

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

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**SUMMARY RECORD OF 18<sup>th</sup> MEETING OF THE RECONSTITUTED COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF MINING PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.**

The Eighteenth 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 **May 29-30, 2017**. The list of participants is annexed.

After welcoming the Committee Members, discussion on each of the Agenda Items was taken up ad-seriatim.

**1.1. Condolence for Late Shri Anil Madhav Dave**

Before the meeting started, two minute silence was observed as a mark of respect for the former Minister of Environment Forest and Climate Change, Late Shri Anil Madhav Dave.

**1.2 Circulation of the Minutes of the 17<sup>th</sup>EAC Meeting:**

The Minutes of the 17<sup>th</sup> Meeting of EAC held during April 27-28<sup>th</sup>, 2017 were circulated.

**2.1. L-11011/72/2012-IA.II(M) Supreme Court Expert Committee– Macro EIA Study Ceiling of Annual Excavation of Iron Ore from the State of Goa**

The officers of the non-coal mining Division of the Ministry of Environment, Forest and Climate Change had gone to brief the ASG regarding the Goa Foundation vs Uol case on 29<sup>th</sup> January 2017. During the visit ASG had handed over a Macro EIA Study in respect of Ceiling of Annual Excavation of Iron Ore from the State of Goa report prepared by the Supreme Court Expert Committee. The ASG sought the stand of the Ministry on this report. The Ministry had given the following reply:

**The current capacity for which currently EC have been granted for Iron ore mining in Goa**

| <b>Status of mine</b>   | <b>Production capacity in MTPA</b> |
|---|------------------------------------|
| Leases within 1 km of Protected Area. So these cases can be considered for lifting abeyance only after the modification of the Hon'ble Supreme Court order in I.A. 1000 | 9.335                              |

|  |                                  |
|--|----------------------------------|
| Leases having forest land in the lease area or dispute on involvement of forest land and Forest Clearance is not available. These cases would be considered for lifting abeyance after obtaining the Forest Clearance. | 7.50                             |
| <b>Current running mines:</b> 72 cases of which 35 cases had been granted EC under the provisions of EIA notification 1994 and 37 cases had been granted EC under EIA Notification 2006.                               | 16.984 + 22.0 =<br><b>38.984</b> |
| <b>Total capacity for which EC has been granted</b>  | <b>55.819</b>                    |

As per the recommendations of the Supreme Court Expert Committee the earlier assessed extraction rate of 20 MTPA should be enhanced to 30 MTPA and after reviewing the macro EIA of the enhanced extraction rate by the State, the same may be further enhanced to 37 MTPA as the upper limit predicted. Total capacity for which EC has been granted by the MoEF&CC for Iron ore mining in Goa is 55.819 MTPA, of which currently mines are running for the capacity of **38.984 MTPA** which is more than the upper limit suggested by the EIA report. **Therefore the State Govt. of Goa may ensure the capping of the upper limit to be maintained in the mines for which EC has been granted in the State of Goa.**

**In addition letters were written to various Government Departments of Goa to obtain their views and the following are the reply from State Government of Goa.**

With respect to the Ministry's letter No. F. No. L-11011/72/2012-IA-II (M) dated 07/02/2017 on above mentioned subject, the **Directorate of Mines and Geology**, Government of Goa have submitted their comments on the recommendations given in pages 138-143 of the report as follows:

- i) The state Government broadly accepts the recommendations for enhancement of capping to 30 Million Tons per year as per existing infrastructure vehicle carrying capacity etc. and more particularly in respect of renewed mining lease.
- ii) Such capping may not cover cases granted deemed grant/lease extension period under the provisions of MMDR Amendment Act 2015 and lease which are to be phased out which are existing within the buffer zone of protected areas subject to final decision of Hon'ble Supreme Court of India.
- iii) The state Government may be given liberty to enhance the production limit up to 37 Million Tones, if the higher capacity trucks (they use at present with carrying capacity of 10 Metric Tons) for transportation are introduced or if the road infrastructure is modified/altered or new routes are introduced so also if dedicated mining corridors are developed.
- iv) The state Government may also be given liberty to proportionately increase the capacity from 30 million Tones up to 37 million Tones, in case the transportation timings are rescheduled in such a manner that the normal public is not put to any

inconvenience and at the same time the transportation of mineral takes place smoothly with extended hours.

v) Since the capping of quantity is relating to fresh extraction, dump working if permitted may also be kept outside purview of capping.

The Directorate of Mines and Geology, Government of Goa has also submitted that the 2<sup>nd</sup> recommendations regarding Environmental Clearance from page 139 is summarized at page 149 thereof, which speaks of uniformity in collection of Goa Iron Ore Permanent Fund and District Mineral Fund across the country. The District Mineral Fund is collected across the country at the present rate of 30% of Royalty. The Royalty is collected @ 15% of sale value of the mineral, thus on all India basis 4.5% of the sale value of mineral is collected as District Mineral Fund apart from 15% of the sale value collected as Royalty. A contribution of 2% of Royalty goes to National Mineral Exploration Trust across the country, which translates to 0.3% of sale value of the Mineral. As such on all India basis 4.8% of sale value collected towards District Mineral Fund and National Mineral Exploration Trust and in the state of Goa, apart from 4.8% of sale value, on additional contribution of 10% of sale value is collected towards contribution towards Goa Iron Ore Permanent Fund, as per order of Hon'ble Supreme Court of India in W.P. (C) No. 435/2012 dated 21/04/2014 as such there is parity in collection of dues from leases situated within the state of Goa and leases from rest of the country. As such the Department is in agreement with the recommendations of Expert Committee that the rates of collection must be same across the country and Goa should not be discriminated from other states of the country.

With regards other recommendations concerning fund, the state Government may not have any objections to the recommendations of the committee.

With regards 3<sup>rd</sup> recommendations, the same can be accepted through co-ordination between the lease Holders and Water Resources Department of the state Government.

With regards 4<sup>th</sup> recommendation regarding strengthening of Mines Department, it is submitted that under the MMDR Act 1957, various activities are to be regulated through different Departments and Ministries like as regards scientific and sustainable mining, to be carried out as per approved mining plan and scheme of mining is the responsibility is given to Regional Controller of mines, Indian Bureau of Mines, Government of India.

The Mine safety is looked after by the Director General, Mines Safety, which is a Central Department under Ministry of Labor. The conditions mentioned under Forest Clearance etc. issued under Forest Conservation Act, 1980 are monitored by Forest Department, Government of Goa. Air and Water Quality monitoring is Done by Goa State Pollution Control Board. Compliance of conditions mentioned in Environment Clearance are monitored by Regional Office of MOEFCC at Bangalore.

The primary function of Directorate of Mines & Geology concerns grant of lease, survey of leases, collection of royalty and dead surface rent as applicable being the owner of Lease along with regulating storage of extracted mineral, both within and outside leasehold area, regulating transportation activity of the extracted mineral, regulating trading activity and curbing the activities of illegal extraction. It is a fact that in the state Government affidavit dated 16/05/2014, the Department had mentioned that 450 posts shall be created and filled up and additional infrastructure shall be provided. The majority of posts mentioned therein were non technical in nature and were to be entrusted for physical monitoring etc. This Department has introduced various electronic modules by which such monitoring activities are done through software designed by the Department. The movement of ore en route is regulated by Vehicle Tracking System installed in carriers from mine head till that vessel (as 99% of mineral extracted is exported). The royalty payment etc. is monitored electronically. The weigh bridges are all electronic and are run by a software which helps not only in efficient accounting of mineral but also prevents overloading of vehicles thus helping in significant reduction of dust pollution which was caused mainly because of overloading of vehicles.

All leases are surveyed by DGPS survey which not only ensures that there is no encroachment or illegal mining but also helps in monitoring mining activities with help of Satellite imagery etc. The Mines Department has recently recruited five Assistant Geologists apart from which a process to fill vacancies of Technical Assistant is underway. 3 Technical Assistants are promoted as assistant Geologists and all the Technical Staff is entrusted job of monitoring, storage, transportation of mineral etc. of all leases.

The entire exercise of monitoring and development of modules etc. is entrusted to a private consortium, which has a dedicated team of 40 technical staff, who undertake round the clock monitoring activities on behalf of the department. The manual monitoring activities were to be done by engaging Field Attendants and drafting them at the jetties and lease hold areas which is now done by use of software. The financial burden on the department is also reduced and an efficient regulation in mining activities is undertaken with the help of various modules through private consortium. With regards 5<sup>th</sup> recommendations, such activities can be undertaken through contribution towards National Mineral Exploration Trust under the guidance/supervision of Ministry of Mines, Government of India.

With regards 6<sup>th</sup> & 7<sup>th</sup> recommendations, the same can be entrusted to the Water Resources Department, Government of Goa, with active co-operation from Forest Department.

With regards 8<sup>th</sup> recommendations, setting up plants etc. the decision with regards that needs to be taken by Mining Industry as per cost and benefit analysis. With regards 9<sup>th</sup> recommendations, the dump mining should be promoted and must be undertaken as per the policy decision of the state Government in scientific and efficient manner under proper regulatory mechanism with due regards to existing infrastructural

facilities which shall be utilized for both regular/fresh mining operations and dump mining activities.

With respect to our letter No. F. No. L-11011/72/2012-IA-II (M) dated 22/02/2017, the **Goa Forest Department**, Government of Goa have submitted their comments, which is summarized as follows:

i) The Committee suggests removal of dumps outside mine areas in forest land for various reasons. But most of these dumps in forest areas are old and reasonably stabilized by growth of vegetation. Any disturbance of these dumps will result in soil erosion and water pollution. Also clearance under FCA- 1980 is mandatory to remove these dumps. It is advisable not to remove such dumps which are old and stabilized of vegetation.

ii) In view of raising the limit of cap, environmental friendly and cost – effective alternatives such as conveyor belts for transporting the ores from mines to the loading points / jetties may be explored, where the proposed dedicated corridors are going to pass through the forest area.

In view of the comments and inputs provided by the State Government of Goa, after due deliberation the EAC was of the opinion that the following may be considered by the Ministry of Environment, Forest and Climate Change when deciding its stand:

**1) Removal of dumps outside mine areas in forest land should not be allowed as they are old and stabilized of vegetation and any disturbance of these dumps will result in soil erosion and water pollution.**

**2) The committee opined that the mining cap can be raised to 30 MTPA from the existing 20 MTPA in view of the submissions made by relevant stakeholders viz. State Mines and Geology Department and State Forest Department, Government of Goa. The committee further suggested that requisite infrastructure such as conveyor belts, railway sidings may be put in place for transporting the ores from mines to the loading points / jetties.**

**3) The committee also supported the submission of the State Forest Department, Government of Goa, that increase in transportation through the forest area should be avoided and higher capacity trucks may be used instead of increasing the number of trucks.**

**2.2 J-11015/460/2012.IA.II(M)-Environmental Clearance for production of 4.0 lakh tons of Dolomite over an area of 73.113 Ha, at Kochervu and Malkapuram Villages, Dhone Mandal, Kurnool District, Andhra Pradesh by M/s Sri Balaji Works- Consultant: B.S. Envirotech, Pvt. Ltd. (IA/AP/MIN/9059/2012)-Environment Clearance-reg.**

The committee did not consider the proposal as the project proponent did not attend the meeting.

**2.3 J-11015/02/2017-IA-II(M) Expansion in production capacity of marble from 3,59,925 TPA to 7,88,340 TPA from Zarivav, Khokharbilly, Koteshwar & Chikla Marble Mining Project by M/s Hindustan Marble Private Ltd. (ML Area: 51.0109 ha) at Villages- Zarivav, Khokharbilly, Koteshwar & Chikla, Taluka- Danta, District - Banaskantha (Gujarat) (IA/GJ/MIN/62341/2017) – ToR- req.**

The proposal of M/s Hindustan Marble Private Ltd. is for mining marble over a lease area of 51.0109 ha. in village Zarivav, Khokharbilly, Chikla & Koteshwar, Tehsil Danta, Distt. Banaskantha, Guajrat. The lease was granted for a period of 20 years w.e.f. 25th Feb. 87. The mine area is located in buffer zone of Balaram- Ambaji Wild Life Sanctuary. The Consultant has presented the details of mine site using KML/SHP files on Google Earth. This lease has been renewed for a period of 30 years vide govt. of Gujarat order No. MMR/102008-514 CHHI dated 31.12.2012 and thus valid till 24th Feb. 2037. The agreement was executed on 19.10.2013. The lease area is located at an aerial distance of 1 km. from the boundary of Rajasthan. The mining plan was approved vide letter No.GGM/MC/448/5344 dated 23rd June, 2014. Mechanized open pit mining for abstracting marble block and marble rubble is being carried out till date. The proposal for expansion from 3,59,925 TPA to 7,88,340 TPA (ROM) was considered in the EAC meeting held during July 21-22, 2016. Based on the information furnished and presentation made by the Project Proponent and discussions held, the Committee deferred the Proposal and sought the following information:-

- (i) The mine area is located in buffer zone of Balaram- Ambaji Wild Life Sanctuary (which is a challenge in court of law). The Status of court case and its details shall be furnished.
- (ii) An authenticated map from CWLW should be submitted with regard to location of mine lease and Balaram- Ambaji Wild Life Sanctuary.

Based on the project proponent's letter dated 6<sup>th</sup> February 2017 the proposal was once again considered in the EAC meeting held during March 20-21, 2017. The committee deferred the proposal as the project proponent did not attend the meeting. The proposal was re-considered in the EAC meeting held during 29<sup>th</sup> May 2017. The committee noted that the proponent did not submit the status of the court case and the authenticated map from CWLW with regard to location of mine lease and Balaram- Ambaji Wild Life Sanctuary.

Based on the information submitted by the project proponent, the committee noted that the mine lease was renewed with effect from 24th February 2007, which made it mandatory for the project proponent to obtain EC at the time of renewal of the mine lease area as per EIA notification 2006. As the project proponent was mining till date without EC, it was a violation. The committee also noted that it was a violation as per the amendment of the EIA notification, S.O. 141(E) dated 15th January 2016 which mandated all mining project should have EC. The committee also noted that the project proponent was mining about 1 KM from Balaram- Ambaji Wild Life Sanctuary without NBWL clearance, which was a violation of the Wildlife Protection Act.

After due deliberation, the **committee deferred the proposal** and advised the project proponent to apply afresh under the provision of S.O. 804(E) dated 14<sup>th</sup> March 2017 which notified the process for appraisal of projects for grant of Terms of Reference and Environmental Clearance, which have started the work on site, expanded the production beyond the limit of environmental clearance or changed the product mix without obtaining prior environmental clearance under the Environment Impact Assessment Notification, 2006.

**2.4 J-11015/1026/2007-IA.II(M) Tiroda Iron Ore Mine of M/s Gogte Minerals (ML area 34.4812 ha and production capacity 0.40 MTPA) at village Tiroda, in Vengurla Taluk in Sindhudurg Distt, in Maharashtra (IA/MH/MIN/7079/2007)- Amendment of EC-reg.**

The Tiroda Iron ore mine of M/s Gogte Minerals, having lease area of 34.4812 ha was granted EC on 31st December, 2008. The lease is in two parts, known as Eastern block having an area of 14.4812 ha and Western block having an area of 20 ha. It was reported by the project proponent that the mining activities are presently going on in the western part of the lease having an area of 20 Ha. The south of the western block of the lease is flanked by a small perennial river Nanos – around 30 m wide (average).

The Condition No. A (XI), under specific conditions, in EC mandates lessee to maintain 100 meter barrier of no Mining zone towards Nanos River. The lessee has submitted that around 0.285 million Tonnes of medium to high grade ore is blocked in this barrier and has requested for permitting to work within portion of this barrier by relaxing the condition A (XI), under the specific conditions at least upto the distance of 50 mts, so that part of ore which is blocked can be recovered. The project proponent has given an undertaking to reclaim, restore and revegetate the entire barrier with native plant species thereafter.

The project proponent referred the following norms as rationale behind seeking reduction of the barrier width from 100m to 50m:

1. The MMR 127(2) under the Mines Act requires maintenance of 15m barrier under such condition.
2. The K form in MCR under the MMDR Act requires maintenance of 50m barrier under such condition.

The proposal was considered in the EAC meeting held during August 22-23, 2016. The Committee deliberated at length the information submitted by project proponent and deferred the Proposal with a view that the proposal may be considered further after the project proponent submits an Impact Assessment Report along with hydro geological report on decreasing buffer area from 100 to 50 meter.

The project proponent has submitted the Impact Assessment & Hydro Geological Report on decreasing the barrier/buffer area from 100m to 40m – conducted by Tesla Innovations, IIT Bombay (SINE). The proposal was re-considered in the EAC

meeting held during 29<sup>th</sup> May 2017. After due deliberation on the study report submitted by the project proponent, the committee was of the view whether to endanger the river for removal of just 0.2 MTPA of medium grade ore is justified from environmental angle.

The committee made detailed deliberation on the information submitted by the project proponent. The committee noted from the KML file of the mine lease area submitted by the proponent that mining had already taken place beyond the 100 meter buffer zone of the river, which is non-compliance of EC condition. Accordingly, further information is required from the project proponent in this aspect. The committee sought from the project proponent engineering sections of the mine lease area which was not furnished. The committee noted that the quality of mineral present in the mine lease area is medium grade and the said mine lease is expiring in the year 2020, i.e less than three years.

The committee was briefed about the Draft River Regulation Zone notification which has been circulated among all States and Union Territories and relevant stakeholders. **The notification mentions that the Prohibited Activity Zone will extend from the river bank to the existing outermost embankment and 100 meters buffer outside such outermost embankment.**

Based on the information furnished and detailed deliberation, **the Committee deferred the proposal and sought following information:**

- 1. Detailed justification of proposal considering that only 0.2 MTPA of medium grade mineral was to be retrieved but may possibly impact the ecology and environment of the river and thereby agriculture and rural life in adjoining areas.**
- 2. Engineering/mining sections.**

**(2.5) Enhancement of production capacity from 13,587 TPA to 1,00,000 TPA (ROM) of Jai Singhdesar Ball Clay, Red & Yellow Ochre Mine of M/s Sharda Sales Corporation located at village Jai Singhdesar, Tehsil Nokha, District Bikaner, Rajasthan (M.L. No. 18/83, Area: 129.50 Ha) - For Consideration of Environmental Clearance [File No. J-11015/219/2015-IA.II (M)]**

The proposal of M/s Sharda Sales Corporation is for enhancement of production capacity from 13,587 TPA to 1,00,000 TPA (ROM) of Jai Singhdesar Ball Clay, Red & Yellow Ochre Mine in 129.5 Ha M.L. area. The mine is located at village Jai Singhdesar, Tehsil Nokha, District Bikaner, Rajasthan. The mining lease area falls between the latitudes of 27°41'26.22"N to 27°42'25.83"N and longitudes of 73°8'38.2"E to 73°9'8.45"E on the Survey of India Toposheet No. 45 E/2. The location of the mine lease area was checked through KML file on Google map and DSS.

The proposal of TOR was considered by the EAC in its meeting held during July 29-30, 2015 wherein the Committee recommended the proposal for grant of ToR. The Terms of Reference (ToR) was issued vide letter No. J- 11015/219/2015-IA.II(M) dated



25<sup>th</sup> August, 2015. The mining lease area of 129.5 Ha comprises of Govt. waste land of 52.8 Ha and Private Land of 76.7 Ha.

The mining lease was granted in favour of M/s Sharda Sales Corporation, Proprietor, Smt. Sharda Devi Poddar for minerals Ball Clay, Red & Yellow Ochre for a period of 20 years near village Jaisinghdesar, Tehsil Nokha, District Bikaner vide order no. F-1(82)/Khan/Gr.2/84 dated 02.02.85. The mining lease agreement was executed on 27.06.1985 and registered on 11.10.85. So, the lease period was from 11.10.1985 to 10.10.2005. After that, the mining lease was cancelled by the Directorate of Mines & Geology vide its order dated 10.07.2001 and the possession of lease area was taken aback by the State Government on 18.7.2001. Later on, the PP filed a revision petition to the Central Government against the order dated 10.7.2001 and the Central government quashed the order dated 10.07.2001 and remanded the case to the State Govt. with a condition that the PP would deposit all the outstanding dues to the State Govt. within a period of 60 days. But the party did not deposit any amount within 60 days period. In between, the PP applied for the first renewal on the 25.11.2004. The renewal application was rejected vide DMG order dated 24.7.2006 and the party filed S.B.C. writ petition to the Honorable Rajasthan High Court, Jodhpur in which an order was passed by the Court on 03.12.2007 setting aside the impugned order dated 24.07.06 of DMG. It added that the period of the mining lease granted in favour of the petitioner shall stand extended equal to the period the petitioner did not remain in possession of the lease area on account of cancellation of the lease and taking back of the possession thereof from 18.7.2001 to 10.10.2005. The order also added that the extended period shall commence from the date, the possession of the area is handed over to the petitioner. The possession of the lease area was handed over to the party on 28.07.2008 and the DMG passed an order on 02.08.2008 that in compliance of the order of the Honorable High Court, the period of mining lease is being extended by a period of 4 years 5 months 24 days with effect from 28.07.2008. This order was subject to the final decision of the DBC special appeal which has been filed in the Honorable High Court, Jodhpur. Thus the aforesaid mining lease period was extended by a period of 4 years 5 months 24 days with effect from 28.07.2008. Now according to Sec 8A (6) of the Mines and Minerals (D&R) Amendment Ordinance, 2015 the lease period is valid till 21.01.2043.

The mining plan including Progressive Mine Closure Plan for a targeted production of 1,00,000 TPA of Ball Clay cum Red and Yellow Ochre has been approved by the Superintending Mining Engineer, Bikaner Circle, Bikaner, vide letter no. SME/BKN/CC/2012/2966, dated 10.07.2012. The Assistant Mining Engineer, Bikaner has certified that the lease area doesn't fall within Aravalli Range.

The PP has reported that the mine working is semi mechanized opencast mining utilizing hydraulic shovels, tippers, tractor, etc. The overburden will be dumped at pre decided dump yard within the lease area. This overburden will be filled back in the mined out pits after the entire mineral upto ultimate pit bottom is mined out. It is proposed to develop benches in dimension of 6m in width and 6m in height having 28° slope. At the end of mine life, 18.520 Ha land inside the M.L. area is proposed to be

brought under plantation while 0.99 Ha of waste dump shall also be planted. The proposed area to be reclaimed by back-filling is 2.24 Ha. PP reported that 1,01,059 m<sup>3</sup> of overburden will be generated (overburden to ore ratio of 0.2:1) during first five years and accordingly, the overburden till the end of life of mine will be 398620 m<sup>3</sup> which would be stacked separately and used for backfilling. The PP has presented authenticated year wise production details from Department of Mines and Geology (till 2011-12).

PP has reported that total water requirement will be 6.0 KLD with 1.0 KLD for Dust Suppression, 1.5 KLD for Drinking and 3.5 KLD for Green belt. The water will be sourced from mine pit except 1.5 KLD drinking water. The estimated cost of the project and environment management plan is ₹2 Crore and ₹8.1 Lakh respectively. There is no Wildlife Sanctuary, National Park, Biosphere Reserves, Wildlife Corridors, Reserved & Protected Forest etc. within 10 km radius as per letter no. F()/Survey/2016-17/7954 dated 10.11.2016 issued by the Dy. Conservator of Forest, Bikaner. The authenticated list of fauna has been obtained from the Office of Dy. Conservator of Forest, Bikaner vide letter F()/Survey/2016-17/7889 dated 9.11.16 and it is mentioned in the EIA report that one Schedule-1 species namely Chinkara is found in the core and buffer zone. A conservation plan for the same has been prepared and submitted to the Dy. Conservator of Forest, Bikaner and acknowledged through letter no. F()/Survey/2016-17/2424 dated 20.4.17. There is reportedly no court case/ litigation pending against the project.

The baseline environmental monitoring was carried out during winter season i.e. October, 2015 to December, 2015. The PP has reported that monitoring results reveal that soil is medium/ high in quality and mining activities shall have adverse impact on the quality of soil. However, mitigation measures to address the adverse impacts are enlisted in EIA/ EMP report. The groundwater quality monitoring of seven water samples from different locations in core and buffer zones of this mine indicate that about 53% water samples do not conform to IS 10500:2012 specifications. The surface water quality monitoring of two surface water samples are within the tolerance limit as per IS 2296:1982. The Ambient Air Quality observations at all the monitored locations were observed to be within the prescribed limits. The EIA report mentions that the Incremental values for PM<sub>2.5</sub> and PM<sub>10</sub> considering the production scenario shall also be below the specified norms as prescribed under NAAQS.

The ground water table varies from 95-100 m BGL i.e. 193 mRL and mining will reach up to 20 m done up to 272 mRL. Hence, during proposed mining ground water table will not be intersected. At the end of mine life, the pit area of 11.210 Ha is proposed to be converted in water storage at the end of mine lease. The PP reported that no R& R issues are applicable to the project.

Public hearing for the project was conducted on 29.9.2016 at Atal Seva Kendra (Gram Panchayat Bhawan), Gram Panchayat Jaisinghdesar, Magra, Tehsil Nokha, District Bikaner under the chairmanship of Additional District Collector (Administration), Bikaner and in presence of Regional Officer, Rajasthan State Pollution Control Board,

Bikaner. The major issue raised in PH was related to environment. The public participants said that – (i) historical pond (nadi) is on the verge of extinction due to mining activities as mining is carried out in its catchment, (ii) parental houses near mining area are disturbed leading them to live in farms, (iii) T.B. and pulmonary diseases are caused due to dust, public roads has been damaged due to pits formation, (iv) no CSR activity has been done as alleged by PP, (v) air and noise pollution is caused, (vi) wire fencing is not done, (vii) crops are getting damaged, and (viii) jobs/ employment not provided to local people. The PP replied to the issues raised during public consultation and said that most of the issues are baseless as mining is done as per the provisions of Rajasthan Minor Mineral Concession Rules. Moreover, the mining operations have been completely suspended with effect from 1.1.2013. The PP has given an activity plan for conservation of pond with cost implication of ₹1,30,000/-. In addition, PP has submitted activities proposed to be taken up under C.S.R. which include drinking water availability in the area, distribution of clothes/ shoes for school children, providing R.O. water at School & community center and providing computer and school furniture.

The Committee observed through the KML file that the mine is operational and mining is being carried outside the M.L. area also. The PP was asked to bring past production details during presentation, however, no details were presented during meeting. Accordingly, PP was again asked to submit past production details. The Committee asked to revise the plantation and include fodder species/ useful plants in the plantation program. The Committee also noted that during Public Hearing, issues related to haphazard mining, air pollution, adverse impact on nearby pond, no CSR activities in the region etc. are raised to which the PP has replied that the allegations are baseless. **The Committee deliberated on the proposal and asked the PP to amicably address the issues raised during public hearing. The PP was also asked to submit authenticated past production details from State Govt., Revised plantation programme and seek details on mining outside mining lease area from State Department of Mines and Geology. In view of the foregoing, the proposal was deferred.**

**(2.6) Expansion from 4.2 to 6.0 MTPA of Iron ore from Bailadila Deposit-10 Mine of M/s. NMDC Limited with M.L. area of 309.340 Ha located at Bailadila Iron Ore Mine, Bachel, South Bastar Dantewada District, Chattisgarh – Re-Consideration of Environmental Clearance regarding [J-11015/141/2014-IA.II(M)]**

The proposal of M/s. NMDC Limited is for Capacity expansion from 4.2 to 6.0 MTPA of Bailadila Deposit-10 Mine of M/s. NMDC Limited with M.L. area of 309.340 Ha. The mine is located at Bailadila Iron Ore Mine, Bachel, South Bastar, Dantewada District, Chhattisgarh. The ML area is located between Latitude 18°41'23.87"N to 18°43'12.59"N and Longitude 81°13'3.60"E to 81°13'44.10"E. The core and buffer zone of the lease area is located on the Survey of India Toposheet No. 65 F/1, 65 F/2, 65 F/5 and 65 F/6. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

The Committee in its earlier meeting held during 08<sup>th</sup> July 2014, recommended the proposal for prescribing Terms of Reference (TOR). MOEFCC issued TOR to the project vide letter no: F.No.J-11015/141/2014-IA.II (M) dated 12<sup>th</sup> August, 2014 with a validity period of 2 years i.e. up to 11.8.2016. The extension of validity of TOR was granted for one year i.e. from 12.8.2016 to 11.8.2017 from MOEFCC vide letter dated 17/8/2016. The baseline environmental data was generated during 1<sup>st</sup> December, 2014 to 28<sup>th</sup> February, 2015 representing winter season. The Proposal was earlier placed in EAC Meeting dated March 20-21, 2017 wherein the proposal was deliberated and deferred as the PP could not show adequate plantation to the Committee due to issues related to KML file. The public consultation was held on 15/11/2016 at Dantewada. Mining Plan approval for 6.0 MTPA capacity has been obtained from IBM on 17/3/2016. The gross block value of the project as on 31-3-2016 is Rs.425.87 Crores. The mining lease area of 309.34 Ha is an existing mining lease in possession of the PP out of which 52.70 Ha is under mining, 13.10 Ha is under waste dumps, 46.51 Ha is for infrastructural facilities like roads, buildings, plant and conveyor, service centre, ETP, sub-station, filter house, power line, pipelines, watch towers and mobile tower etc., 7.07 Ha is for Safety zone and 189.96 Ha is other area.

The PP got the initial Mining Lease for Bailadila Deposit-10 in the year 1965 for a period of 30 years i.e. from 11/9/65 to 10/9/95. Subsequently, the lease was renewed for further period of 20 years i.e. from 11/9/95 to 10/9/2015. As per provisions of the Mines and Minerals (Development & Regulation) Amendment Act, 2015, the mining lease of Bailadila Deposit-10 has been extended up to a period ending on 31st March, 2020. To extend the period of mining lease for Bailadila Deposit-10 Lease from 11.09.2015 to 31.3.2020, the Amendment agreement was signed on 10.09.2015. The approval for Mining Plan with mine closure plan was obtained from IBM, Nagpur Regional Office, Nagpur vide letter no: BST/FE/MPLN-455/NGP-15 dated 17/3/2016. The Mine plan was approved for a production capacity of 6.0 MTPA (ROM) Iron Ore. The PP has reported that entire mining lease i.e. 309.34 Ha is in forest area and approval under Forest Conservation Act, 1980 vide letter no. 8-89/97-FC dated 29/7/98 has been obtained. The validity of Forest clearance is co-terminus with lease period as per MM(DR) Amendment Act, 2015 i.e. 31.03.2020. The FRA certificate under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forests Rights) Act, 2006 on the forest land proposed to be diverted for non-forest purposes is obtained from Collector & District Magistrate, Dakshin Bastar, Dantewada vide letter no. 975/MO/2015 dated 31/03/2015.

The mining method to be adopted is opencast mining with full mechanization. The sequence of operation in quarrying is drilling, blasting, excavation, loading and transportation. Drilling and blasting is carried out for excavation of iron ore. The PP reported that out of the total Mining lease area, the land to be affected over a period of life of mine will be 265.85 ha. The remaining area of 43.49 ha continue to be under the same present category of land use except for the fact that afforestation programme would be planned out to improve the ecology of the area. The total mineable reserve from the mines is 223.01 Million Tonnes with 62.62% Iron. The total water requirement for Deposits-10 project after expansion will be about 12,375 m<sup>3</sup>/day. The project cost is

Rs. 425.87 Crores. PP reported that there is no Wildlife Sanctuary, National Park, Biosphere Reserves, Wildlife Corridors, Reserved & Protected Forest etc. in the core zone. However, 7 species belonging to Schedule-I were recorded in 10 km radius area. A detailed Wild Life Conservation Plan for the same was approved by PCCF / Chief Wildlife Warden, Forest Deptt, Raipur vide letter dated 04.02.2016 with fund allocation of ₹14.47 Crores. There is no reportedly court case/ litigation pending against the project. The Committee deliberated on the observations of the MoEFCC compliance report in its earlier meeting dated March 20-21, 2017. The Committee had also sought details of permission for withdrawal of water, land-use pattern study, community development work break-up details, expenditure made on green belt development and detailed water conservation and asked the PP to prepare a detailed plan for occupational health including practical budgetary aspects.

The Committee noted the plantation details submitted by the PP through KML file along with site photographs. The Occupational Health Plan of Rs.25,31,000 was discussed by the Committee and PP submitted that the NMDC hospital offers free of cost treatment to local residents and similar facilities are offered to the non-NMDC patients. The PP has informed that application for seeking permission from the Water Resources Department has already been made. The information pertaining to land-use pattern study, community development work break-up details, expenditure made on green belt development and detailed water conservation plan was also placed before the committee and discussed at length. **The Committee after detailed deliberation recommended the project for grant of EC.**

**(2.7) Enhancement of Production capacity of limestone(Minor Mineral) from 14,600 TPA to 15,00,000 TPA (ROM) by M/s Nitesh Minerals Pvt. Ltd. located at village Hariyadhana, Tehsil-Bilara & District-Jodhpur, Rajasthan(MLA : 100 Ha.) – Re-Consideration of Environmental Clearance regarding [J-11015/307/2009-IA.II(M)]**

The proposal of M/s Nitesh Minerals is for enhancement of production capacity of limestone (Minor Mineral) from 14,000 TPA to 15,00,000 TPA (ROM) in the mine lease area of 100 ha. The mine lease area is located at village- Hariyadhana, Tehsil Bilara, District-- Jodhpur, Rajasthan. The lease area falls within the Survey of India Topo sheet no. 45F/15. The site falls in the Latitudes and Longitudes 26<sup>0</sup>26'3.3" & 26<sup>0</sup>26'41.7"N and 73<sup>0</sup>47'36" & 73<sup>0</sup>48'20"E respectively. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

The Ministry had prescribed the TOR for the project vide letter no. J-11015/307/2009-IA.II(M) dated 17.12.2009. The Proponent submitted EIA/EMP report to the Ministry for seeking environmental clearance after conducting Public Hearing. The proposal of EC was appraised by the EAC in its meeting held during May 23-25, 2012 wherein the Committee recommended the EC Proposal. The proposal was identified as a case of violation (while appraisal by the EAC) under the provisions of EIA Notification, 2006 notified under the Environment (Protection) Act, 1986 on the ground that Project proponent has enhanced the production from the mine from 14,600 TPA to

60284.76 in the year 2009-10 without requisite prior environment clearance. Accordingly, the Ministry, vide letter of even no. dated 30.10.2012, 23.04.2013 and 07.07.2014 had requested State Government to take action against the Project Proponent invoking the powers under section 19 of the E (P) Act, 1986 for violation and submit the credible action.

The Project Proponent submitted that the Department of Mines and Geology, Govt. of Rajasthan, Jodhpur, vide letter dated 17.1.17 has authenticated the production details since 1986-87 till 2015-16 which mentioned that the mine has obtained maximum production of 93080 TPA in 1986-87 and its yearly production has not increased thereafter. Hence, there is no increase in annual production after notification of EIA 2006 i.e. 14.09.2006. The State Government has also clarified that the Mining lease was renewed from 16.11.1991 to 15.11.2001 vide letter dated 16.03.1992. The renewal period was changed from 10 years to 20 years as per the policy of the State Government vide order dated 30.01.1999. The renewal period was made 30 years instead of 20 years as per Rule 16(2) of the Rajasthan Minor Mineral Concession Rules, 1986 vide letter dated 10.12.2012. Hence, the Mining lease is valid up to 15.11.2021. The Department of Mines & Geology, Government of Rajasthan has further stated that the renewal of mine lease is done only once i.e. from 16.11.1991 to 15.11.2001 whereas the extension of time period has been granted twice from 10 years to 20 years and 20 years to 30 years. The matter was examined in the Ministry and it is noted that this was not a case of violation.

The Committee noted the fact that the proposal was recommend for grant of EC after appraisal by EAC in its meeting dated May 23-25, 2012 and the proposal was identified as a violation case in the Ministry on the ground of increase in capacity in 2009-10 without obtaining prior EC. However, upon further examination it was found that no violation has happened since the proposal relates to limestone (minor mineral). The provisions of EIA notification, 1994 are not applicable in the instant matter as minor minerals were not covered under the ambit of EIA Notification, 1994. As per Ministry's O.M. dated 28.10.2004 (issued under EIA notification, 1994), term 'expansion' has been as – Expansion shall include increase in production or lease area or both. It was further clarified that - if the annual production of any year from 1994-95 onwards exceeds the annual production of 1993-94 or its preceding years (even if approved by IBM), then it would constitute expansion. The maximum production achieved by the PP is 93,080 TPA in the year 1986-1987. Hence, expansion related clause shall be applicable only when the capacity from the mine lease exceeds 93080 TPA after 1994-95. Referring to the Past production details of Department of Mines and Geology, Govt. of Rajasthan (submitted by PP), it is observed that the highest capacity achieved in the mine lease after 1994-95 is 60,284.76 TPA in the year 2009-10, which is less than 93,080 TPA.

**The Committee deliberated on the proposal and noted that the case neither related to expansion in capacity without prior EC nor it was a case of renewal as per the letter of Govt. of Rajasthan. Hence, it is not a violation case. In view of the foregoing, the EAC recommended the project for grant of EC.**

**(2.8) Limestone Mining with production capacity of 53,055 TPA by M/s Dawar Cements Pvt. Limited located at Chakdura, Khrew, Tehsil Pampora, District Pulwama, J&K (M.L. Area - 21.106 Ha.) - For Consideration of Environmental Clearance [File No. J-11015/324/2013-IA-II(M)]**

The proposal of M/s Dawar Cements Pvt. Limited is for Limestone Mining with production capacity of 53,055 TPA in 21.106 Ha M.L. area. The mine is located at located at Chakdura, Khrew, Tehsil Pampora, District Pulwama, J&K. The M.L. area is located on the Survey of India Toposheet No. 43 J/16, 43 N/4, 43 K/13, and 43 O/1. The Latitudes and Longitudes of mining lease area are as below:

| Pillar No. | Latitude    | Longitude   |
|------------|-------------|-------------|
| Bx         | 34°03'15" N | 75°00'45" E |
| Ax         | 34°03'18" N | 75°00'39" E |
| Hx         | 34°03'19" N | 75°00'36" E |
| A          | 34°03'24" N | 75°00'32" E |
| B          | 34°03'22" N | 75°00'28" E |
| C          | 34°03'26" N | 75°00'23" E |
| D          | 34°03'29" N | 75°00'16" E |

| Pillar No. | Latitude    | Longitude   |
|------------|-------------|-------------|
| E          | 34°03'42" N | 75°00'19" E |
| F          | 34°03'38" N | 75°00'23" E |
| G          | 34°03'26" N | 75°00'32" E |
| H          | 34°03'31" N | 75°00'45" E |
| Dx         | 34°03'27" N | 75°00'47" E |
| I          | 34°03'16" N | 75°00'46" E |

The proposal of TOR was considered by the EAC in its meeting held during October 31-November 01, 2013 wherein the Committee identified it as a violation case and Ministry had initiated action vide its letter dated 01.04.2014. The PP had produced limestone from the mine without obtaining prior Environmental Clearance during 2008 to 2013. The ToR was issued on date 22<sup>nd</sup> January 2016 by MoEF&CC, vide letter no. J-11015/324/2013-IA.II (M) after submission of proof of credible action taken by the State Govt. and submission of Board Resolution by the PP. The PP also granted Amendment in ToR vide letter no. J-11015/324/2013-IA.II (M) dated 14<sup>th</sup> September 2016 wherein Production capacity was amended from 50,000 TPA (ROM) to 53055 TPA (ROM).

The Committee observed that the case filed by the JKSPCB in the court of Chief Judicial Magistrate, Srinagar was in the month of September, 2015 whereas the O.M.s relating to consideration of violation proposals by the Ministry were quashed by the NGT in July, 2015. Hence, any action on violation after quashing of orders dated 12.12.12 and 27.06.13 is null and void. Further, the Ministry has already brought a notification dated 14.03.2017 wherein detailed process has been mentioned for dealing with the cases related to violation of EIA Notification, 2006.

The Committee deliberated on the violation aspects of the proposal and took a view that since action taken by JKSPCB on violation after quashing of the relevant O.M.s by Hon'ble NGT is null and void and considering that new notification has been brought out for dealing with violation cases, **the PP should apply under violation category to regularize the issues related to violation.**

**(2.9) Expansion of Quartz & Feldspar Mining Project from 12000 TPA to 12,00,000 TPA of M/s Goyal Minerals Grinding Mills in M.L. Area of 130.0 Ha (M.L.No.–01/1993) located Near village –Sanwalpura Tavran Tehsil–Shri Madhopur, District–Sikar (Rajasthan) - Consideration of ToR regarding (Proposal no. IA/RJ/MIN/64032/2017)**

The proposal submitted by M/s Goyal Minerals Grinding Mills is for seeking ToR for conducting EIA studies for Expansion of Quartz & Feldspar Mining Project from 12000 TPA to 12,00,000 TPA (ROM) in mine lease area of 130 Ha. The mine is located Near village –Sanwalpura Tavran Tehsil–Shri Madhopur, District – Sikar (Rajasthan). The latitudes and longitudes of the M.L. are as below:

| Pillar | Latitude                   | Longitude                  |
|--------|----------------------------|----------------------------|
| A      | 27 <sup>0</sup> 34'3.88"N  | 75 <sup>0</sup> 54'24.56"E |
| B      | 27 <sup>0</sup> 33'15.12"N | 75 <sup>0</sup> 54'47.31"E |
| C      | 27 <sup>0</sup> 33'5.14"N  | 75 <sup>0</sup> 54'20.38"E |
| D      | 27 <sup>0</sup> 33'53.9"N  | 75 <sup>0</sup> 53'57.62"E |

The mine lease area is located on Survey of India Topo-sheet no. 45M/14, 45M/15 and 54A/2. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

The PP reported that the project was earlier granted EC vide letter J-11015/19/99-IA-II(M) dated 02.12.1999 for mining of Feldspar and Quartz with capacity of 12,000 TPA. The mine lease was sanctioned in favor of Shri Netram Goyal for mineral Quartz, Feldspar, Silica Sand, Mica vide order no. DMG/Neem/C.C-6/ P.1(1) 1/93/375 dated 07.05.1998 for 30 Years from the date of lease execution. The lease was executed on dated 24.04.1998. Shri Net Ram Goyal has expired on dated 10.06.2015. According to his will signed before death, he nominated three people. They had made a firm name M/s Goyal Minerals Grinding Mills and made application of mutation of lease by the name of partnership firm. The Additional Director (Mines) has given the order to mutation of lease vide letter no.-ADM/Jai/1/P-4/2011/239 on dated 8.07.2015. The supplementary mutation of lease execution was made on dated 02.09.2015. The lease validity is renewed from 30 years to 50 years by the date 10.03.2015 due to amendment in MMDR Act. The Modified Mining Scheme with Progressive Mine Closure Plan is approved from the SME, Jaipur circle, Jaipur, vide Letter no. SME/JP/Modi.Mi-Scheme/P-280/2016/3817 Dated 31/03/2017. It is proposed mining for mineral Quartz, Feldspar. Mining of Quartz, Feldspar will be carried out by open cast benching method. The Committee noted that the PP has not mentioned Mica and Silica Sand in the Form-1 submitted to the Ministry. However, in PFR the PP has indicated to mine Quartz, Feldspar, Mica and Silica Sand. The PP has submitted that it intends to mine Quartz, Feldspar, Mica and Silica Sand; however, the same were not included in earlier EC and have not been mined till date.

The PP submitted past production details before the Committee wherein it was noted that the production of Feldspar and Quartz has not exceeded the EC capacity



and Mica and Silica Sand have not been mined. It was observed through the KML file that mining has been done outside the lease area also and accordingly, Committee asked the Ministry to seek clarification from State Department of Mines and Geology. The Committee noted that the PP is seeking expansion from 12,000 TPA to 12,00,000 TPA i.e. an increase of 100 times which may have immediate adverse impact on the environment. Further, as per the mining plan the mineable reserves are 50,56,985 TPA and with proposed production capacity the mine will be exhausted in less than 5 years. Hence, the PP needs to include the aspect of sustainable mining and accordingly, revise the proposal. The Committee further noted that the PP is not able to anticipate the future pollution generation vis-à-vis the current scenario and hence, needs to make a practical proposal. Further, the estimation of equipments for undertaking expansion up to 12,00,000 TPA is also incorrect. The PP during the meeting agreed to reduce the production from 12,00,000 TPA to 6,00,000 TPA.

The Committee deliberated on the proposal and noted that the proposal is devoid of sustainable mining practices & plan as of now and a preliminary estimate of mining operations vis-à-vis environmental impacts needs to be considered. Further, mining outside lease area is also observed through KML file, hence, necessary clarification is required from State Department of Mines and Geology. **The proposal is accordingly deferred.**

**(2.10) Mining of Manganese Ore with 0.120 million TPA capacity by of M/s MOIL Ltd. in M.L. area of 76.409 Ha located at Bharveli-Awalajhari Village, Balaghat Tehsil, Balaghat District, MP - Consideration of ToR regarding (Proposal no. - IA/MP/MIN/64023/2017)**

The proposal of M/s MOIL Limited is for underground mining of Manganese ore with production capacity of 0.120 million TPA in an area of 76.409 Hectares. The project is located at Awaljhari and Bharweli Village, Balaghat Tehsil and District, Madhya Pradesh. The mine lease area falls in Survey of India topo-sheet No. 64 C/1. The PP also presented the KML file during the presentation to indicate the location and shape of mine lease on Google Earth/ DSS. The latitudes and longitudes of the mines lease are as follows:

| S.No | Latitude       | Longitude      |
|------|----------------|----------------|
| 1    | 21°50'49.40"N  | 80°13'40.50"E  |
| 2    | 21°50'4.0"N    | 80°13'40.50"E  |
| 3    | 21°50'46.305"N | 80°13'43.452"E |
| 4    | 21°50'44.48"N  | 80°14'4.242"E  |
| 5    | 21°50'16.79"N  | 80°13'23.03"E  |
| 6    | 21°50'14.16"N  | 80°13'24.16"E  |
| 7    | 21°50'2.439"N  | 80°13'12.6"E   |
| 8    | 21°49'53.60"N  | 80°13'7.408"E  |
| 9    | 21°49'41.33"N  | 80°13'9.74"E   |

| S.No | Latitude       | Longitude      |
|------|----------------|----------------|
| 10   | 21°49'46.11"N  | 80°13'17.506"E |
| 11   | 21°49'53.5"N   | 80°13'26.31"E  |
| 12   | 21°49'56.6"N   | 80°13'28.6"E   |
| 13   | 21°49'56.3"N   | 80°13'31.56"E  |
| 14   | 21°50'5.11"N   | 80°13'33.38"E  |
| 15   | 21°50'5.3"N    | 80°13'37.12"E  |
| 16   | 21°50'33.327"N | 80°13'51.445"E |
| 17   | 21°50'39.354"N | 80°14'1.535"E  |

PP submitted that The Mining Lease was granted for a period of 50 years by

Department of Mineral Resources, Government of M.P. vide letter no.F-3-25/2013/12/2, dated 24.09.2015. The Mining plan was approved by IBM, Nagpur Regional Office, L.No.BGT/MN/ MPLN-1166/NGP dated 21/03/2016. The ore deposits will be worked by underground cut & fill method of mining. The mine is located adjacent to Bharveli mining lease of 182.3004 Ha, an existing lease of MOIL. The proposed Manganese mine (76.409 hectares) is proposed to be developed as Mechanized Mine by Underground – Over hand flat back cut and fill stoping with back filling of sand hydraulically from surface to stope by HDPE pipes. PP reported that mine is proposed to be worked through two shafts build on existing mine leases. **The Committee noted that the instant M.L. area is a disjointed lease and is not continuous in shape. Additionally, there is a gap between the adjacent mining leases owned by PP. Hence, underground horizontal access to the M.L. area may involve areas which are not in possession of PP.**

The estimated water requirement of the project is 100 m<sup>3</sup>/day for sand stowing, wet drilling, cooling of plants & machinery, dust suppression and beneficiation of ore. It was submitted by PP that Water requirement for dust suppression (within the lease and outside the lease in nearby villages), plantation and vehicle washing will be met from mine water and from rainwater collected in mining pit. During the presentation, PP reported that the mining lease shall be approached underground by adjacent mining lease. **It was also noted that residential area of 14.33 Ha is covered under the current mining lease of PP in which around 200 families are residing. Hence, the proposal may also involve R&R issues. The Committee also asked the PP to involve 200 families during public consultation process.**

The expected Solid Waste to be generated from mining operations is 9203 m<sup>3</sup> for first 5 years. It is proposed to store the quantity with single layer of 5m height, 100m length and 20 m width with 30° slope. There is no court case / litigation is pending against the project. The tentative cost of the project is 77 lakhs.

The Committee deliberated on the proposal and noted that in view of the issues related to R&R and M.L. accessibility issues, PP need to work out Cost-Benefit analysis before planning the operation of mine. Further, the capital cost relating to setting up of working shaft also need to be included in the project cost if the same is proposed to be put up under the instant project. The Committee also asked the PP to present the overlap of conceptual plan vis-à-vis working plan for understanding proposed mine operations including the aspect of accessing the mine lease from underground being disjointed and discontinuous in shape. **In view of the above, the proposal was deferred.**

**(2.11) Karmau Limestone Mining with proposed production capacity of 0.20 MTPA by M/s Jaiprakash Associates Limited located at village Karmau, Tehsil Rampur Baghelan, District Satna, Madhya Pradesh (150.028 Ha) – Amendment of ToR regarding**

*File No. J-11015/129/2014-IA.II(M)*

The proposal of M/s. Jaiprakash Associated Limited is for production of 0.2 million TPA of limestone in the ML area of 150.028 ha. The mine lease area is located at village-Karmau Tehsil-Rampur Baghelan, District Satna, Madhya Pradesh. The TOR to the proposal was issued vide letter no. J-11015/129/2014-IA.II(M) dated 14.07.2014. Project Proponent requested the extension of validity of TOR as the Public Hearing for the project has been delayed. The ToR was earlier extended by 1 year vide Ministry's letter No. J-11015/129/2014-IA.II(M) dated 09.09.2016 after recommendation of the same from EAC in its meeting dated August 22-23, 2016.

The PP requested for extension of validity of TOR for one year i.e. from 14.07.2017 to 13.07.2018. Based on the information furnished and discussions held, the **Committee recommended extension of the validity of TOR** for one year i.e. from 14.07.2017 to 13.07.2018. The Committee informed the PP that as per EIA Notification, 2006 as amended till date there is no scope for further extension of ToR beyond 13.07.2018.

**(2.12) Janardanpur Limestone Mine of Jaiprakash Associated Ltd. having ML area 135.435 ha with production capacity of 0.5MTPA of limestone by M/s Jaiprakash Associates Ltd. located at Village-Janardanpur, Tehsil-Rampur Baghelan, District-Satna, Madhya Pradesh (135.435ha.) – Amendment of ToR regarding [File No. J-11015/134/2014-IA.II(M)]**

The proposal is of M/s. Jaiprakash Associated Limited is for production of 0.5 million TPA of limestone in the ML area of 135.435ha. The mine lease area is located near Janardanpur village, Rampur Baghelan Tehsil, Satna district, Madhya Pradesh. The TOR to the proposal was issued vide letter no. J-11015/134/2014-IA.II(M) dated 14.07.2014. Project Proponent requested the extension of validity of TOR as the Public Hearing for the project has been delayed. The ToR was earlier extended by 1 year vide Ministry's letter no. J-11015/134/2014-IA.II(M) dated 09.09.2016 after recommendation of the same from EAC in its meeting dated August 22-23, 2016.

The PP requested for extension of validity of TOR for one year i.e. from 14.07.2017 to 13.07.2018. Based on the information furnished and discussions held, **the Committee recommended extension of the validity of TOR** for one year i.e. from 14.07.2017 to 13.07.2018. The Committee informed the PP that as per EIA Notification, 2006 as amended till date there shall not be any scope for further extension of ToR beyond 13.07.2018.

**2.13 Ochre, White Earth and Laterite Mine with production capacity of 1,00,000 TPA by M/s Shiv Kumar Agarwal located in Village-Kama Khuia, Tehsil-Birsinghpur, District- Satna State -Madhya Pradesh (M.L. area - 16.19 Ha) – Amendment of ToR regarding**  
*File No. J-11015/278/2015-IA-II(M)*

The proposal submitted by M/s Shiv Kumar Agarwal is for seeking amendment of ToR with respect to increase in mining capacity from 1,00,000 TPA to 2,50,000 TPA

of Ochre, White Earth and Laterite. The mine is located at Village-Kama Khuia, Tehsil-Birsinghpur, District- Satna State -Madhya Pradesh. The TOR to the proposal was issued vide letter no. J-11015/278/2015-IA.II(M) dated 24.09.2015. Project Proponent requested the increase in mining capacity of the proposal from 1,00,000 TPA (ROM) to 2,50,000 (ROM).

The Committee deliberated on the information furnished by the PP and noted that the proposal pertains to an existing working mine. The PP was asked to bring past production details to ascertain violation, if any. However, no production details were furnished by the PP. In view of the above, the Committee asked the PP to furnish authenticated past production details from State Department of Mines and Geology and the proposal was deferred.

#### **2.14 Amendment of EC granted for Kodingamali Bauxite Mining Project of M/s Odisha Mining Corporation Limited located in Kodingamali, Tahasil Koraput, District Koraput, Odisha (MLA: 447.25Ha. production of 3.0 MTPA Bauxite ore)**

*File No. J-11015/439/2007-IA-II(M)*

The proposal submitted by M/s Odisha Mining Corporation is for seeking amendment in EC granted by the MoEFCC vide letter No. J-11015/439/2007-IA-II(M) dated 28.05.2008. The project is for mining of Bauxite with production capacity of 3.0 million TPA in Kodingamali Bauxite Mining Project located at Kodingamali, Tahasil Koraput, District Koraput, Odisha in mining lease area of 447.25 Ha. The amendments are sought with respect to (1) Inclusion of Road as mode of transportation; (2) Proposed Land use plan in line with the Stage - I Forest clearance granted by MoEF&CC.

PP submitted that the EC granted by MoEF&CC dated 28.05.2008 was for production of 3.0 MTPA Bauxite ore for supply of Bauxite ore to the proposed Alumina refinery of M/s. Hindalco Industries Ltd. located at Village Kansariguda in Rayagada District at a distance of about 3.00 Km from the ML wherein the transportation of mineral was mentioned through pipe conveyor. Post MMDR (Amendment) Act, 2015, the JV with Hindalco has been cancelled by Govt. of Odisha on dt. 18.02.2015 due to issues related to Joint Venture Companies. The PP has also submitted that 18.94 ha of forest area of the M.L. was surrendered by OMC being non-mineral bearing and the land use plan was modified accordingly. The forest diversion proposal was revised to 434.395 Ha including 6.86 ha of approach road connecting the ML area and submitted on 13.06.2016 under section 2 (ii) of FC Act, 1980. The proposal was approved by MoEF&CC under Section 2(iii) of FC Act, 1980 vide letter dated 06.01.2017 for assignment of forest area within M. Stage-I FC under section 2 (ii) of FC Act, 1980 of the said proposal including approach road has been granted by the Ministry on dated 17.04.2017.

The EAC deliberated on the proposal noted the following:

- EIA was earlier done considering the transportation of ore through pipe conveyor whereas now the PP has requested for Transportation of ore by Road. The study for

assessing the impact of ore transportation by road was not conducted. Hence, a study to assess the environmental impact (air/ water/ noise/ soil etc.) of ore transportation by road needs to be conducted.

- The timelines given by the PP during the presentation needs to be revisited since most of the activities can be run parallel to each other and accordingly, the target to undertake ore transportation by Railway siding may be targeted at an early date.
- A Carrying Capacity Study is needed to assess whether the existing infrastructure is adequate to handle the traffic load that may be generated as a result of ore transportation by road.
- The water requirement for the project was earlier sourced through the proposed Alumina Refinery whereas the PP has submitted that 400KLD water is required for mining operations for which permission details from concerned authority needs to be furnished.

In view of the above, **the proposal is deferred** and the PP is asked to submit the requisite information on EIA due to transportation by road, Carrying Capacity Study w.r.t. road network and Water drawl permission.

**2.15 EC amendment for installation of Overland Conveyor for transportation of Bauxite and change in mining equipment/ machineries for sizing in South Block Mining lease of Panchpatmali Bauxite mines of M/s National Aluminum Company Limited (NALCO) located at Damanjodi village, Koraput Tehsil, Koraput District, Odisha (MLA: 528.262 Ha & 3.15 MTPA) [File No. J-11015/78/2010-IA-II(M)]**

The proposal submitted by M/s National Aluminum Company Limited (NALCO) is for seeking amendment in EC granted by the MoEFCC vide letter No. J-11015/78/2010-IA-II(M) dated 28.02.2011. The amendment in EC is sought for installation of overland conveyor for transportation of bauxite and change in mining equipment/ machineries for sizing of south block mining lease in Panchpatmali Bauxite mines of M/S National Aluminium Company Limited (NALCO) located at Damanjodi village, Koraput Tehsil, Koraput District, Odisha in mining lease area of 528.262 Ha.

PP submitted that the existing EC capacity for mining in South Block Mining Lease stands at 3.15 MTPA. The bauxite production from the South Block has been proposed from the year 2019-20. Accordingly, amendment is sought for the purpose of installation of additional overland conveyor, apron feeder, crusher etc. for additional transportation of 3.15 MTPA bauxite from the central & south blocks of Panchpatmali Mining Lease. The mining infrastructure and other new facilities, apart from the proposed overland conveyor are proposed to be installed within the existing lease area. The alignment of the proposed overland conveyor shall be finalized during engineering stage. No additional private or Govt. or forest land acquisition/alienation/diversion is envisaged.

The EAC deliberated on the proposal noted that EIA was earlier done considering the transportation of ore through cable belt conveyor. Now the PP intends to change the transportation mode to overland conveyor system along with installation

of Crusher of 1100 TPH with associated equipments and machineries which shall have impact of environment. Accordingly, Committee desired the PP to conduct an EIA Addendum Study to assess the impact of the crusher and conveyor system and prepare a mitigation/ management plan. The **proposal is deferred** in view of the above.

**2.16 Amendment in EC of Devpura-II Soapstone Mining Project of M/s Associated Soapstone Distributing Co. Pvt. Ltd. M.L. No. 2/94, Area -16.60 Ha. located near Village Devpura, Tehsil Sarada, District Udaipur, Rajasthan.**

*File No. J-11015/155/2003-IA-II(M)*

The proposal submitted by M/s Associated Soapstone Distributing Co. Pvt. Ltd. is for seeking amendment in EC granted by the MoEFCC vide letter No. J-11015/155/2003-IA-II(M) dated 24.02.2004. The amendment in EC is sought for changing the mine working from underground to opencast in Devpura-II Soapstone Mining Project located at Village Devpura, Tehsil Sarada, District Udaipur, Rajasthan.

The EAC deliberated on the proposal noted that EIA was earlier done considering the mine working as underground and perceiving the associated impacts. The PP now intends to change the Mine working from underground to opencast for which a detailed study including Public hearing is required. Accordingly, the **proposal was deferred** and the PP was asked to consider the proposal as fresh proposal and seek ToR for conducting detailed EIA studies.

**Additional Agenda Item No. 3:**

**(3.1) Nagaur Limestone Mine (Block 3B1(a)) of M/s Emami Cement Ltd with M.L. Area of 267.6288 Ha with production capacity of 1.7 Million TPA (ROM) (Limestone production capacity- 0.68 Million TPA) near village - Deh, Tehsil- Jayal & Village - Sarasni, Tehsil- Nagaur, District - Nagaur (Rajasthan) - Consideration of ToR regarding**  
*IA/RJ/MIN/62857/2017*

The proposal submitted by M/s Emami Cement Ltd is for seeking ToR for conducting EIA studies for Nagaur Limestone Mine (Block 3B1(a)) with production capacity of 1.7 Million TPA (ROM) (Limestone production capacity- 0.68 Million TPA) in mine lease area of 267.6288 Ha. The mine is located at village - Deh, Tehsil- Jayal & Village - Sarasni, Tehsil- Nagaur, District - Nagaur (Rajasthan). The mine lease area falls between latitudes of 27°16'45.2244"N to 27°20'1.3632"N and longitudes of 73°51'26.0570"E to 73°55'06.827"E. The mine lease area is located on Survey of India toposheet no. 45 E/15. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

The proposal was earlier discussed in EAC meeting dated April 27-28, 2017 wherein the Committee noted that the lease/ Lol for the said mine block is not issued by the State Govt. and the proposal was deferred. In this regard, the PP had represented

before the Ministry and submitted requisite document on valid Lol from the State Govt. The matter has been placed before the Committee for consideration.

The Committee deliberated on the proposal and noted that the PP now possesses valid Lol from the State Government. The detailed presentation in respect of the instant proposal was already made on April 27-28, 2017. In view of the above, the **proposal was recommended** for grant of Standards ToR conditions for preparation of EIA report.

The meeting ended with vote of thanks to the Chair.

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**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 EIA Report.
- 8) Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- 9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine



lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.

11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.

12) A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.

13) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.

14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.

15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.

16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.

17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.

18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.

19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should

also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.

20) Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

22) One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season) ; December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM<sub>10</sub>, particularly for free silica, should be given.

23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.

25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.

27) Impact of the Project on the water quality, both surface and groundwater, should be

assessed and necessary safeguard measures, if any required, should be provided.

28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.

29) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.

30) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.

31) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.

32) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.

34) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.

35) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.

36) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.

37) Measures of socio economic significance and influence to the local community

proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

38) Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.

39) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.

40) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

41) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

42) A Disaster management Plan shall be prepared and included in the EIA/EMP Report.

43) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.

44) Besides the above, the below mentioned general points are also to be followed:-

a) All documents to be properly referenced with index and continuous page numbering.

b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.

c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF &CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.

d) Where the documents provided are in a language other than English, an English translation should be provided.

e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.

f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II(I) dated 4<sup>th</sup> 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 haulroad,loadingandunloadingpointandtransferpoints.Fugitivedustemissions 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/leveling 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 adopted 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 45<sup>0</sup>. 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 neighborhood 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 19<sup>th</sup> May, 1993 and 31<sup>st</sup> 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.

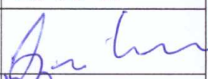
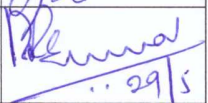
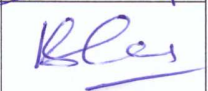
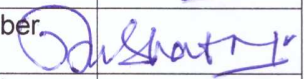
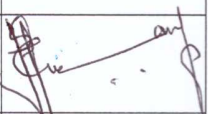

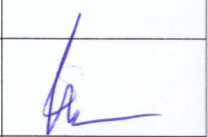
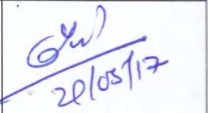
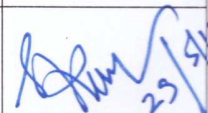
45). A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.

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](http://www.environmentclearance.nic.in) and a copy of the same should be forwarded to the Regional Office.

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

| Sl. No. | Name and address   | Designation      | Signature<br>29-05-17   |
|---------|--|------------------|---|
| 1.      | <b>Dr. Ajai Kumar</b><br>B-1302, BestechParkView Spa, Sector-47, Gurgaon, Haryana  | Chairman         |    |
| 2.      | <b>Shri B Ramesh Kumar</b><br>H-No. 6-1-134/6, Balram Compound, Padmarao Nagar, Secundrabad- 500025, Andhra Pradesh  | Member           |    |
| 3.      | <b>Prof. Dr. K.S. Rana</b><br>Maharana Manzil, 18, Dholpur House, (D.M. Compound), M.G. Road, Agra-1, Uttar Pradesh - 282001   | Member           |    |
| 4.      | <b>Prof. A. K. Bhatnagar,</b><br>JA/4B, Ashok Vihar-I, Delhi - 110052  | Member           |    |
| 5.      | <b>Dr. N. C. Karmakar</b><br>Department of Mining Engineering, Indian Institute of Technology (BHU), Varanasi - 221 005, Uttar Pradesh   | Member           |   |
| 6.      | <b>Dr. Hemant S. Sahasrabudhe</b><br>"Utkarsha", LB-53, Housing Board Colony, Laxminagar, Nagpur-440022  | Member           |    |
| 7.      | <b>Prof. S. Ramakrishna Rao</b><br>50-120-9/1, Tulasi Mani Regency North Extension, Seethammadhara, Visakhapatnam - 530013 Andhra Pradesh.   | Member           |    |
| 8.      | <b>Dr. Himanshu Pathak,</b><br>Professor, Center for Environment Science and Climate Resilient Agriculture, Indian Agricultural Research Institute, New Delhi 110 012  | Member           |   |
| 9.      | <b>Dr. AL. Ramanathan</b><br>Professor, School of Environmental Sciences, Jawaharlal Nehru University. New Mehrauli Road, New Delhi- 110067  | Member           |   |
| 10.     | <b>Dr. Tushar Kant Joshi,</b><br>Laxmikant Niwas, Salan Gaon, Bhagwantpur, Dehradun-248009, Uttarakhand.   | Member           |   |
| 11.     | <b>Shri Santosh Gupta,</b><br>Flat No. 405, Block -B, Gaur Green Vista, Nyay Khand -1, Indrapuram, Ghaziabad-201014  | Member           |  |
| 12.     | <b>Representative of Ministry of Mines</b><br><b>Shri. K.S. Yadav,</b><br>Regional Controller of Mines, 4 <sup>th</sup> Floor Block-2 Karmyogi Bhawan, Sector-10A, Gandhi Nagar (Gujarat) -382010. <i>Pushpender Gaur, D Com</i><br><i>Shastri Bhawa N-Delhi</i> | Member           |  |
| 13.     | <b>Representative of Indian Meteorological</b><br><b>Mr. V.K. Soni,</b><br>Scientist "E", (Meteorology/Air Pollution), 609, SatMet Building, Mausam Bhawan, Indian Meteorological Department, Lodhi Road, New Delhi-110003                                       | Member           |   |
| 14.     | <b>Representative of Wildlife Institute of India,</b><br><b>Dr. (Ms.) Asha Rajvanshi,</b><br>Wildlife Institute of India, Chandrabani, Dehradun-248001   | Member           |   |
| 15.     | <b>Director</b><br>IA-Division (Non Coal Mining)<br>Vayu-305, Indira Paryavaran Bhawan, Ministry of Environment, Forest & CC, Jorbagh Road, Lodhi Road, New Delhi-110003   | Member Secretary |  |

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Agenda for 18<sup>th</sup> EAC Meeting to be held during May 29, 2017