at Village Mahawa-Saipura-Bhilampur-Badhreta, Tehsil Kailaras, Distt. Morena, Madhya Pradesh -Consideration of ToR.

Ref: Online proposal no. IA/AP/MIN/70015/2017

The proposal of the M/s Abhijeet Cement Limited (ACL) is for limestone production of 0.45 MTPA from Mahewa-Saipura-Bhilampur-Badhreta Limestone Mine (268.520 Ha) located at Village: Mahawa-Saipura-Bhilampur-Badhreta, Tehsil: Kailaras, District: Morena, Madhya Pradesh. The mine lease area falls in the Survey of India topo-sheet No. 54 F 11. The latitudes and longitudes of the Mine lease fall between Latitude: - N26° 14' 30" to N 26° 16' 30" and Longitude:- E 77° 30' 00" to E77° 34' 30".

2. The PP applied online for grant of ToR on 14.10.2017 and submitted the Form-1, Pre-feasibility Report, Copy of Mining lease deed and Authorization letter in the

name of Shri Padmakar Murodiya, GM to represent the company before EAC.

3. The proponent submitted that the mining lease over an area of 268.520 hectares falling in Khasra Nos 397,400,403 and 408 of Mahawa village, Khasra No 291 of Saipura village, Khasra Nos 240 and 258 of Bhilampur village and Khasra No 482 of Badhreta village of Tehsil: Kailaras, District: Morena, Madhya Pradesh was granted for a period of 30 years vide Govt. of Madhya Pradesh letter No. 2-1/2008/12/1 dated 2/9/2008 and the lease deed was executed on 03.07.2010 and valid till 02.07.2040.

4. PP submitted that out of the total mining lease area of 268.520 Ha is Govt. revenue land. PP submitted that there is no forest land involved in the Mining lease area and there is no protected area within 10 Km of the Mining Lease area.

5. PP submitted that the Term of Reference was earlier granted vide Ministry's letter No. J-11015/285/2011-IA-II (M) dated 26-03-2012 for 1.0 MTPA of Limestone productions.

6. The Proponent submitted that minable mineral reserves are 15.36 Million Tons and with proposed production capacity the life of mine will be 17 years. The proponent mentioned that the mining of the deposit is worked by open cast fully mechanized mining with deep hole drilling & blasting. The crushing of blasted limestone for size reduction will be done at impact type crusher located at the centre of all the three mining leases and the transportation of crushed limestone to cement plant will be with the help of belt conveyor of appropriate size. The waste rock mostly is argillaceous limestone and purple shale which will be handled and dumped as per proposals of approved mining plan. The mining has been proposed in such a way that almost entire limestone of low-grade nature will be utilised by blending however temporary stockpile of sub grade mineral will be made if required away from waste dump to avoid mixing. There is very little top soil cover is there in mining area which will be separately dumped so as to utilize it for plantation and reclamation activity.

7. The proponent submitted that Water requirement for the project will be 50 m³ /day which will be met from bore-well proposed in the mining lease area and from the rainwater collected in the mining pit. PP submitted that the ground water table is 25-30m below the surface level and mine working will not intersect the ground water table.

8. The proposal was considered in the EAC Meeting held on 27th November, 2017. Based on the presentation made by the PP and discussion held. The committee **deferred the proposal** and ask the PP to submit the following:

- a) Conceptual plan as per approved mining plan,
- b) Access route/road from each mine to crusher (along with dimension of the road viz. length, width etc.)
- c) Area already explored (area and depth) and time frame within which the geological exploration will be completed,

- d) Year-wise green belt development and afforestation planning,
- e) Proposed route for laying down the conveyor belt from crusher to plant and mine to crusher if any.
- f) Copy of letter No. 2-1/2008/12/1 dated 2/9/2008 issued by Govt. of Madhya Pradesh.

2.7: J-11015/100/2017.IA.II (M): Proposal of M/s Abhijeet Cement limited for limestone production of 1.8 MTPA from Sehampur-Itoura limestone mine (186.79Ha) located at Village Shahadpur & Itoura, Tehsil Kailaras, Distt. Morena, Madhya Pradesh -Consideration of ToR.

Ref: Online proposal no. IA/AP/MIN/70017/2017

The proposal of the M/s Abhijeet Cement Limited (ACL) is for limestone production of 1.8 MTPA from Mahewa-Saipura-Bhilampur-Badhreta Limestone Mine (186.79 Ha) located at Village: Shahadpur & Itoura, Tehsil: Kailaras, District: Morena, Madhya Pradesh. The mine lease area falls in the Survey of India topo-sheet No. 54 F11. The latitudes and longitudes of the Mine lease fall between Latitude: - N26° 15' 00" to N 26° 16' 00" and Longitude:- E 77° 32' 15" to E77° 34' 15".

2. The PP applied online for grant of ToR on 14.10.2017 and submitted the Form-1, Pre-feasibility Report, Copy of Mining lease deed and Authorization letter in the name of Shri Padmakar Murodiya, GM to represent the company before EAC.

3. The proponent submitted that the mining lease over an area of 186.79 hectares village Shahadpur & Itoura , Tehsil: Kailaras, District: Morena, Madhya Pradesh was granted for a period of 30 years vide Govt. of Madhya Pradesh letter No. 2-1/2008/12/1 dated 2/9/2008 and the lease deed was executed on 03.07.2010 and valid till 02.07.2040.

4. PP submitted that out of the total mining lease area of 186.79 Ha is Govt. revenue land. PP submitted that there is no forest land involved in the Mining lease area and there is no protected area within 10 Km of the Mining Lease area.

5. PP submitted that the Term of Reference was earlier granted vide Ministry's letter No. J-11015/286/2011-IA-II (M) dated 26-03-2012 for 1.8 MTPA of Limestone production.

6. The Proponent submitted that minable mineral reserves are 22.90 Million Tons and with proposed production capacity the life of mine will be 11 years. The proponent mentioned that the mining of the deposit is worked by open cast fully mechanized mining with deep hole drilling & blasting. The crushing of blasted limestone for size reduction will be done at impact type crusher located at the center of all the three mining leases and the transportation of crushed limestone to cement plant will be with the help of belt conveyor of appropriate size. The waste rock mostly is argillaceous limestone and purple shale which will be handled and dumped as per proposals of approved mining plan. The mining have been proposed in such a way

that almost entire limestone of low-grade nature will be utilised by blending however temporary stockpile of sub grade mineral will be made if required away from waste dump to avoid mixing. There are very little top soil cover is there in mining area which will be separately dumped so as to utilize it for plantation and reclamation activity.

7. The proponent submitted that Water requirement for the project will be 170 m³/day out of which 120 m³/day of the water is required for dust suppression (within the lease and outside the lease in nearby villages), plantation and vehicle washing and 50 m³/day is required for drinking purposes, which will be met from bore-well proposed in the mining lease area and from the rainwater collected in the mining pit. For withdrawal of ground water necessary permissions shall be obtained from the competent authorities. PP submitted that the ground water table is expected to 25-30m below the surface level and mine working will not intersect the ground water table.

8. The proposal was considered in the EAC Meeting held on 27th November, 2017. Based on the presentation made and discussion held. The committee **deferred the proposal** and ask the PP to submit the following:

- a) Conceptual plan as per approved mining plan,
- b) Access route/road from each mine to crusher (along with dimension of the road viz. length, width etc.)
- c) Area already explored (area and depth) and time frame within which the geological exploration will be completed,
- d) Year-wise green belt development and afforestation planning,
- e) Proposed route for laying down the conveyor belt from crusher to plant and mine to crusher if any.
- f) Copy of letter No. 2-1/2008/12/1 dated 2/9/2008 issued by Govt. of Madhya Pradesh

2.8: J-11015/62/2017-IA.II(M): Proposal of M/s RMG Superconductors Ltd. with limestone production capacity of 2.5 Million TPA in M.L. area of 740.35 Ha located at Villages JamuwaniKalan, Khirwa&Durjanpur, Tehsil - Vijayraghavad, District-Katni, Madhya Pradesh– Consideration of ToR regarding

Online Ref:IA/MP/MIN/65784/2017

The proposal of M/s RMG Superconductors Ltd. is for seeking ToR for conducting EIA studies for limestone mines with production capacity of 2.5 Million TPA in M.L. area of 740.35 Ha. The mine is located at villages JamuwaniKalan, Khirwa&Durjanpur, Tehsil - Vijayraghavad, District - Katni, Madhya Pradesh. The lease area is bounded between latitudes and longitude coordinates of 24°02'8.3"N to 24°07'4.6"N and 80°39'50.9"E to 80°44'1.4"E respectively. The area is located on Survey of India Topo-sheet no. 64D/12. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

2. PP reported that the mining lease area covers 740.35 Ha consisting of 734.54 Ha Private Land and 05.81 Ha Government Land. The entire lease area is sub divided into 3 blocks as Block 1- Jamuwanikalan area- 264.22 Ha, Block 2- Khirwa area-142.32 Ha., Block 3- Durjanpur area- 333.81 Ha. The State Govt. of M.P. vide letter no. F 3- 22/2010/12/2, Bhopal dated- 16.09.2010 has recommended 740.35 Ha. of area for mining of Limestone and Laterite. The lease deed is executed on 31.01.2012 and the Mining Plan with Progressive Mine Closure Plan has been approved by Indian Bureau of Mines vide letter no 314(3)/2011-MCCM(CZ)/MP/MS/PMCP-6 dated 01.08.2011. The Committee noted that since five years have already been passed, the PP is required to furnish the details of valid approved mining plan in the EIA/ EMP Report. The PP has reported to develop an opencast mechanized mine. The net geological reserves are estimated to be about 59.30 Million tonnes and the mineable reserves are estimated to be 45.96 Million tonnes. The groundwater is not likely to be encountered during the mining as water table is 25-30 m below ground level and maximum mining depth will be only 15m during the mining plan period. The Block I (Jamuwanikalan) and Block II (Khirwa) is separated by a perennial nallah bordering both the blocks. Beside this, few small seasonal nalas on the boundary are also available. One non-perennial nala flows within the Block-III (Durjanpur) lease area. The method of mining is proposed to be open-cast using drilling Machine along with compressor for drilling and subsequent blasting and Excavator/ shovels/ dumper combination for extraction, loading, sizing by crusher and transportation of limestone. PP reported that there will be no generation of waste, sub-grade limestone and reject material.

3. PP reported that the expected project cost is ₹7100 Lakhs and employment generation is 211 persons. The water requirement is estimated to be 300 m³ /day out of which 250 m³ /day of the water is required for dust suppression (within the lease and outside the lease in nearby villages), plantation and vehicle washing and 50 m³ /day is required for drinking purposes. The water requirement is proposed to be met from groundwater and rainwater collected in mining pit. The Committee asked the PP to obtain necessary permissions for water drawl. There is no National Park, Wildlife sanctuary, defense installation or sensitive area located within 15 km radius of the proposed mine. There is no historical monument or public building near the area and within 10 kms radius except a few temples.

4. The Committee deliberated on the proposal and noted from the KML file that the blocks covered under the mine lease are scattered. The KML also revealed that there are villages, schools and other public infrastructural places which are either coming within lease area or adjacent to it. It was also learnt that the PP proposes to install crusher within the mine lease; however, its details could not be made readily available before the Committee. The Committee, accordingly, asked the PP to furnish the details of the Project Affected Households (PAH) and broad contours of the R&R plan along with plan and sections of the proposed mining operations clearly delineating the active mining area. In view of the above, the proposal was deferred for grant of ToR.

5. The PP vide their letter No RMGSCL/EC/2017/003 dated 29.09.2017 submitted the details of the Project Affected Households (PAH and broad contours of the R&R plan along with plan and sections of the proposed mining operations clearly delineating the active mining area. The proposal was again considered in the EAC Meeting held on 27th November, 2017. The committee noted that on viewing the KML file submitted by the PP on DSS, Approx. 4.02 Ha area of Mining lease is falling inside Forest Compartment No. 27 & 28 under Katni Forest Division of Madhya Pradesh State. The Committee therefore, **deferred the proposal** and asked the PP to submit a certificate from State Forest Department stating that no forest land is involved in the ML area.

2.9:J-11015/246/2016-IA-II(M): Enhancement of mines production capacity of Limestone from 1.60 MTPA ROM to 3.94 MTPA ROM of M/S Rain Cements Limited located at Revoor & Mellacheruvu Villages, Mellacheruvu Mandal, Suryapet District, Telangana State (ML area 417.95 ha) (Consultant–Vimta labs)-Consideration of ToR

Online Ref: IA/TG/MIN/59983/2016-

The proposal of M/S Rain Cements Limited is for enhancement of mines production capacity of Limestone from 1.60 MTPA ROM to 3.94 MTPA ROM in their mine lease area of 417.95 ha located at Revoor & Mellacheruvu Villages, Mellacheruvu Mandal, Suryapet District, Telangana State. The previous EC for mining 1.60 MTPA of limestone was granted vide letter J-1101/152/2008-IA II(I) dated 27th October 2010 by the Industry Sector of IA Division of MoEF&CC.

2. The project proponent submitted that Cement plant is located at Ramapuram Village, Kodad Taluk, Nalgonda District (Unit-I), which has an installed capacity of 15, 00,000 MT per annum. RCL proposes for expansion in production capacity of clinker from 1.0 MTPA to 2.50 MTPA and Cement from 1.5 MTPA to 3.80 MTPA. In order to meet required limestone for enhanced capacity in cement plant, RCL proposes to increase the mines production from 1.60 MTPA ROM to 3.94 MTPA ROM within existing mine lease areas of 417.95 ha located at Revoor and Mellacheruvu Villages, Mellacheruvu Mandal, Suryapet District, Telangana State. The proponent submitted that for increase in limestone production, additional higher capacity one excavator and 3 dumpers will be included to the existing fleet. The propose project site located in the Latitude of 16° 50'6.0" to N16° 49' 21.1" N and Longitude of 79° 57' 42.7" E to 79° 59' 44.8 E.

3. The project proponent submitted that the Limestone from these lease area is used for captive consumption of Rain Cement Plant (Line 1 existing & Line 2 proposed) which is about 3.94 MTPA. The geological reserve/ resources in the limestone mine is 402.85 million tonnes of which 159.83 million tonnes of mineral reserves and 243.02 million tonnes of Remaining Resources. The mining lease is spread over the parts of villages Revoor and Mellacheruvu, Mellacheruvu Mandal, Suryapet District, Telangana State. The mines are connected through R&B road from Kodad about 28 km and from new District HQ Suryapet 65 km.

4. The project proponent mentioned that the present requirement of water in the mine is about 100 KLD. Required water for drinking purpose is being provided from the tube wells already installed in the mining area. For dust suppression water is sourced from the accumulated rain water from the pits. In view of the enhanced production, the total requirement of water in the mine will be about 250KLD. Power consumption of the existing mine operations is 135 KW. Additional power requirement will be 150 KW after expansion and will be met from the grid. The cost of proposed project is about Rs. 15.50crores. The proponent has submitted that as on 01-07-2016 afforestation in 26.26 Hectares within the ML has been done. In the next five years period about 10,000 saplings will be planted covering an area of 8.00 hectares inside ML area.

5. The project proposal was considered during the EAC meeting held during 30-31 January 2017. Based on the information furnished and discussion held, the Committee recommended the proposal and prescribed the Standard ToR for undertaking detailed EIA study as per Annexure-I. The ToR was issued vide Ministry's letter No J-11015/246/2016-IA-II(M) dated 13.04.2017.

6. PP now applied online for amendment in ToR granted on 26.10.2017 and submitted that as the mining lease coordinates was previously taken as per government revenue records. As there was a discrepancy observed, DGPS survey was conducted and the coordinates were revised accordingly. The previously submitted coordinates were Latitude of 16° 50'6.0" to N16° 49' 21.1" N and Longitude of 79° 57' 42.7" E to 79° 59' 44.8 E and the revised coordinates are 16°49' 23.7" to N16°50' 31.6" N and Longitude of 79° 57' 39.0" E to 79° 59' 43.7 E

7. The proposal was considered in the EAC Meeting held on 27th November, 2017 and committee noted that as per the KML file submitted by the PP there is a shift in the lease boundary. A letter from land revenue department that survey numbers and their area falling under new mining lease boundary are correct and they have no objection over the same needs to be submitted. The Committee was in view that as the lease boundary has changed after the DGPS survey the proponent needs to updated the boundary pillar coordinates if provided in the Mining Plan and Mining lease documents. A modified mining plan based on new coordinates needs to be submitted. A letter from Department of Mines and Geology, Government of Madhya Pradesh that mining lease boundary as per new coordinates is correct and they have no objection over the same. The Committee **deferred** the proposal and was of the view that proposal may be re-considered after submission of above information.

**2.10: J-11015/452/2013-IA.II (M): Mining of Mineral Sand, Boulder, Bajri with production capacity of 4, 77,306 TPA by M/s UKFDC located at Malan River Bed, Villages- Lachampur, Haldukhata, Jashodharpur, Tehsil- Kotdwar, District-Pauri Garhwal, Uttarakhand (35.356ha.)- Amendment in EC
Online Ref: IA/UK/MIN/22887/2013**

The proponent vide their letter No. 4051 dated 25.10.2017 requested for

amendment in the Environmental Clearance granted vide letter No J-11015/452/2013-IA.II(M) dated 02.11.2015 and applied online on 31.10.2017 for amendment of the following:

EC Letter SL No 5: “ *Project Proponent had made the traffic analysis survey and reported that no of truck deployed 10 per day (10 tonne capacity each) and the level of service remains average. The Project proponent reported that road will be repaired and maintained in good conditions. A supervisor will be appointed to regulate the traffic movement near site. Speed breakers and signage will be maintained at all the sensitive places.*”

The proposal was considered in the EAC Meeting held on 27th November, 2017. The proponent submitted that the period of extraction for the above proposal is 8 months and 10 tonne tippers are rarely available in the area. The committee considering the request to the proponent **recommended** the amendment in EC to allow deployment of trucks/tipper/tractor up to 10 ton capacity with maximum production not more than 2000 TPD.

2.11 J-11015/708A/2007-IA.II (M): Amalgamation of EC in respect of Patgowari Dolomite Mine by M/s Maharashtra State Mining Corporation Ltd. Patgowari Dolomite Mine Part-I & Part II over 45.76 ha. (EC obtained for 0.05 MTPA) & 14.24 Ha. (EC obtained for 0.04 MTPA) area respectively, situated at Village: Patgowari, Taluka: Ramtek, District: Nagpur, Maharashtra.

The proposal of **M/s Maharashtra State Mining Corporation Ltd** is for **amalgamation of EC** granted for **Patgowari Dolomite Mine Part-I** over an area of **45.76 Ha** having production capacity up to **0.05 MTPA** vide Ministry's letter No. **J-11015/708A/2007-IA.II (M) dated 18th February, 2008** (Refer p.40/c) and **Patgowari Dolomite Mine Part-II** over an area of **14.24 Ha** having production capacity up to **0.04 MTPA** vide Ministry's letter No. **J-11015/708B/2007-IA.II (M) dated 26th February, 2008** (Refer p.34/c).

The proposal was placed as agenda item No 2.21 in EAC Meeting held on 29-30th August, 2017. The committee **deferred** the proposal as proponent did not appear for the EAC meeting. The committee also suggested that the concerned Division may ascertain the nature of the project as per Ministry's O.M No J-11013/41/2006-IA.II (M) dated 30.06.2009 and process the case accordingly.

After examining the case the proposal was again placed in EAC Meeting held on 27th November, 2017. The proponent submitted that as per earlier EC condition the mining was started from the one side of the mining lease. The committee **recommended** the proposal subject to submission of approved mine plan for amalgamated lease.

2.12: EC amendment for replacing manual breaking and sorting with mechanized crushing and screening in Mining lease of Bodai Daldali Bauxite mines of M/s Bharat Aluminium Company Limited (BALCO) located at Villages Mundadadar, Keshmarda, Rabda & Semsata, Post Daldali, Bodla Tehsil, Kawardha District, Chhattisgarh (MLA: 626.117

Ha & 1.25 Million TPA)

File No. J-11015/37/2010-IA-II(M)

The proposal submitted by M/s BALCO is for seeking amendment in EC granted by the MoEFCC vide letter No. J-11015/37/2010-IA-II(M) dated 09.04.2010. The EC was granted for expansion of production from 0.3 Million to 1.25 Million TPA. The amendment in EC is sought for replacing the existing manual breaking and sorting with mechanized crushing and screening by installation of three crushers with screening unit each of 250 TPH (Total 750 TPH) without change in the existing approved capacity of 1.25 MTPA Bodai Daldali Bauxite mines located at Villages Mundadadar, Keshmarda, Rabda & Semsata, Post Daldali, Bodla Tehsil, Kawardha District, Chhattisgarh in mining lease area of 626.117 Ha. The crushers are proposed to be installed within the M.L. area. There is no requirement of additional land. The EC was granted on 04.12.2003. The Committee earlier observed that the PP has made excessive production in the years 2006-07 and 2007-08 over and above the EC granted capacity of 0.3 Million TPA. **A case has been filed in the court of Chief Judicial Magistrate, Kabirdham District, Chhattisgarh with case no. 1759/2009 against the PP for excessive production under sections 15 & 16 of Environment Protection Act, 1986 and section 34 of Indian Penal Code.**

2. The proposal was earlier considered by the EAC in its meeting held in the month of September, 2017 and October, 2017. In September, 2017 meeting, the Committee desired the PP to conduct an EIA Addendum Study to assess the impact of the crusher of 250 TPH (Total 750 TPH) and prepare mitigation/ management plan along with furnishing update the status of Court case and MoEFCC R.O. Compliance report. In October, 2017 meeting, the PP placed the EIA addendum study report mentioning that crushing operation is primarily an air polluting activity. The PP submitted that as a part of its compliance monitoring, it conducts baseline ambient air and noise monitoring which are found to be within the prescribed norms. The mathematical modelling carried out for the instant proposal indicated low incremental concentrations of SO₂. It has also been presented that PM shall not be a major concern as the bauxite ore inherently contains up to 2% of moisture. The PP also enumerated the mitigation measures for air pollution control. The Committee note the same and asked the PP to implement the same in spirit while operating the crushing operations. No waste water will be generated from crushing & screening operations. Therefore, no adverse impact on water environment is envisaged due to installation of proposed crushing & screening unit. Rejects generated from the unit will be used for backfilling the mined out pits. No waste water or solid waste will be allowed to contaminate soil cover of the nearby area.

4. The Committee deliberated on the status of compliance of earlier EC conditions and observed that PP has now started taking actions on the observed partial and/ or full non-compliances. The PP submitted that an update on the follow-up action/ corrective actions on the observed non-compliances have been given to the concerned MoEFCC R.O. vide its letter dated 20.09.2017. The PP submitted that even if some conditions remain under process, then the same shall be complied within a frame of six months. Apart from the above, the Committee observed that PP

has submitted an undertaking mentioning that in case demand is raised through Court order or executive order then the same shall be intimated to MoEFCC. **The Committee, after detailed deliberations, recommended the proposal subject to submission of NOC from State Department of Mines and Geology clearly stating that no demand is pending on it in pursuance of the Supreme Court judgment dated 02.08.2017 in the matter of Common Cause Vs Union of India & Ors. (W.P.C.No.114/2014) for illegal/ excess mining.**

Date: 28th November, 2017 (Tuesday)

3.1 Standardisation of EC Conditions in Non-Coal Mining Sector

The Member Secretary explained the Committee that the Ministry is in the process of revisiting the EC conditions and standardising the same. The activity is being undertaken in other industrial sectors also. Hence, it has been proposed to standardise the EC conditions of Non-Coal mining sector also with three broad categories viz. Open-cast Mining, Under-ground Mining and Mineral Beneficiation.

2. The Conditions are proposed to be broadly categorised into the following heads:

- Implementation of Action Plan formulated for addressing PH, Wildlife Conservation, Resettlement & Rehabilitation etc.
- Air Pollution Control
- Water Management and Water Pollution Control
- Control of vibration, Noise and Fly Rock Generation due to Blasting
- Mine working
- Mine Reclamation and Rehabilitation
- Green Belt Development and Afforestation/ Plantation
- Land Use Planning
- Occupational Safety and Health
- Socio Economic Environment and Rehabilitation of Mined out Area for Post Mining Land Use

3. The Member Secretary further informed that the EC conditions were standardised in October, 2016; however, over a period of time after that, it is felt that some aspects related to mine workings need to be re-worked again like provisions related to OB dump height, exploration aspects etc. and may be linked with other legal statutes specifically the Mining plan/ Mining Scheme.

4. The Committee members deliberated on the existing EC conditions and gave their inputs w.r.t. individual conditions. Some recommendations also included merging of overlapping conditions and doing away with those which are adequately governed through other statutes. The Member Secretary made a note of all the suggestions placed by the Committee and informed that based on their inputs provided, Draft EC conditions shall be worked out in the Ministry. The draft conditions would be circulated to all the Committee members as well as MoEFCC Regional Offices for further refinement and inputs. The suggestions of MoEFCC R.O.

Offices and Draft EC conditions shall be placed in next/ subsequent EAC Meetings for arriving at final EC Conditions.

3.2 Scientific Replenishment Study reports submitted by PPs in respect of River Sand mining proposals of Rajasthan

The Member Secretary apprised the Committee that the Hon'ble Supreme Court vide its judgment dated 16.11.2017 in the matter of SLP(C) No.34134 of 2013 (State of Rajasthan Vs Nature Club of Rajasthan) has restrained river sand/ bajri mining in the State of Rajasthan in respect of 82 Letter of Intent (LoI) holders who had submitted their applications to the MoEFCC for grant of EC. The Apex Court, during hearing of case, observed that:

“.....We have heard learned counsel for the parties and we are horrified with what is happening in the State of Rajasthan with regard to bajri and sand mining/quarrying.

For several months, if not years, without any environmental clearance and without any scientific replenishment study, unabated mining is going on by 82 parties before us.....

.....In Court, serious allegations have been made that the State of Rajasthan is complicit with the miners/quarry holders and sand and bajri is being mined with impunity. Without giving any credence to the allegations made until we hear from the Chief Secretary of Rajasthan on affidavit, we restrain all the 82 mining lease/quarry holders from carrying out mining of sand and bajri unless a scientific replenishment study is completed and the matter is fully and dispassionately considered by the Ministry of Environment, Forest and Climate Change and an environmental clearance is granted or rejected.....”

3. The Member Secretary further apprised the Committee that the PPs/ LoI holders have started applying on the website of the Ministry with Scientific Replenishment Study Reports. Considering the large number of such proposals (82 nos.), one such report is placed before the Committee members for taking a view on whether this can be accepted as a representative technical report for further deliberations and appraisal at EAC. The Committee had mandated the requirement of Scientific Replenishment study reports in its Meeting held in October, 2016.

4. The Committee deliberated on the matter and noted that the report placed in the Committee is based on empirical Meyers-Peter equation and not on actual replenishment study. The earlier reports were based on Dandy-Bolton equation, which again were empirical. It was noted by the Committee that such sand deposits of Rajasthan are typical and exceptional in a sense that these are paleo sand deposits and such 'rivers' (except a few) generally remain dry except for good monsoon years. Therefore, the actual replenishment may differ widely from replenishment calculated from

empirical formulae. Hence, the stipulation of making a Scientific Replenishment study was made with a view to assess the actual replenishment rate of rivers through ground measurements based on which production capacity of project can be fixed. The instant report, which is an attempt to empirically calculate the replenishment potential of river , not desirable. Hence, MoEFCC may take a view in the matter and place only such Scientific Replenishment reports before the Committee wherein actual ground measurements have been carried out.

The meeting ended with vote of thanks to the Chair.

Standard Terms of Reference (TOR) for Mining Project

- 1) Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
- 2) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
- 4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 5) Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- 6) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- 7) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.
- 8) 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.
- 9) 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.

- 10) 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.
- 11) 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.
- 12) 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.
- 13) 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.
- 14) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 15) 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.
- 16) 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.
- 17) 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.
- 18) 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.
- 19) 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).
 - 20) 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.
 - 21) 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.
 - 22) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
 - 23) 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.
 - 24) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
 - 25) 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.
 - 26) 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.
 - 27) 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.

- 28) 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.
- 29) 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.
- 30) 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.
- 31) 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.
- 32) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- 33) 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.
- 34) 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.
- 35) 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.
- 36) 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.

- 37) 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.
- 38) 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.
- 39) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 40) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- 41) A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 42) 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.
- 43) 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.

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Standardization of EC conditions in Non-coal mining sector

A. Specific conditions

To be suggested by the EAC w.r.t. project.

B. Standard conditions

- 1). Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
- 2). This Environmental Clearance is subject to obtaining requisite NBWL Clearance from the Standing Committee of National Board for Wildlife, if any, as applicable for this Mining project.
- 3). The Project Proponent shall obtain Consent to Operate from the concerned State Pollution Control Board and effectively implement all the conditions stipulated therein.
- 4). Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall complete all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing.
- 5). The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water) for the project.
- 6). Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- 7). A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forest and Climate Change 5 years in advance of final mine closure for approval.
- 8). No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment, Forest and Climate Change.
- 9). No change in the calendar plan including excavation, quantum of mineral and waste should be made.

- 10). Mining shall be carried out as per the provisions outlined in mining plan approved by Indian Bureau of Mines (IBM)/State Mines and Geology Department as well as by abiding to the guidelines of Directorate General Mines Safety(DGMS).
- 11). The lands which are not owned by Proponent, mining will be carried out only after obtaining the consents from all the concerned land owners as per the provisions of the Mineral Concession Rules, 1960 and MMDR Act,1957.
- 12). Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment, Forest and Climate Change its Regional Office.
- 13). Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of anti- snake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- 14). The critical parameters as per the Notification 2009 such as PM10, PM2.5, NOX, and Sox etc. in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- 15). 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.
- 16). Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as haul road, loading and unloading point and transfer points.

Fugitive dust emissions

From all the sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board.

- 17). Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. The monitoring shall be carried out four times in a year pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board.
- 18). Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre- mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table.
- 19). Regular monitoring of water quality upstream and downstream of water bodies shall be carried out and record of monitoring data should be maintained and submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.
- 20). The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centres.
- 21). Transportation of the minerals by road passing through the village shall not be allowed. A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The project proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without

appropriately increasing the carrying capacity of such roads.

- 22). The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
- 23). Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers. Crusher and material transfer points should invariably be provided with Bag filters and or dry fogging system. Belt-conveyors should be fully covered to avoid air borne dust.
- 24). Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers. The material transfer points should invariably be provided with Bag filters and or dry fogging system. In case of Belt-conveyors facilities the system should be fully covered to avoid air borne dust; Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured.
- 25). Sufficient number of Gullies to be provided for better management of water. Regular Monitoring of pH shall be included in the monitoring plan and report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.
- 26). There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.
- 27). The Project Proponent has to take care of gullies formed on slopes. Dump mass should be consolidated with proper filling/levelling with the help of dozer/compactors.
- 28). The reclamation at waste dump sites shall be ecologically sustainable. Scientific reclamation shall be followed. The local species may be encouraged and species are so chosen that the slope, bottom of the dumps and top of the dumps are able to sustain these species. The aspect of the dump is also a factor which regulates some climatic parameters and allows only species adapted to that microclimate.
- 29). The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land

reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8m and width 20 m and overall slope of the dumps shall be maintained to 45⁰. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.

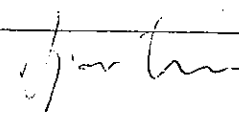
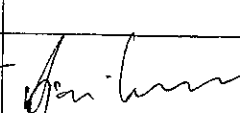
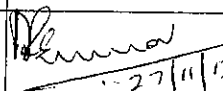
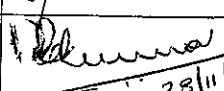


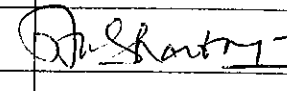
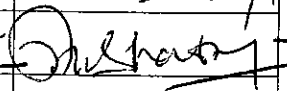
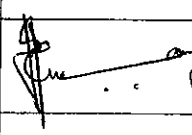
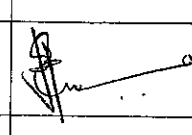
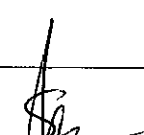
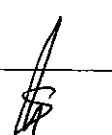
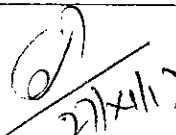
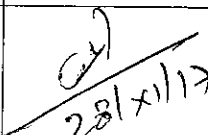
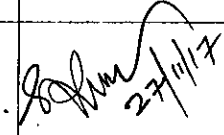
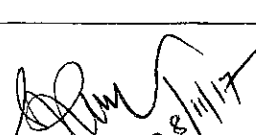
- 30). Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. The drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dumps to prevent run off of water and flow of sediments directly into the river and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.
- 31). Plantation shall be raised in a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department and as per CPCB Guidelines. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.
- 32). Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- 33). The Project Proponent shall make necessary alternative arrangements, where required, in consultation with the State Government to provide alternate areas for livestock grazing, if any. In this context, Project Proponent should implement the directions of the Hon'ble Supreme Court with regard to

acquiring grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded against felling and plantation of such trees should be promoted.

- 34). The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.
- 35). As per the Company Act, the CSR cost should be 2 % of average net profit of last three years. Hence CSR expenses should be as per the Company Act/Rule for the Socio Economic Development of the neighbourhood Habitats which could be planned and executed by the Project Proponent more systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. The report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.
- 36). Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- 37). Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs.
- 38). Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.
- 39). 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.
- 40). A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- 41). The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office.

- 42). The project authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- 43). The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest and Climate Change, its Regional Office, Central Pollution Control Board and State Pollution Control Board.
- 44). The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- 45). A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.
- 46). State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.
- 47). The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment, Forest and Climate Change at www.environmentclearance.nic.in and a copy of the same should be forwarded to the Regional Office.

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

Sl. No.	Name and address	Designation	27/11/2017	28/11/2017
1.	Dr. Ajai Kumar B-1302, BestechParkView Spa, Sector-47, Gurgaon, Haryana	Chairman		
2.	Shri B Ramesh Kumar H-No. 6-1-134/6, Balram Compound, Padmarao Nagar, Secundrabad- 500025, Andhra Pradesh	Member	 27/11/17	 28/11/17
3.	Prof. Dr. K.S. Rana Maharana Manzil, 18, Dholpur House, (D.M. Compound), M.G. Road, Agra-1, Uttar Pradesh - 282001	Member		 28/11
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		
	Dr. Tushar Kant Joshi, Laxmikant Niwas, Salan Gaon, Bhagwantpur, Dehradun-248009, Uttarakhand.	Member		
	Shri Santosh Gupta, Flat No. 405, Block -B, Gaur Green Vista, Nyaykhand -1, Indrapuram, Ghaziabad-201014	Member		
	Representative of Ministry of Mines Shri. Pushpender Gaur, Dy. Controller of Mines, Ministry of Mines, Shastri Bhawan New Delhi-110001.	Member	 27/11/17	 28/11/17
	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		
	Representative of Wildlife Institute of India, Dr. (Ms.) Asha Rajvanshi, Wildlife Institute of India, Chandrabani, Dehradun-248001	Member		
	Director IA-Division (Non Coal Mining) Vayu-305, Indira Paryavaran Bhawan, Ministry of Environment, Forest & CC, Jorbagh Road, Lodhi Road, New Delhi-110003	Member Secretary	 27/11/17	 28/11/17

Agenda for 24th EAC Meeting to be held during on 27th November, 2017