

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

SUMMARY RECORD OF 23rd MEETING OF THE RECONSTITUTED COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The Twenty Third 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 **October 23-24, 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. Circulation of the Minutes of the 22nd EAC Meeting:

The Minutes of the 22nd Meeting of EAC held during September, 18th - 19th, 2017 were circulated.

(2.1) Pandru Quartz & Feldspar Mine of M/s S.B. Minerals Enterprises with expansion in production capacity from 60,000 TPA to 7,00,000 TPA (ROM) in M.L. area of 91.0 Ha located at village - Pandru, Tehsil – Asind, District – Bhilwara, Rajasthan (IA/RJ/MIN/57552/2016) – Consideration of Environmental Clearance regarding
File No. J-11015/179/2016-IA.II(M)

The proposal of M/s S.B. Minerals Enterprises is for enhancement of production capacity from 60,000 TPA to 7,00,000 TPA (ROM) in respect of Pandru Quartz & Feldspar Mine in M.L. Area of 91 Ha. The mine is located at Villages – village - Pandru, Tehsil – Asind, District – Bhilwara, Rajasthan. The instant mine lease area all in Survey of India Topo sheet No. 45K/6 and bounded between 25°35'50''N to 25°36'41''N latitudes & 74°15'52''E to 74°16'34''E longitudes. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

2. The proposal of ToR was earlier considered by the EAC in its meeting held during August 22-23, 2016 wherein the Committee recommended for grant of ToR to the PP. The Ministry issued Terms of Reference (ToRs) for the preparation of the Environmental Impact Assessment (EIA) Report and Environmental Management Plan (EMP) vide their letter no. J-11015/179/2016-IA.II (M) dated 09.09.2016. The EIA Report/ EMP in compliance with prescribed ToR, was submitted to Ministry on 04.09.2017 for appraisal. The instant lease area got first EC vide letter no. J-11015/112/2006-IA.II (M) dated 27.04.2007 for 60,000 TPA ROM with validity of 5 years i.e. up to 26.05.2012 (up to end of lease period). As per the past

production details, the mineral production was 3061 TPA in 1993-94 which was expanded up to 9920 TPA in 2003-04. The mine operated up to 2004-05 (5685 TPA) till it obtained EC on 27.04.2007 for 60,000 TPA. After grant of EC in 2007, the mine operated till 26.05.2012 and a maximum production of 48840 TPA was achieved. The operations again suspended for 2012-2014 period and restarted from 01.04.2014. The EC was again granted vide letter no. J-11015/142/2011-IA.II (M) dated 11.03.2014 for production capacity of 60,000 TPA (ROM) in lease area of 91.0 Ha. The maximum production of 59,800 TPA was achieved after grant of EC in 11.03.2014. **The Committee noted the submission of PP and asked the PP to present details of permissions obtained by it since 1993-94 (EC as well as Consent to Operate) vis for further examination of the issue in view of the judgement passed by Hon'ble Supreme Court of India on 02.08.2017 in the matter of Common Cause Vs Union of India & Others as Feldspar and Quartz were major minerals till February, 2015. The Committee also asked the PP to submit the Consent to Operate obtained from the State Pollution Control Board since start of mining operations in the lease area.**

3. PP reported that total lease area is 91 Ha. As per letter no. F-FCA /DFO /5527 dated 09.05.2016 issued by DCF, Bhilwara there is no National Park, Wildlife Sanctuary, Migratory routes of fauna and National Monument within 10km periphery of the lease area. The authenticated list of species have also been provided through the said communication. The PP presented a map inferring no forest land in the lease area. The authenticated list of Schedule-I species mentioned that Peafowl is present in the core/ buffer zone of the lease area for which PP has submitted the Conservation Plan of ₹2,00,000 for five years involving plantation and awareness programmes. **The Committee asked the PP to present a certificate in support of its claim of 'No Forest land' issued by an official not below the rank of DFO as per the prescribed ToR and revise the activities under peafowl conservation plan and accordingly, increase the budget.**

4. PP reported that the lease was originally sanctioned to M/s S. B. Minerals Enterprises, Asind vide Govt. Order no. P-5/72/khan/Gr.-2/91 dated 31.03.1992 and agreement was made on dated 13.05.1992 and registered on 27.05.1992 for a period of 20 years. Application for renewal was made on dated 04.04.2011 for 20 years from 27.05.2012. However, post MMDR Amendment Act, 2015, the lease validity is extended to 50 years from the date of original grant and the Department of Mines and Geology vide its letter dated 25.02.2015 has mentioned that post MMDR Amendment Act, 2015, the mine lease validity has been extended to 26.05.2042. The Modified mining plan including progressive mine closure plan was approved by State Department of Mines and Geology vide letter no. SME/BhilCircle/Modi.M.P./M.L.146/2011/517 dated 22.02.2016 for enhanced capacity of 7,00,000 TPA. **The Committee asked the PP to submit the same to the Ministry.**

5. PP has reported that the daily water demand will be 20KLD, out of which 4.5KLD will be used for domestic purpose and 15.50 KLD for dust suppression and plantation purposes. The water requirement is proposed to be met from ground water for which application to CGWA has already been made. The primary baseline data for site specific micro meteorology data, ambient air quality, water quality, noise level, soil and flora & fauna was collected during Post monsoon Season i.e. from October – December, 2016. The monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and the same were reported to be

in respective prescribed ranges viz. NAAQS-2009 (for air monitoring), Class C criteria of IS:2296-1982 (for surface water), IS:10500-2012 (for ground water) and ambient noise limits prescribed by CPCB. It is, however, noted that the concentration of TDS, Total Hardness, Calcium, Magnesium, Chloride, Fluoride in groundwater higher than the permissible concentration under IS:10500-2012. **The Committee asked the PP to explain the reason for higher concentration of some parameters in ground water samples and also explain the impact of proposed mining activity on the same.** The soil quality was observed to be neutral in nature with good nitrogen content. The ground water level reportedly varies from 474 to 479 average MSL. The mine working shall be done between 542 to 514 average MSL, hence, the groundwater intersection will not take place.

6. PP has reported that there is no seasonal nallah passing through the mining lease which may require diversion. PP reported that there is no court case/ litigation pending against the project. The Committee took note of the Compliance Report of MoEFCC R.O. Lucknow dated 04.03.2016 and noted that PP has not complied with all the conditions prescribed by MoEFCC like :- *related to development of greenbelt (Sp. Condition ix), furnishing the details of funds earmarked for environment protection measures to MoEFCC (Sp. Condition xxiii) and date of financial closure and approval of the project and date of start of land development work (Sp. Condition xxiv).* **The Committee asked the PP to provide latest status of the compliances as the Compliance Report of is more than 18 months old.**

7. Public hearing for the project was conducted on 29.03.2017 at Public Place, Village - Pandru, Tehsil - Asind, District – Bhilwara under the chairmanship of CEO, Jila Parishad - Sh. Gajendra Singh Rathore (Representative of District Collector, Bhilwara). **The Committee asked the PP to produce a certificate stating that CEO, Jila Parishad is equivalent or above the rank of Additional District Collector.** The representatives of RSPCB, Bhilwara also attended the meeting. The proceedings of the Public hearing indicated that the local villagers have largely supported the mining project and asked the PP to address issues related to damaged road to Pandru with a view to improve its connectivity, opening of health centre/ hospital in the area, improving the status of educational facility and providing infrastructural support, providing Protective equipments to mine workers, local development related issues like improved infrastructure, construction of temple, taking up plantation drive in the area to control pollution etc. PP submitted that it is committed for social upliftment of the area and shall provide the basic amenities to nearby villagers for water distribution, building of schools, hospitals, etc. which will ultimately add to the economic benefits to the locals of the area. For the same purpose, it has made a provision of ₹16.5lakhs towards capital cost and ₹0.7lakhs towards recurring cost. Apart from this, a provision of ₹20lakhs towards capital cost and ₹15lakhs towards recurring cost has been made for implementing the Environment Management Plan. The Total project cost is ₹8.5Crores with recurring expenditure of ₹85lakhs. The Committee noted the submissions of the PP and made it clear that expenditure made for addressing the issues raised in PH shall be covered under Enterprise Social Commitment which will be exclusive of CSR budget. **Further, the Committee noted that the instant project involves acquisition of agricultural land for enhanced production; hence, the R&R issues shall be applicable for the project for which details have not been furnished by the PP. The Committee advised the PP to present detailed R&R plan.**

8. The Committee deliberated on the proposal and noted that the proposal contains multiple issues which include revision of plans w.r.t. waste generation in mine and its management over entire life of mine, green belt development and plantation, identification of plant species, R&R plan and conservation plan for peafowl. The PP is also required to revise and furnish detailed break-up of Project cost, EMP Cost and ESC budget as deliberated in preceding paragraphs and furnish No Forest land certificate. The Committee noted that all issues rose during the EAC deliberations need to be addressed before making further appraisal. PP is also required to submit the Consent to operate obtained from the State Pollution Control Board since start of mining operations in the lease area. In view of the above, the proposal was deferred.

(2.2) **Expansion of Lead-Zinc Ore Production from 0.9 Million TPA to 1.08 Million TPA at Rajpura - Dariba Mine by M/s Hindustan Zinc Limited in mine lease area of 1142.2106 Ha located at Village Panchayat- Mahenduria, Tehsil - Relmagra, Dist - Rajsamand, Rajasthan under clause 7(ii) of the EIA Notification, 2006 (IA/RJ/MIN/67688/2017) – Consideration of Environmental Clearance regarding**
File No. J-11015/380/2008-IA.II(M)

The proposal of M/s Hindustan Zinc Limited is for expansion of Lead-Zinc Ore Production Rajpura Dariba underground mine with enhancement of production capacity from 0.9 Million TPA to 1.08 million TPA (ROM) of Lead–Zinc ore i.e. 20% of the existing capacity. The mine lease is located near village Panchayat- Mahenduria, Tehsil - Relmagra, Dist - Rajsamand, Rajasthan. The latitudes and longitudes of the mine lease are 24°55'40.8"N to 24°57'49.0"N and 74°06'57.7"E to 74°08'41.4"E respectively. The lease area falls on Survey of India topo sheet no. 45 L/1 and 45 K/4. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

2. The Project Proponent had submitted EIA/EMP report online to the Ministry seeking expansion in production capacity under clause 7 (ii) of EIA notification, 2006. The Proposal was considered by the Expert Appraisal Committee for expansion of earlier EC capacity of 0.9 Million TPA of Lead–Zinc ore production granted vide letter no. J-11011/380/2008-IA-II(I) dated 4.11.2009 to 1.08 Million TPA in the instant meeting. The Committee observed that the clause 7 (ii) of EIA Notification, 2006 states as below:

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

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

of EIA and public consultations and the application shall be appraised accordingly for grant of environmental clearance.

3. The PP explained that this expansion under 7(ii) has been considered in many cases in the EAC (Industry). It also cited reference to the OM with regard to 25% expansion for Coal Mining Projects and past projects of M/s Uranium Corporation India Limited and M/s NALCO which were given approval for expansion without EIA/EMP studies and Public hearing in the past. Further, the PP stated that the EAC (Non-Coal) in October, 2016 had considered and recommended similar expansion proposal for its Sindesar-Khurd Lead-Zinc mines for 20% increase in lead-zinc ore production from 3.75 Million TPA to 4.5 Million TPA. The Ministry issued EC to the expansion proposal vide letter no. J-11015/10/2014-IA-II(M) dated 21.12.2016.

4. The PP submitted that to achieve enhanced production of 1.08 Million TPA it has carried out changes in the mining operations with respect to infrastructure/ technology improvement or modernization and explained the impact of these changes to the Committee (comprising of mining experts) which will eventually help it in achieving enhanced production:

S.No	Description	Benefits
1.	Introduction of road grader	Road graders are being introduced to improve road conditions
2.	Mechanization in diesel & explosive transportation	Mechanization is being planned in transportation of diesel dispensing & explosive transportation thereby improving safety, productivity and ergonomics.
3.	Leaky feeder communication system	Communication system is being introduced for communication for any breakdown, emergency or unplanned activities in the mine
4.	Top hammer drills	Top hammer drills are being introduced in underground so as to improve production drilling in lower levels of the mine and thereby reducing the dependency over compressed air. Improved productivities and ergonomics shall also count towards improved safety.
5.	Long feed jumbos	In order to improve development rates, it is proposed to introduce long 16 feed jumbo thereby improving advance per blast.
6.	Bulk emulsion charging system	In order to improve development rates and mechanizing charging, bulk emulsion charging system shall be introduced. Charmec shall also be introduced for the same.
7.	Mud pump	In order to strengthen mud handling system from existing manual to mechanized.
8.	Underground workshop	A world class underground workshop is to be introduced to improve the maintenance facility.
9.	Rock breaker & grizzly	In line with trackless mining, a rock breaker & grizzly are being proposed to be installed so as improve crusher performance.
10.	High speed exploration	In order to enhance exploration capacity, it is proposed to

S.No	Description	Benefits
	rigs	introduce high capacity exploratory drill rig of smaller dimension.
11.	Raise boring	Raises are being developed with raise bores to fasted the raising and thereby improving the ventilation.
12.	Advanced Mine Planning techniques	Technical cell is being strengthened to design in advanced sophisticated software helping in scientific mining of minerals.
13.	Shotcrete	Shotcreting facility is under development so as to improve development rates in poor ground conditions.
14.	Light motor vehicles for underground	For effective supervision, LMVs (Light Motor Vehicles) are proposed to be introduced.

5. The PP reported that the project is a fully mechanised underground Lead-Zinc mine and mined out with Blast hole Stopping method with back filling. The mine workings are approached by two shafts viz. Main shaft (surface to -110MRL) & Auxiliary shaft (Surface to 0MRL) and by a surface decline (surface to 200MRL). At present the Main shaft connects all the working levels from surface to -92MRL. The Main Shaft bottom is at -110MRL. The auxiliary shaft connects all the working levels from surface to 0MRL. Underground levels are also connected by ramps. In future, the deeper levels are proposed to be accessed by ramps. The Main Shaft is utilized for men & material hoisting by cage winding and for ore hoisting by skip winding. Auxiliary Shaft is utilized for men & material hoisting via cage only. **A separate access (Surface Decline) is also developed for transportation of man, material, machinery, ore & waste.** The cross section of surface decline is 4.7m (w) × 3.7m (h) suitable for hauling 30 ton capacity LPDTP. The additional water requirement of 7 KLD for the project is for drinking purpose only which would be sourced from Matrikundiya dam. The plant is reportedly running on 100% recycling basis for the last two years.

6. PP submitted that in view of the above technological improvements, supplemented with construction of decline for movement of mining machinery, ore & waste and personnel, it is feasible to extract 1.08 Million TPA of lead-zinc ore without significant impact on baseline environmental scenario. The EIA studies for the instant proposal have also reportedly been carried out and data was collected for March – May, 2017 period wherein the impacts and mitigation measures with respect to the existing expansion proposal have been enumerated. All the parameters for water and soil quality were within permissible limits. The ambient air quality was also within permissible limits as this was underground mine and there were no significant emission sources near the site. The Committee deliberated the baseline data collected by the Project Proponent. **The Committee noted that the PP is already carrying out its activity in the said mine lease area of 1142.2106 Ha and bound to implement the EMP as per the terms and conditions of EC granted by the Ministry and Consent conditions prescribed by the State Pollution Control Board.** The mine lease core and buffer zone reportedly does not have any protected areas such as National Parks or Wildlife Sanctuaries, Reserve and/ or Protected forest. The additional waste generation due to development activities is envisaged to be 4,80,000 TPA from existing 35,000 TPA. The Committee noted that there would be significant increase in waste generation; however, the PP informed that the waste is proposed to be disposed off in underground voids through filling method. PP also informed that while filling

back the waste into the voids, it has successfully achieved high consistency leading to low moisture content and ultimately less water consumption for waste management.

7. The Committee deliberated on the compliance of earlier EC conditions. The Regional Office of the Ministry located at the Lucknow has submitted the certified compliance report vide dated 08.09.2017. The Proponent explained the status of various conditions. The Committee noted the submissions made PP status and observed that PP has complied with the EC conditions. PP submitted that it possesses/ has applied for required permissions and clearances as mentioned below:

- **W.r.t. M.L.validity** – The mine lease is valid till 29th May 2030.
- **W.r.t. Approved mining plan** – The Scheme of Mining with progressive mine closure plan has been approved for 1.2 Million TPA of ore production vide letter no. 682(23) (773)/ 2011-kha nikha san. (Uttar)Udai dated 22.07.2015 under rule 12(3) and rule 23B of MCDR, 1988.
- **W.r.t. Environment Clearance**– The EC was granted by MoEF, New Delhi for 0.9 Million TPA of lead-zinc ore production from Rajpura Dariba underground mine & 1.2 Million TPA of ore beneficiation vide letter no. J-11011/380/2008-IA II(I) dated 4.11.2009.
- **W.r.t. Consent to Operate** – The Consent to Operate was granted by Rajasthan State Pollution Control Board (RSPCB), Jaipur for carrying Mining & Beneficiation activities vide letter no. F (Mines)/ Rajsamand (Railmagra)/ 1(1)/2008- 2009/278-282 dated 23.04.2015 and the same is valid till 28.02.2018.
- **W.r.t. permission from CGWA** – The NOC from CGWA for mine dewatering (446.50 KLD) was been obtained vide letter no. 21-4(315)/WR/CGWA/2008-212 dated 14.07.2009 and renewed vide letter dated 06.06.2012. Application for renewal for the same was submitted vide letter dated 27.05.2015. The application for obtaining NOC from CGWA for additional ground water dewatering (2698.5 KLD) has been submitted on dated 27.01.2017.

8. The PP presented the past production details which indicated that it has not violated the EC capacity after its grant in 2009. However, the Committee observed that the Hon'ble Supreme Court in the matter of Common Cause Vs Union of India (W.P.C.No.114/2014) has interpreted the scope of Section 21(5) of the MMDR Act, 1957 which also includes the violation of Water (Prevention and Control of Pollution) Act, 1974; Forest (Conservation) Act, 1980; Air (Prevention and Control of Pollution) Act, 1981 and Environment (Protection) Act, 1986. The judgement says that illegally mined mineral need to be compensated for 100% of its value and State Governments are required to initiate action and collect the amount of illegally mined mineral from mine owners/ industries. In the instant case, PP informed during the EAC meeting that State Government has not raised demand for excess production. **The Committee asked the PP to submit an undertaking to the effect that it shall inform the Ministry once demand is raised by State Government and adhere to the orders of the State Government, directions of the Hon'ble Supreme Court or any other court of law/ Tribunal. The PP was also advised to submit authenticated past production details and a statement of Consent & EC obtained since start of mining operations.**

9. PP reported that the beneficiation plant is within the mining lease, hence, there shall be

no external traffic associated with ore transportation to the smelter. However, concentrate will be transported through road and then to Fatehnagar. The concentrate will be transported through covered trucks/dumpers. The topography of the area is marked by N-S trending linear ridge with highest elevation of 561 aMSL. This ridge is flanked on either side by gently undulating surface having an average elevation between 490-500aMSL. Main shaft is at 501 aMSL. The area within leasehold does not include any major streams or river across it, hence not prone to any kind of flood. The existing depth of working is 700m and the proposed additional working depth is 800m making total depth of working as 1500m. The Project Proponent reported that there is no Schedule –I species in the core and buffer zone of the M.L.area.

10. The PP mentioned that it has made provision for Personal Protective equipment's to mine workers with necessary training and awareness programs. The Occupational Health measures were also explained and the Committee noted that proponent has monitored lead in blood. The Project Proponent reported that the workers were provided Self Rescuer in addition to basic PPEs like gum boot, helmet with cap lamp, dust mask, goggles, ear plug etc. Refuge chamber is installed at strategic locations to work as assembly points underground to support workers in during emergency in underground mine. The cost of the project is ₹700 Crores including additional cost of ₹400 Crores for instant proposal. The cost for Environmental Protection measures is proposed as ₹40 Crores including additional cost of ₹26 Crores for instant proposal. PP submitted that no R&R Plan is applicable for the instant proposal. The additional manpower requirement for the project is about 150. Project Proponent reported that there is no court case pending against the project.

11. Based on the information submitted and presentation made by PP and subsequent deliberations made on the proposal, as mentioned in preceding paragraphs, the project was recommended for grant of Environmental Clearance for enhancement of production from 0.9 Million TPA to 1.08 Million TPA(ROM) of Lead – Zinc Ore with exemption from public hearing under clause 7(ii) of EIA notification subject to submission of undertaking and information as mentioned in preceding Paras.

(2.3) Bhatin Uranium Mine of M/s Uranium Corporation of India Ltd. with production capacity of 75,000 TPA (ROM) in mine lease area of 142.98 Ha located in village Bhatin, District East Singhbhum, Jharkhand (142.98 ha) (IA/JH/MIN/67453/2007) – Re-Consideration of Environmental Clearance regarding

File No. J-11015/45/2008-IA.II(M)

The proposal for Bhatin Uranium Mines having production capacity of 75,000 TPA (ROM) in mine lease area of 142.98 Ha located in village Bhatin, District East Singhbhum, Jharkhand (142.98 ha). The proposal was received in the Ministry for seeking EC as the mine lease fell due for renewal in October, 2007. The mine lease is located at Latitude 22°39'25"N to 22°40'20"N and longitude 86°19'20"E to 86°20'25"E and is covered by Survey of India toposheet no.73J/6. The Proponent after conducting public hearing on 26.05.2011 submitted EIA/EMP report for seeking environmental clearance. The proposal for environmental clearance was earlier placed in the 25th Meeting of the Expert Appraisal Committee held during March 19 - 21, 2012 wherein the Committee recommended the proposal and Competent Authority approved the proposal for

grant of environmental clearance. However, the EC letter was not issued then for want of Stage-1 FC.

2. PP submitted that the project was considered in Expert Appraisal Committee (EAC) meeting held during December 9-10, 2007 wherein the Committee recommended the proposal for grant of TOR. The Ministry had prescribed TOR for the project on 25.01.2008 combined for the Jaduguda and Bhatin mines wherein it was categorically stated that separate proposals should be submitted for the two mines as there were two separate mine plans. Accordingly, the Proponent has submitted this proposal for the Bhatin mine only. The ore from this mine will be processed at the Jadugda processing plant which is located at a distance of about 4 km in the Jaduguda uranium mines.

3. PP submitted that the Mine lease area is 142.98 Ha, which include 54.53 ha of forestland. The modified mining plan of Bhatin Uranium mine was approved by the Atomic Minerals Directorate for Exploration and Research, Hyderabad vide letter no. AMD/MPA/3M/UCIL-Bhatin/142.98Ha/2012 dated 18.01.2012. The Mine working will be underground semi-mechanised by horizontal cut and fill method. Life of mine is 29 years. Water requirement for the project is estimated to be 110 KLD, which will be obtained from Garra River. No National Park/ Sanctuary/ Biosphere Reserve/Tiger Reserve/ Elephant Reserve/ Archaeological Sites are reported within 10 km radius. It was reported that there is no court case pending against the project.

4. As per the information submitted by the Project Proponent, no solid waste will be disposed on the surface. The hazardous waste (waste oil) is sold to authorized recyclers. It has been stated that at the end of the mine life an area of 5.87 Ha will be covered under plantation including 0.75 Ha of greenbelt. The Public Hearing was held on 26.05.2011 under the Chairmanship of Shri Vijay Kumar Singh, Additional Deputy Magistrate District East Singhbhum. The representative from the SPCB, Jharkhand was also present. The issues raised by public were addressed by the project proponent with commitment for implementation. The issues raised during public hearing were also considered and discussed during the meeting. These, inter-alia, included employment to local people, provision of drinking water, medical facilities and health effects such as reported disabled child birth etc. An amount of Rs. 23.36 Lakhs per annum as recurring cost was earmarked towards the environmental protection measures. An amount of Rs. 30 Lakhs/year earmarked towards welfare measures for the nearby Villages other than R&R plans.

5. The PP vide its letter dated 18.05.2017 submitted its Stage-1 FC and the same was referred to FC division for clarification as Jadugoda mine lease area of UCIL is a contiguous lease area wherein many villages are covered including Bhatin Uranium Mines. The FC division stated that as per the Site Inspection Report by RO, Ranchi, the area of Bhatin village falls in the forest diversion proposal. Since the FC was submitted after passage of more than 18 months, the proposal was again placed before the EAC for appraisal and consideration and to prescribe any other studies, if needed. The Member Secretary apprised the Committee that the proposal was earlier approved by the Competent Authority i.e. the then Minister of Environment and Forests; however, EC letter was not issued subject to pending Stage-1 FC.

6. The Committee deliberated on the presentation and submissions made by the PP and noted that since the proposal was duly been appraised by the earlier EAC and approved by Competent Authority, it is implied that appraisal as well as subsequent examination of the proposal has already been carried out. The only pending issue with the proposal was grant of Stage-1 FC which is also now granted by the Competent Authority. Hence, there is no requirement of further appraisal on the project. In view of the above, **the Committee recommended the project for grant of EC.**

(2.4) Kallurani Limekankar & Clay (others) mines of M/s India Cements Limited for mining of 1 Million TPA of Limekankar & 0.2 Million TPA Clay (others) (minor mineral) in M.L. area of 479.195 Ha located at Village- Kallurani, Muthuramalingapuram and Narttampatti Villages, Taluk – Aruppukottai, District - Virudhunagar, Tamil Nadu (IA/TN/MIN/66148/2017) – Re-Consideration of ToR regarding
File No. J-11015/71/2017-IA.II(M)

The proposal submitted by M/s India Cements Ltd. is for seeking ToR for conducting EIA studies for mining of 1 Million TPA of Limekankar & 0.2 Million TPA Clay (others) (minor mineral) in M.L. area of 479.195 Ha. The mine is located at village- Kallurani, Muthuramalingapuram and Narttampatti Villages, Taluk – Aruppukottai, District - Virudhunagar, Tamil Nadu. The area falls in Survey of India Toposheet No. 58 K/3 located between latitudes from 9°25'32.9"N to 9°27'10.7"N and longitudes from 78°07'55.5"E to 78°09'28.7"E. The Proposal was earlier considered in the EAC Meeting held during August 29-30, 2017 wherein PP presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

2. The LoI for mine lease was granted by Principal Secretary to Government, Industries (MMC.2) Department, Tamil Nadu vide letter no.16025/MMC.2/2016-1 dated 23.05.2017 asking PP to submit required documents within 3 months. The PP has applied before the Ministry for seeking ToR in the month of July, 2017 i.e. within the 3 month's period. PP reported that the Mining plan for the lease area recommended for quarrying is already prepared and submitted to State Government for approval. The entire Limekankar and 20% of Clay proposed to be produced from this quarrying lease shall be used for captive use in its Sankarnagar Cement plant located in Tirunelveli, Tamil Nadu. The 10km study area is reportedly devoid of ecologically sensitive features like national parks, biosphere reserves, Wildlife sanctuaries, etc. No forest land is involved in the lease area. The area does not come under CRZ category. No perennial river or streams is reported to be passing through the lease area and no natural water course will be disturbed or diverted due to quarrying operation. Total water requirement for quarrying operations will be 25.0 KLD among which 2.0 KLD for domestic use, 5.0 KLD for water sprinkling of haul roads and 18.0 KLD for green belt.

3. The Committee in earlier EAC meeting dated August 29-30, 2017 had made detailed deliberations on the PP's proposal and noted that the lease area comprises of small isolated fragments/ patches which are not included in the lease area and accordingly, PP was required to present a plan showing right of way to be provided for all the patches falling within mine lease area and mention the production quantity (ROM basis) (per annum) as per approved mine plan

to arrive at the production capacity. The PP submitted its reply online which is placed in the instant meeting for perusal of the EAC. The Committee took note of the plan prepared by the PP for providing right of way and observed that though PP has indicated the right of way in all the patches, it doesn't seem practically feasible. Hence, PP was asked to exclude certain patches/pockets for mining purpose and submit a demarcated map to the Ministry clearly indicating the area to be considered under active mining operations. The PP further submitted that considering the geological reserves and change in active mining area of the mine lease, the revised mining plan has been submitted to the Department of Mines and Geology with proposed capacity of 1 Million TPA of Limekankar & 0.2 Million TPA Clay (others). The Committee noted that there is no change in the production capacity of the original proposal vis-a-vis the revised mining plan submitted by the PP to the State Mine and Geology Department.

4. The Committee deliberated on the presentation and information submitted by the PP and asked the PP for submission of demarcated map, as agreed during the meeting, clearly mentioning the active mining area as well as the area identified to be excluded from the mining operations (in quantitative terms also). The PP was also asked to submit ROM quantity (total and block-wise), active mining area and transportation route from each mining block in line with the deliberations made during the meeting. In view of the above, the proposal was deferred.

(2.5) Expansion of Quartz & Feldspar Mining Project from 12000 TPA to 6,00,000 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) – Re-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 6,00,000 TPA (ROM) in mine lease area of 130 Ha. The mine is located near village – Sanwalpura Tavran Tehsil–Shri Madhopur, District – Sikar (Rajasthan). The 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 latitudes and longitudes of the M.L. are as below:

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

2. 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.

2. The proposal was earlier considered in May 29-30, 2017 wherein the Committee noted that the proposal is devoid of :- (i) sustainable mining practices & plan, and (ii) assessment of mining operations vis-à-vis environmental impacts. Further, mining outside lease area was also observed through KML file and PP was asked to provide a clarification from State Department of Mines and Geology. Based on the deliberations in the earlier meeting, the PP agreed to reduce the production from 12,00,000 TPA to 6,00,000 TPA.

3. PP submitted clarification pertaining to mining outside lease area from State Department of Mines and Geology and also provided required clarification through its letter dated 14.07.2017 submitting revised PFR, revised Form-1, revised assessment of mining machinery etc. as sought by EAC in its earlier meeting. **The Committee noted the submissions made by the PP and after detailed deliberations recommended the proposal for grant of TOR for 6,00,000 TPA (ROM) of Quartz & Feldspar.**

2.6. M/s Bagalkot Cement & Industries Ltd, located at Village Kaladagi Village, Bagalkot Taluk, Bagalkot District, Karnataka, (Area 167.32 Ha., 0.6 MTPA) – Consideration of ToR regarding (IA/KA/MIN/67156/2017)
File No. J-11015/79/2017-IA-II(M)

The proposal of M/s. Bagalkot Cement & Industries Ltd. is for Kaladagi Limestone Mine & of capacity of 0.6 Million TPA in mine lease area of 167.32 Ha. The mine is located at Village-Kaladagi Village, Bagalkot Taluk, Bagalkot District, Karnataka State. The mine falls under the Survey of India topo sheet No. 47 P/8.

2. The proponent submitted that the mining lease was granted in favor of Mysore Minerals Limited (MML) in the year 13-03-1981 for 20 years with extent of 467.82 Ha which was later on transferred to M/s. Kanoria Industries Ltd in the year 05-10-1996. M/s. Kanoria Industries Ltd, Bagalkot has been renamed as M/s. Bagalkot Udyog Limited on 19-10-2005 and then transferred its Assets and Liabilities as per BIFR order to the new company and re-named as M/s. Bagalkot Cement & Industries of Bagalkot in 13-7-2007. M/s. Bagalkot Cement & Industries Ltd submitted the renewal application Form-J to the department of mines and geology in the year of 18-12-1998. Renewal application is submitted to Dept of Mines & Geology,

Bangalore and mining plan was approved in 2002 to the extent of 467.82Ha.

3. The project proponent submitted that he has reduced the area from 467.82Ha to 453.25 Ha i.e, 14.57 Ha which was under reserve forest. FMCP for the deleted area was approved by IBM in 2009 and also mining plan was approved for the retained area of 453.25Ha in 2009. The project proponent submitted that further reduction in the area from 453.25Ha to 167.32 Ha was done due to Raichur-Belgaum State Highway passing through in the Northern part of the lease area. There are other PWD main roads from Kaladagi to Ankalagi and Kaladagi to Bantnal Major part of Kaladagi Town with population of 13,676 (2011 census) is covered the Northern portion of the lease area. There is also a major canal passing in the middle of the lease area and Northern part of the lease area is getting submerged in future. The Government of Karnataka granted the deemed lease extension and accordingly, the mining lease period is valid till 12-03-2031.

4. The proposal was considered in the EAC meeting held during 23rd and 24th October 2017 for grant of ToR. Based on the past production details submitted by the project proponent, the committee noted that the proponent had been mining from 1997 till 2008 without valid EC and had expanded from 13822.685 TPA to 1,48,403 TPA in 1999-2000 which construed as a violation of the EIA notification 1994. After due deliberation, **the committee deferred the proposal and advised the proponent to apply afresh as per the provisions S.O. 804(E) dated 14th March, 2017.**

(2.7) Amendment in Environment Clearance for Nimbahera-Ahirpura Limestone Mining Project of M/s J.K. Cement Works with production capacity of 2 Million TPA in mine lease area of 403.1875 Ha situated at Village - Nimbahera, Ahirpura Tehsil -Nimbahera, District- Chittorgarh, Rajasthan (IA/RJ/MIN/11656/2004) – Amendment of Environmental Clearance
File No. J-11015/83/2004-IA.II(M)

The proposal submitted by M/s J K Cement Works is for seeking amendment in EC granted by the MoEFCC vide letter No. J-11015/83/2004-IA-II(M) dated 30.05.2005. The EC was granted for production of 2 Million TPA of limestone. The amendment in EC is sought for :- (i) Correction in mine lease area, and (ii) Installation of 250 TPH Crusher and clay screening arrangement of 20-30 TPH. The mines located at Village - Nimbahera, Ahirpura Tehsil - Nimbahera, District - Chittorgarh, Rajasthan in mining lease area of 403.1875 Ha.

2. PP submitted that the EC was accorded on 30.05.2005 in lease area of 652.3215 Ha; however, due to non-mineralized zone, which is not suitable for cement industry, it had surrendered 249.125 Ha of the lease area and retained only 403.1875 ha area for which supplementary lease deed had been executed and mining plan was also approved. **The Committee noted the submissions of the PP, and recommended for amendment in EC w.r.t. correction in lease area to 403.1875 Ha.**

3. PP submitted that it also proposes to install a crusher of 250 TPH with screening arrangement of 20-30 TPH for clay separation. The crusher is proposed to be installed within the M.L. area. There is no requirement of additional land. The Committee further observed that the

Hon'ble Supreme Court in the matter of Common Cause Vs. Union of India & Ors. (W.P.C. No.114/2014) has mentioned that 100% value of illegally mineral needs to be compensated by the mining companies/ lessees through payment to the State Government. The PP is required to provide information with respect to past production details along with the details of 'Consent to Operate' obtained from SPCB since start of mining operations. The EAC deliberated on the proposal noted that the aspect of crusher was not envisaged in the earlier EIA whereas installation of 250TPH crusher, within the lease, shall have an impact of environment. Accordingly, Committee desired the PP to conduct an EIA Addendum Study to assess the impact of the crusher of 250 TPH and prepare a mitigation/ management plan. **In view of the above, the proposal was deferred w.r.t. installation of crusher and PP was asked to provide the information desired above.**

2.8 EC amendment in view of the change in definition of Run of Mine (ROM), introduced in the recently notified Mineral Concession Rules, 2016 in respect of Noamundi Iron Ore Mine of M/s Tata Steel Limited with production capacity of 10 Million TPA (ROM) and Iron ore Beneficiation plant of 18 Million TPA in mine lease area 1160.06 Ha located at village Noamundi, District - Singhbhum (West), Jharkhand (IA/JH/MIN/7094/2011)
File No. J-11015/104/2011-I.A-II(M)

2.9 EC amendment in view of the definition of Run of Mine (ROM), introduced in the recently notified Mineral Concession Rules, 2016 in respect of Katamati Iron Ore Mine of M/s Tata Steel Limited with production capacity of 8 Million TPA (ROM) in mine lease area 403.3238 Ha located at village Katamati, Tehsil Barbil, District Keonjhar, Odisha, Jharkhand (IA/OR/MIN/9358/2008)
File No. J-11015/63/2008-I.A-II(M)

2.10 EC amendment in view of the definition of Run of Mine (ROM), introduced in the recently notified Mineral Concession Rules, 2016 in respect of Noamundi Iron Ore Mine of M/s Tata Steel Limited with production capacity of 8 Million TPA (ROM) of Iron ore & 0.1 Million TPA (ROM) manganese ore and Beneficiation plant of 8 Million TPA throughput in mine lease area 9786 Ha village Khondbond, Tehsil Barbil, District Keonjhar, Odisha, Jharkhand (IA/OR/MIN/9648/2007)
File No. J-11015/888/2007-I.A-II(M)

The above three proposals were submitted by M/s Tata Steel Limited for seeking amendment in production quantity w.r.t. ROM quantity of mineral. The PP, during the meeting, submitted that the proposal has been submitted as the definition of ROM has been changed in the recently notified Mineral Concession Rules, 2016. The PP vide its representation mentioned that for all the above-stated three mines, the EC granted capacity corresponded to 'Feed to the plant' earlier; however, after the notification Mineral Concession Rules, 2016, the ROM is now defined as :- ***the raw unprocessed or uncrushed material in its natural state obtained after blasting or digging, from the mineralised zone of a lease area.*** Going by the above definition, the PP has interpreted that the ROM is now equivalent to the Total excavation. Accordingly, the PP has applied for EC amendment w.r.t. change in production capacity asking the Ministry to

indicate the quantity of Total excavation as ROM so that its 'Feed to the plant' is not changed.

2. The Committee deliberated on the proposal and asked the PP whether it has faced any query/ issue/ clarification w.r.t. its ROM based operations till now from any authority administering mining related statutes like IBM or State Department of Mines and Geology. The PP submitted that, as of now, it has not faced any issue; however, considering the new ROM definition it is interested in seeking an EC amendment for all its mine leases. The Member Secretary informed that a similar proposal was recommended by EAC in its January, 2017 meeting; however, the amendment has not been issued till date for want of forest clearance related documents.

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

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

**2.11 EC amendment for replacing manual breaking and sorting with mechanized crushing and screening in Mining lease of Bodai Daldali Bauxite mines of M/s Bharat Aluminium Company Limited (BALCO) located at Villages Mundadadar, Keshmarda, Rabda & Semsata, Post Daldali, Bodla Tehsil, Kawardha District, Chhattisgarh (MLA: 626.117 Ha & 1.25 Million TPA)
File No. J-11015/37/2010-IA-II(M)**

The proposal submitted by M/s BALCO is for seeking amendment in EC granted by the MoEFCC vide letter No. J-11015/37/2010-IA-II(M) dated 09.04.2010. The EC was granted for expansion of production from 0.3 Million to 1.25 Million TPA. The amendment in EC is sought for replacing the existing manual breaking and sorting with mechanized crushing and screening by installation of three crushers with screening unit each of 250 TPH (Total 750 TPH) without

change in the existing approved capacity of 1.25 MTPA Bodai Daldali Bauxite mines located at Villages Mundadadar, Keshmarda, Rabda & Semsata, Post Daldali, Bodla Tehsil, Kawardha District, Chhattisgarh in mining lease area of 626.117 Ha. The crushers are proposed to be installed within the M.L. area. There is no requirement of additional land. The Committee noted that as per the information submitted by PP, it has made excessive production in the years 2006-07 and 2007-08 over and above the EC granted capacity of 0.3 Million TPA. The EC was granted on 04.12.2003. **A case has been filed in the court of Chief Judicial Magistrate, Kabirdham District, Chhattisgarh with case no. 1759/2009 against the PP for excessive production under sections 15 & 16 of Environment Protection Act, 1986 and section 34 of Indian Penal Code.** The proposal was earlier considered in EAC meeting held in September 18-19, 2017 wherein the Committee desired the PP to conduct an EIA Addendum Study to assess the impact of the crusher of 250 TPH (Total 750 TPH) and prepare a mitigation/ management plan along with furnishing update the status of Court case and MoEFCC R.O. Compliance report.

2. The PP submitted information for appraisal of EAC wherein it was informed that three sets of mobile/semi-mobile Crushing and Screening unit with capacity of 250 TPH each will be provided out of which 2 will be in operation and one will be kept in standby. The blasted ROM of boulder size maximum to (-) 400 mm, will be passed through grizzly having opening 150 mm to segregate the (-) 150 mm size material, which will be further screened by the 20 mm screen placed below the grizzly eliminating the fines, murrum and soil associated with ROM (i.e. -20 mm) and the +20 mm to -150 mm material goes directly to the Vibrating Screen. The (+) 150 mm size fraction of ROM will be fed to primary crusher for size reduction to (-) 150 mm size which also will go to the vibrating screen of screen size 20 mm, where the -20 mm material will be separated and the final product of size 20 mm to 150 mm will be stacked for dispatch. As Bauxite ROM has a natural moisture content of 1.5-2% during dry seasons and therefore helps in minimizing the dust generation during handling. The Crushing & Screening units will be designed with inbuilt dry fog system which will ensure very effective dust suppression along with low water consumption.

3. The PP presented that crushing operation is primarily an air polluting activity. The PP submitted that as a part of its compliance monitoring, it conducts baseline ambient air and noise monitoring which are found to be within the prescribed norms. The mathematical modelling carried out for the instant proposal indicated low incremental concentrations of SO₂. It has also been presented that PM shall not be a major concern as the bauxite ore inherently contains up to 2% of moisture. The PP also enumerated the mitigation measures for air pollution control. The Committee note the same and asked the PP to implement the same in spirit while operating the crushing operations. The water requirement for crushing and screening unit is reported to be low at 33 KLD due to use of dry fog type dust suppression system. It was informed that the additional requirement of water after installation of Crushing & Screening units will be met within existing approval of 400 m³ from Katai River. No waste water will be generated crushing & screening operations. Therefore, no adverse impact on water environment is envisaged due to installation of proposed crushing & screening unit. Rejects generated from the unit will be used for backfilling the mined out pits. No waste water or solid waste will be allowed to contaminate soil cover of the nearby area.

4. The Committee deliberated on the MoEFCC Certified Compliance report dated 20.03.2017 wherein multiple non-compliances/ partial compliances have been highlighted. **Committee asked the PP to present the corrective actions taken till date for ensuring compliance.** The PP submitted that an update on the follow-up action/ corrective actions on the observed non-compliances have been given to the concerned MoEFCC R.O. vide its letter dated 20.09.2017 and a request has also been placed to visit the mines for re-verification; however, the inspection has not been done till date. Apart from the above, the Committee observed that Hon'ble Supreme Court of India on 02.08.2017 in the matter of Common Cause Vs Union of India & Others has mentioned that illegally mined mineral shall be subject to 100% recovery as compensation in value terms under Section 21(5) of the MMDR Act, 1957. The Committee observed that the PP is already under litigation with State Government for the same reason and hence, it should submit an undertaking that any outcome of the said issue either in terms of court order or an executive demand order shall be intimated to the Ministry soon after its receipt. The PP, however, reported that it has not received any demand order from the State Government in pursuance of the Hon'ble Supreme Court judgement on illegal mining in the matter of Common Cause Vs Union of India & Others (W.P.C. No.114/2014). **In view of the above issues, the proposal was deferred and PP was asked to take follow-up action as per the observations made in the preceding paragraphs.**

2.12: J-11015/216/2016 IA-II (M): Environment Clearance of the proposed Pachar Soapstone Mine proposed by M/s Durga Mines & Minerals located at Village - Pachar, Tehsil-Dugnakuri, District: Bageshwar, Uttarakhand of an area of 12.360 ha and production capacity of 29539 TPA- Consideration for EC [IA/UK/MIN/69436/2016]

The proposal of **M/s Durga Mines & Minerals** is for mining of 29539 TPA of Sandstone from the mine lease area of 12.360 Ha located at the Village- Pachar, Tehsil-Dugnakuri, District: Bageshwar, Uttarakhand. The Mining lease falls under survey of India Topsheet No 53 O/13 and between Latitude 29°53'27.39"N to 29°53'9.83"N and Longitude 79°57'25.58"E to 79°57'20.42"E. The PP submitted that letter of Intent (LoI) for the mining lease was granted by Industrial Development Department vide O.M No 1261/VII-1/240 ख / 240 dated 16.08.2016.

The project falls under Schedule 1(a) of mining and is a Category- "B2" project as per EIA notification 14th September 2006 and, thereafter amended on 15th January 2016. As SEIAA, Uttarakhand is not re-constituted, the proposal was submitted to the Ministry for consideration of TOR. The proponent has submitted the Form-I, PFR and EMP online.

The PP also mentioned that there are other four similar mines within the radius of 500 metres and total area of the Cluster is 38.846 Ha.

The PP has submitted that the method of mining will be open-cast semi mechanized. The overburden & inter-burden shall be removed by deployment of an excavator as well as with the help of rock breaker. The soapstone shall be extracted with deployment of an excavator as well as manually with the help of crow bar; chisels, pickaxe, hammers, spade and different grade of soapstone will be stacked separately near the mining faces. Soapstone is soft mineral; therefore no drilling & blasting shall be required. The soapstone shall be dressed manually & stacked separately. No further beneficiation shall be undertaken during the first

five years. The different grade of soapstone will be filled into 50 kg plastic bags & transported to the road side by mules. From road side the soapstone bags will be loaded into trucks through manually and transported to Haldwani.

PP submitted that the proposal for ToR was placed in the EAC meeting held on 23-25 November 2016. The Committee deliberated at length the information submitted by PP and recommended the proposal and prescribed the Standard TOR for undertaking detailed EIA study.

PP submitted that out of 12.360 Ha ML area 12.201 is the agricultural land and 0.159 Ha is public utility land. PP submitted that as per LoI mining is not permitted on 0.159 Ha of public utility land. There is no forest land involved in the proposal and ML is not within 10 Km of any National Park/WLS/Conservation Reserve. There is no over-burden or waste dump is proposed outside the mine lease area. There are two Schedule-1 Species are observed in the study area and the conservation for the same has already been submitted to the Chief Wildlife Warden.

PP submitted that the proposed cost of the Project is Rs. 25 Lakh. The amount earmarked for project monitoring and EMP is Rs. 40,000 and recurring cost is Rs. 1 Lakh/Year. The total employment from the project would be 92. The Project area falls in seismic zone V and highly prone to earthquakes. Bench width is 3 M. The total water requirement would be 3 KLD (0.7 KLD for domestic purpose, 1.80 KLD for dust suppression and 0.5 KLD for plantation).

PP submitted that the baseline study was carried out for core and 10 km buffer zone around the Mining Lease area during the winter season 2016-17 i.e. December, 2016 to February, 2017. Baseline data collected on air, water, Noise and Soil quality during this period is well within the prescribed limits.

PP submitted that the public hearing for the project was conducted on 21.07.2017 under the Chairmanship of ADM, Bhageshwar.

The proposal was considered in EAC Meeting held during 23-24th October, 2017. After due deliberation the **committee deferred the proposal** and was of the opinion that the proposal can be considered after the submission of the following:-

- 1) Revised EIA/EMP and Public Hearing in accordance with S.O 141(E) dated 15.01.2016 and S.O 2669 (E) dated 1.07.2016 as the PP applied under 'B1' Category of the Cluster Situation.
- 2) The Proposed plantation list needs to be verified and corrected.
- 3) As the project area falls in seismic zone V and highly prone to earthquakes and the proposed waste dumps are close to Nallha, the PP needs to submit the proper plan for stability of the dumps and other surface infrastructures.
- 4) The Mineralogical composition of the Sandstone needs to be submitted. PP also needs to provide the surveillance plan for the Tuberculosis.

- 5) Submit the copy of the advertisement published for public hearing in the English Newspaper.
- 6) The revised EIA Report should include activity-wise emission rate, isopleths, GLC of PM10 and PM2.5. The revised EIA Report should clearly bring out the worst case scenario and scenario after adopting the mitigation measures.

2.13:J-11015/443/2014-IA.II (M): Budhwada Limestone Mine of M/s The Ramco Cements Limited located at Village Budawada, Jaggayyapeta Taluk, Krishna District, Andhra Pradesh (ML area 160.0 ha). Consideration for EC- [IA/AP/MIN/25556/2014]

The Budawada Limestone Mine of M/s The Ramco Cements Limited is located at village- Budawada, Mandal-Jaggayyapet, District-Krishna, Andhra Pradesh. The Mining lease fall under Survey of India TopoSheet No 65/D/1 and between Latitude 16⁰51'17.0" N to 16⁰52'10.30" N and longitude 80⁰03'46.9" E to 60⁰05'31.7" E. The earlier EC was obtained vide Letter: F. No. J-11015/150/2008- IA II (M) dated 10th December, 2009 for 1.1 MTPA of Limestone production in an area of 160 Ha (Budawada Reserved Forest Area), Jaggayyapet Mandal, Krishna District, Andhra Pradesh.

It is proposed to enhance Clinker production of the Cement Plant by 0.3 MTPA for which, limestone requirement is 0.5 MTPA. Due to the presence of high silica zones, clay pockets and phyllites, mineral reserves have come down drastically in the operating captive limestone mines of Jayanthipuram Cement Plant. Ramco Budawada Limestone mine is spread over an area of 160 Ha and the proved mineral reserves are about 101.46 Million Tonnes, the Mine will last for 41 years with proposed production capacity of 2.5 MTPA.

Fully Mechanized method of mining will be adopted. The limestone produced will be crushed in the mine for transport to cement Plant through haul roads. 160 Ha is part of the Budawada Reserve Forest. Forest Clearance was obtained vide letter No. 8-56/2005-FC, dated December 22, 2011. No topsoil is present. The waste available is interstitial clay. The waste generated will be stacked in the temporary dump yard and will be used for afforestation and laying roads.

At the end of mining operations, about 150ha of mined-out area will be developed into the water reservoir and 2.72ha along the mine lease boundary and the barrier zone for railway line will be afforested under Greenbelt development. 5.26ha will be developed under road/Belt conveyor etc., 2.02ha will be developed for Crusher, substation, Mines office, auto garage etc.

The water requirement for the mine at 2.5 MTPA limestone productions is about 200 m³ /day for dust suppression, plantation and domestic purposes. This requirement is supplied by Cement Plant and after the formation of the mine pit the rain water collected in the mine pit will be used. The capital Investment Cost is estimated as Rs. 4 Crores.

The Committee noted that the Form-I along with Pre-Feasibility Report as per EIA Notification, 2006 has not been submitted and the compliance of earlier EC condition, particularly the report on the Cumulative study of the area has not been implemented. Also the Protection measures for first order stream passing through the lease area as mentioned in earlier

EC, have not been implemented.

The proposal was considered in the EAC meeting held during December 10-11, 2014. Based on the discussion held in the meeting, EAC suggested a site visit of the area by a sub-committee of EAC and that the Project Proponent has to submit the following documents for further consideration of the proposal:-

- (i) Revised Form-I along with Pre-Feasibility Report as per EIA Notification, 2006;
- (ii) The compliance of earlier EC conditions, particularly the report on the Cumulative study of the area;
- (iii) Topo sheet of the area; and
- (iv) Protection measures for first order stream passing through the lease area as mentioned in earlier EC.

On submission of information the proposal was placed in the EAC Meeting held on 24-26 June, 2015. The PP submitted the revised Form-I and pre-feasibility report and topo-sheet of the area. The PP submitted that there is no water stream/nallahs etc. within mine lease area. Based on the information furnished and presentation made by the Project Proponent and discussions held, the Committee prescribed the standard TORs. During this meeting it was also decided that a site visit may be done prior to the consideration of project at EC stage by EAC.

The Terms of Reference were approved by MoEF & CC for carrying out the Environmental Impact Assessment study vide letter No.J-11015/443/2014-IA.II (M) dated 29.07.2015. Public hearing was conducted on 26.04.2016. The proponent submitted its application for seeking environmental clearance after conducting public hearing to the Ministry online on 02.07.2016. The mine is located in an area of 160 ha in 376(P) Compartment No. 6 of Budawada Reserve Forest for which forest clearance was obtained. The 1st Scheme of Mining is approved by the Indian Bureau of Mines on 27-10- 2014, valid up to 31.03.2019.

The proposal was again considered in the EAC Meeting held on 19-20 Sep, 2016. Based on the information furnished and discussion held, the Committee was of the view that only 10% of the production has been achieved and proposal for expansion could not be justified by the PP. Therefore, Committee decided to **deferred** the proposal and was of the view that PP has to submit the following documents, in addition to justification for seeking EC for expansion, for further decision on the matter by the committee.

- i. The mine lease area is complete forest land however no Schedule 1 species was reported in the area. Therefore, list of flora and fauna of study area shall be authenticated by State Forest Department.
- ii. The Conservation plan for Schedule 1 species, if any, shall be submitted.
- iii. The baseline data appears to be incorrect. The fresh baseline data shall be collected and re-submitted.
- iv. It was noted that mine has achieved only 10% of its present production. Therefore, the request for expansion is not justified; an explanation in this regard shall be submitted. PP now submitted the detailed EIA Report. As per PP the baseline study was carried for winter season December-14 to February-15.

The PP now submitted the above information and proposal was considered in the EAC Meeting held on 23-24th October, 2017. Based on the information furnished and discussion held, the Committee was of the view that only 10% of the production has been achieved and proposal for expansion could not be justified by the PP. The Committee also observed that the PP did not develop the green belt around the Mining lease, which is one of the conditions of the earlier EC. PP submitted that they could not develop the green belt and achieve their rated production as they did not get permission from the other nearby mining lease owners to use the area under their control to approach their mining lease and due to this the production is less. PP also submitted that they are in process of resolving the issue pertaining to approach road. Therefore, the Committee decided to defer the proposal and instructed the PP to take steps to fulfil the conditions stipulated in earlier EC and resolve the issues pertaining to approach road.

2.14: J-11015/465/2012-IA-II (M) Bauxite Mining of M/s Ex-Serviceman Welfare Association located at village Girgaon, Mhalsavade and Ringewadi, Tehsil Shahuwadi, District Kolhapur, Maharashtra (750 TPD (1,50,000 TPA) in 90.60ha.). Consultant: Yogiraja Industrial Consultant- Reconsideration of EC-Reg. [IA/MH/MIN/28947/2012]

The proposal by M/s Ex-Servicemen Welfare Association is for open-cast new Bauxite Mining with proposed production of 750 TPD (1,50,000 TPA), at Village Girgaon, Mahalsavade and Ringewadi Taluka Shahuwadi, District Kolhapur Maharashtra.

The Proposal of TOR was considered in the EAC meeting held during 18-20 July, 2007 for TOR. The Ministry issued ToR vide their letter no. J-11015/366 and 367 /2007-IA-II (II) (M) dated Aug 20, 2007. Based on TOR, EIA/EMP report was prepared and submitted to the Maharashtra Pollution Control Board, Kolhapur for Public Hearing. Subsequently, two Public Hearings were conducted for Girgaon, Mhalsvade and Ringewadi Villages on 26th August, 2011. The Proposal for EC was considered by the Expert Appraisal Committee in its meetings held during 29-30th July 2015, 20-22nd January 2016 and finally on 22-23rd June, 2016. The EAC recommended the proposal for Environmental Clearance for Mining of Bauxite with a proposed production capacity of 750TPD (1,50,000 TPA) over the mine lease area of 90.60 ha.

The Ministry has issued directions as well as an Office Memorandum from time to time with regard to Western Ghats. The directions issued on 13.11.2013 clearly suggests prohibiting certain categories of activities including mining, quarrying and sand mining except the cases which have been received/pending in Expert Appraisal Committee/MoEF or State Level Environment IMPACT Assessment Authority/State Level Environment Impact Assessment Authority before 17.04.2013, when the report of High Level Working Group headed by Dr. K. Kasturirangan, Member (Science) Planning Committee was placed on the website of Ministry. The Office Memorandum which was issued with respect to High Level Working Group report on Western Ghats on 20.12.2013 also reiterates the direction issued on 13.11.2013. The Ministry had issued draft Notification for ESA on 10.03.2014. This has lapsed and it is reiterated by fresh notification dated 04.09.2015. This proposed Notification also prescribes complete ban on mining, quarrying and sand mining in Ecologically Sensitive Areas and all existing mines shall be phased out within 5 years from the date of issue of final notification or on the expiry of the existing mining lease whichever is earlier.

The matter was examined in the Ministry and it is a fact that Western Ghats is a global biodiversity hotspot and need to be preserved. It is harbour for many endemic species of different flora and fauna. UNESCO has also included certain part of Western Ghats in the UNESCO World Heritage List. The Ministry in its proposed ESA notification dated 04.09.2015 clearly opined that there should be complete ban on mining, quarrying and sand mining in the Ecologically Sensitive Zone and all existing mines will be phased out within 5 years from the date of issue of final Notification.

The MoEFCC has issued direction under Section 5 of the EPA, 1986 on 13.11.2013 for providing immediate protection to the Western Ghats and to maintain its environmental integrity, thereby, putting a moratorium on consideration of environmental clearance for certain identified categories of new and/or expansion projects/activities such as mining and quarrying which have maximum interventionist and damaging impacts on the ecosystems, in the proposed Ecological Sensitive Area (ESA) as identified by the High Level Working Group.

In view of the above justification, the proposal of M/s Ex-Servicemen Welfare Association was rejected vide letter dated 3rd November 2016. Aggrieved, by the decision of the MoEF&CC, M/s Ex-Servicemen Welfare Association assailed the letter dated 3rd November 2016 in Hon'ble NGT Appeal No. 58 of 2016.

The Hon'ble NGT in its order pronounced on 2nd February 2017 stated that "We are therefore, dismayed that despite this Tribunal setting aside the earlier order passed by the MoEF on 06.08.2014 in appeal No. 73 of 2014 and remanding the case to MoEF to reconsider in the light of the exception provided in the Notification dated 13.11.2013, yet, the MoEF has again on the same ground passed fresh order declining proposal which is against the opinion expressed by this Tribunal on the enforceability of the draft notification and fact situation. Since the reason assigned earlier by the MoEF to reject the proposal of the Application dated 06.08.2014 has been tested before this Tribunal and set aside the same could not have been the basis to decline the relief. As consequent of such improper understanding of direction under Section 5 of Environment (Protection) Act, 1986 and non-application of mind to examine exception provided in the notification dated 13.11.2013, we are satisfied the impugned direction cannot be sustained. In the circumstances we are satisfied the ground urged by the Applicants against the impugned direction is legally acceptable and therefore the appellant succeeds in its legal pursuit. The impugned direction issued by MoEF dated 13.11.2016 is hereby quashed. MoEF is directed to reconsider the application of the appellant in the light of the exception provided in the moratorium dated 13.11.2013 and consider the proposal of the appellant applying the provisions of EIA Notification of 2006. The entire process shall be completed within a period of one month from the date of receiving of copy of this order. We further make it clear that other report submitted by the appellant which are in favour of MoEF must be considered while considering their proposal".

In view of the Hon'ble NGT order, the proposal was re-considered in the EAC meeting held during 27-28 April, 2017. Based on the presentation made by the project proponent and the information furnished by the proponent, the committee noted on the DSS based on the KML file that the proposed mine lease area overlaps with Reserve Forest area. The committee noted that the proposal was earlier recommended based on the fact that the proponent had submitted that

they have surrendered 5.29 ha area, which is marked as forest land by the State Government. The committee also noted that the KML file was not analyzed during the EAC meeting held during 22-23rd June, 2016 when the proposal was recommended. Now, based on KML file, the DSS not only showed that the mine lease area was surrounded by Reserve Forest areas but also that there was still Reserve Forest area falling within the mine lease area. After due deliberation, the committee deferred the proposal and was of the opinion that the proposal can be considered after the proponent submits the following:

- 1) A certificate from the PCCF/CWLW, Maharashtra State Forest Department that the 5.29 ha. forest land has been surrendered to the forest department.
- 2) A certificate from State Forest Department that there is no forest land in the mine lease area.
- 3) A copy of the executed lease document for the revised mine lease area excluding the forest area.

The proposal is considered in the EAC Meeting held on 24th October, 2017. The PP submitted that the Dy. Conservator of Forest, Kohlapur Forest Division confirmed that there is no forest land within the ML area vide letter No D-5/Van Savardhan/17.18/1540 Kolhapur-3 dated 28.07.2017. Based on the information furnished and discussion held, the Committee **deferred** the proposal and was of the view that proposal may be re-considered only after the PP submit the valid executed lease deed.

2.15 J-11015/155/2014-IA.II(M) Production of 2.0 lakh TPA (ROM) of limestone by M/s Saurashtra Chemicals, located at village Zinzarka-Boricha, Tehsil & District Porbanda, Gujarat (24.28ha) (Consultant:-Mantec Consultants Pvt. Ltd. –Consideration of EC [IA/GJ/MIN/23323/2014]

The proposal of M/s Saurashtra Chemicals Division of Nirma Limited is for mining of Limestone with production capacity of 2, 00, 000 TPA from the mine lease of 24.28 ha located at Village: Zinzarka-Boricha, Tehsil: Porbandar, District: Porbandar, Gujarat. The latitude & longitude of the mine lease area lies between 21°44' 56.76" N to 21°45' 14.90" N & 69°40'19.65" E to 69°40'37.74" E the survey of India Toposheet No is 41G 941G 10. It is Category "A" project as the MLA comes within 1.38 KM area of the Barda Wildlife Sanctuary. The Consultant has presented the details of mine site using KML/SHP files on Google Earth.

Mining lease of Zinzarka Limestone mine was granted in favour of Shri Laxman Bhai Bhim Bhai Agath in the year 1985 and the lease deed was executed on 08.06.1988 for 20 years. The lease was transferred vide Govt. of Gujarat Order No. MCR-1589 (S-54)-2164-CHH dated 24.11.1992 and corrigendum dated 17.01.1994 was issued in the name of M/s "Saurashtra Chemicals". Transfer deed was executed on 24.01.1994. The PP had applied for renewal of lease vide application dated 30.05.2007. Receipt of the renewal application was acknowledged in from 'D' by Govt.of Gujarat on 21.06.2007.

The Ministry had earlier prescribed Terms of Reference (ToR) for the said mine vide MoEF letter no. J-11015/1243/2007-IA.II (M), dated 25.01.2008 for 12,800 TPA Limestone

productions, SPCB had conducted the Public Hearing on 22.10.2008 and PP has submitted the EIA/EMP report on 17.01.2013 i.e. after expiry of the validity of TORs. Accordingly, MoEF vide letter dated 11.03.2013 communicated to the PP that the validity of TORs has already expired. The PP had re-applied afresh for obtaining Environment Clearance on 06th May 2014. The project was discussed in the EAC held on 08th – 09th July 2014 for grant of ToR. The EAC recommended ToR in the meeting and ToR letter was issued on **25th November 2014**.

The water is required for sprinkling on haulage road. Total water requirement shall be 5.85 KLD. The domestic water demand has been calculated as 2.35 KLD and for dust suppression 1.5 KLD, Green belt development 2.0 KLD. Total water requirement shall be met from bore well located at Dharpur-kajawadri limestone mine. Necessary Permission for abstraction of ground water for a quantity of 94.025 KLD has been granted by Central Ground Water Authority vide letter no. 21- 4(732)/WCR/CGWA/2010-2590 dated 24.11.2010.

PP has informed that the Application to obtain National Board of Wildlife clearance has been submitted vide letter dated 15.09.2012. Jambuvanti cave is a Historical monument of Archeological importance in the study area at a distance of 5 km from Zinzarka mine for which NOC has been granted by the Directorate of Archaeology, Gandhinagar vide its letter dated 12.05.2009. There is no court case/litigation is pending against the mining project. Total cost of the Project is Rs 25 Lakhs. There is a typographical error in the approved ToR where the capacity of the project is given 2.0 MTPA, however M/s Saurashtra Chemicals Division of Nirma, Gujarat had applied for 0.2 MTPA. It was also communicated to MoEF vide our letter no SC/NL/ENV- 121/186/2016 dated July 01, 2016.

The Gujarat State Pollution Control Board has conducted the public hearing on 20.05.2016 at 09:00 A.M. under the chairmanship of Shri Dinesh Patel, District Magistrate, Distt. Porbandar on the project site Zinzarka-Boricha Village, Tehsil & District Porbandar, Gujarat. The people were concerned about the commencement of the mining activity as this will provide the employment opportunity for unskilled persons living in the nearby villages.

The latest scheme of mining along with the mine closure plan is approved by IBM Udaipur vide its approval letter no 682(23)(605)/2008-Khanikhas(U)Udai dated 23.12.2013. It is proposed to adopt semi mechanised opencast method of working with conventional drilling - blasting techniques, using 65 mm dia drills for drilling blast holes, conventional high explosives for blasting, sizing at mine site and then sized materials loading manually into truck/ tippers& dispatched directly to soda ash plants regularly, therefore no stacking for materials are required. Occasionally excavator cum loader JCB 4DX will also be used as and when required.

The ground water table is 20-25 m below the surface level. The mining operation (7.5mBGL) will be on higher level above the water table. There will be no adverse effect on the existing water regime due to the mining activity in the area. The baseline monitoring was conducted for period of December 2014 to February 2015. The maximum value for PM10 is observed, as 82 µg/m³ at Adityana while 24 hours applicable limit is 100µg/m³ for industrial and mixed use areas. The area observes average PM10 concentration in the range of 67.3-76.1µg/m³ with the lowest concentration of 56µg/m³ recorded at Bakharla. The maximum value for PM2.5 observed is, 48µg/m³ at the Adityana Site while 24 hours applicable limit is 60µg/m³

for industrial and mixed use areas. The average PM2.5 concentration value ranges between 37.1-38.5µg/m³ with the lowest concentration of 32 µg/m³ recorded at Adityana, Katwana, Boricha and Bakharla villages.

The proposal was considered in the EAC Meeting held on **19-20th September, 2016**. The Committee deliberated at length the information submitted by PP and decided to **defer the Proposal** for environmental clearance as it was noted that mine lease area falls within the Eco-sensitive Zone (ESZ) of the Barda Wildlife Sanctuary. The ESZ notification provides for prohibiting the mining activity within the ESZ therefore, the proposal may be deferred till the ESZ notification is finalized.

PP now submitted that the Ministry had issued the Final Notification for Eco-sensitive Zone (ESZ) of the Barda Wildlife Sanctuary vide S.O No. 1365 (E) dated 28.04.2017 . As per the final notification the proposed mine is outside the Barda Wildlife Sanctuary.

The Proposal is again considered in the EAC Meeting held on 24th October, 2017. The KML file was verified on DSS and Google Earth, and it has found that ML area is outside the Eco-sensitive Zone (ESZ) of the Barda Wildlife Sanctuary. PP also submitted a Map duly authenticated by Chief Conservator of Forest, Porbandar Division, showing that the distance of the Mining lease from Barda Wildlife Sanctuary is 1.3 KM. The Committee observed that a road is passing through the mining lease and was of the view that no mining operation should be carried out within 50 meters on the both sides of the road. The PP submitted that renewal of mining lease is awaited. Based on the discussion held and document submitted by the PP the Committee **deferred** the proposal and was of the view that proposal may be re-considered only after the PP submits the renewed Mining lease deed.

2.16 J-11015/262/09-IA.II (M) Shirale Bauxite Mine (2.5 LTPA) of M/s Anand Mines located at Village Panundre and Mhalaswade, District Kolhapur, Maharashtra (278.85 ha)-Consideration of EC-Reg. [IA/MH/MIN/69565/2009]

The proposal by **M/s Anand Mines** is for mining 2.5 LTPA of Bauxite from Shirale Bauxite Mine (278.85 ha) located at Village Panundre and Mhalaswade, District Kolhapur, Maharashtra.

The proponent submitted that the Letter of Intent from Ministry of Coal & Mines Dept. Govt. of India, New Delhi on 28th Jan 2008 and the Mining lease deed was executed at the Collector Office , Kolhapur on 10.04.2017. The mine is falls in Survey and India Topo-sheet No. 47H/13 (E43T13) and lies between Latitude -16⁰50'15" to 16⁰51'41.75" N and Longitude-73⁰52'50" to 73⁰56'00" E.

The proponent mentioned that the total lease area is **278.850 Ha** comprising of 206.136 Ha private land and 72.714 Ha Govt land. PP submitted that no forestland is involved. However, it was observed that the mine lease area is surrounded by forest. PP also submitted the letter No. D-5/Van Savardhan/17, 18/2444 Kohlapur-3 dated 6.10.2017 issued from the office of Dy. Conservator of Forest, Kolhapur confirms that the project proposal does not bear forest area and it is more than 10 KM from the buffer area of Sahyadri Tiger Reserve.

PP submitted that the Mining Plan was approved on 22-10-2009 vide letter no MB/KLP/Goa (MAH) BX- 193-SZ for a period of 5 years. The mine working will be open-cast semi-mechanized with drilling and secondary blasting. In order to get better recovery rock breaker will be used as far as possible and if needed secondary blasting will be carried out. PP submitted that production of bauxite will be restricted to one shift i.e. General Shift and the mining operations are proposed annually between October to May, excluding the monsoon. The total mineable reserves are 9.18 Lakh and the life of the mine at the proposed rate of production will be 7 years. Ultimate working is 1.5m bgl and the ground water table is reported to vary between 80-100m bgl. The mine working will not intersect the ground water table. The PP submitted that the water requirement is 47 KLD which will be obtained from ground water. PP submitted that no mineral processing/beneficiation are proposed to be done at the mines. However, crushing and screening of the ROM will be done within the mine lease area. PP submitted that being a float ore there is no overburden to be handled. PP submitted that Hydraulic excavator; Wheel Loader, backhoe and rock breaker will be used for material handling and 35 Ton dumper and 10 tonne Trucks/Tippers will be used for transportation of the mineral.

The Term of reference was issued vide letter No. J-11015/262/2009-IA.II (M) dated 9.11.2009. The public hearing was conducted on 02.12.2010 at Mahasul Bhavn, Shahuwadi Taluka, District Kolhapur. The Public Hearing was chaired by Shri Shivaji Kadbane, Deputy Collector (equivalent to ADM). The issues raised during public hearing were also considered and discussed during the meeting. It was also reported that there is no court case pending against the project.

PP submitted that the baseline AAQ data was collected for a period Sep-2009 to Nov-2009 and showed that the levels are within permissible limits. The maximum predicated value of the increase in PM₁₀ due to proposed mining operation would be 6.89 ug/m³. The Noise level during the study period was within the prescribed standards. There is no perennial surface water body within the ML. There is no process waste water generation from mine. Domestic sewage will be discharged into septic tank and soak pit. PP submitted that at the conceptual stage the mine pit will cover 85 Ha out of this 70.0 Ha will be reclaimed by carrying out plantation (local species) and the area under green belt will be 1.5 Ha. PP submitted that backfilling of the mine out pit will not be possible due to unavailability of waste material.

The PP also submitted the “Biodiversity and Wildlife Conservation Plan” vide their letter dated 11.12.2012 for the approval of Chief Conservator of Forest (Wildlife). PP submitted that the cost of Project is ₹ 2 Crore. The budget for CSR activities is ₹ 14.5 Lakh Capital Investment and 12 Lakh recurring expenses for planned period. The budget for implementation of EMP capital cost ₹ 90.50 Lakh and recurring cost ₹ 35.0 Lakh. The budget for eco-development and biodiversity and wildlife conservation plan proposed by PP is ₹ 25 Lakh and the same may be revised if found inadequate by the Chief Wildlife Warden.

Proposal was considered by the Expert Appraisal Committee in its meeting held on 28th -30th November, 2011. Based on the presentation made and discussions held, the Committee sought information on:

- a) Confirmation should be furnished from the Competent Authority in the State Forest Department that no forestland is involved in the project;
- b) Permission from the Forest Department for transportation of mineral through the forest area should be obtained;
- c) Large critical endangered and endemic plants and animals are reported in the core zone. However, no detailed study on critical habitats of flora and fauna has been provided, nor a conservation plan worked out. This study should be undertaken and detailed report along with conservation plan should be furnished;
- d) Confirmation from the CWLW as well as from National Tiger Conservation Authority should be obtained and furnished regarding the impact of the proposed project on Wildlife Habitat in the surrounding area and critical habitats including Tiger.
- e) The public hearing is seen to be chaired by Deputy Collector however, as per EIA Notification, 2006, the public hearing has to be supervised and presided over by District Magistrate/District Collector/Deputy Commissioner or his or her representative not below the rank of and additional District Magistrate. Necessary clarification from the State Pollution Control Board should be submitted in this regard. Document in support of the reported postponement of PH should also be submitted.

It was decided that the proposal may be brought back before the committee for its further consideration after the requisite information as mentioned above has been submitted by the proponent. MoEF vide letter dated 17th April, 2012, sought clarification from the Proponent on the above mentioned issues. The Project Proponent vide letter dated November 6th, 2012 submitted additional requisite information to MoEF. The proposal was again considered in the EAC Meeting held on 19-21st December, 2012 and based on the information furnished, presentation made and discussions held, the Committee recommended the Project for environmental clearance.

The Ministry has issued directions as well as Office Memorandum from time to time with regard to Western Ghats. The directions issued on 13.11.2013 clearly suggests prohibiting certain categories of activities including mining, quarrying and sand mining **except the cases which have been received/pending in Expert Appraisal Committee/MoEF or State Level Environment IMPACT Assessment Authority/State Level Environment Impact Assessment Authority before 17.04.2013**, when the report of High Level Working Group headed by Dr. K. Kasturirangan, Member (Science) Planning Committee was placed on the website of Ministry. The Office Memorandum which was issued with respect to High Level Working Group report on Western Ghats on 20.12.2013 also reiterates the direction issued on 13.11.2013. The Ministry had issued draft Notification for ESA on 10.03.2014, 04.09.2015. This proposed Notification also prescribes complete ban on mining, quarrying and sand mining in Ecologically Sensitive Areas and all existing mines shall be phased out within 5 years from the date of issue of final notification or on the expiry of the existing mining lease whichever is earlier.

The matter was examined in the Ministry and it is a fact that Western Ghats is a global biodiversity hotspot and need to be preserved. It is harbour for many endemic species of different flora and fauna. UNESCO has also included certain part of Western Ghats in the UNESCO World Heritage List. The Ministry in its proposed ESA notification dated 04.09.2015

clearly opined that there should be complete ban on mining, quarrying and sand mining in the Ecologically Sensitive Zone and all existing mines will be phased out within 5 years from the date of issue of final Notification.

The MoEFCC has issued direction under Section 5 of the EPA, 1986 on 13.11.2013 for providing immediate protection to the Western Ghats and to maintain its environmental integrity, thereby, putting a moratorium on consideration of environmental clearance for certain identified categories of new and/or expansion projects/activities such as mining and quarrying which have maximum interventionist and damaging impacts on the ecosystems, in the proposed Ecological Sensitive Area (ESA) as identified by the High Level Working Group.

In view of the above justification, the proposal of M/s Anand Mines was rejected vide letter J-11015/262/2009-IA(M) dated 29th April 2014. Aggrieved, by the decision of the MoEF&CC, M/s Anand Mines approached the NGT vide application no. 493 of 2017 wherein the NGT in its order dated on 21st August, 2017 directed the Ministry to dispose of the application filed by the Applicant as expeditiously as possible but in no case later than eight weeks from date of order.

The Ministry had issued draft Notification for ESA on 28.02.2017. This proposed Notification also prescribes complete ban on mining, quarrying and sand mining in Ecologically Sensitive Areas and all existing mines shall be phased out within 5 years from the date of issue of the final notification or on the expiry of the existing mining lease whichever is earlier.

In view of the Hon'ble NGT order dated 27.08.2017, the proposal was re-considered in the EAC meeting held during 18-19th September, 2017. The committee noted that the KML file was not analyzed during the EAC meeting held during 19-21st December, 2012 when the proposal was recommended. Now, based on KML file, the DSS not only showed that the mine lease area was surrounded by Reserve Forest areas but also that there was still Reserve Forest area (14.10 Ha) falling within the mine lease area. The area of KML file submitted by PP is also not matching with the actual lease area. Although, the PP previously submitted the NOC dated 15.12.2012 from Forest Department Kholapur but the committee was in opinion that a clarification for Forest Compartment number 1051, 1052, 1054 and 1055 as shown by DSS be obtained from the State Forest Department. After due deliberation, the committee deferred the proposal and was of the opinion that the proposal can be considered after the proponent submits the following:

- a) A certificate from State Forest Department that the Forest Compartment no 1051, 1052, 1054 and 1055 is outside the mining lease area.

The PP now submitted the letter No D-5/Van Savardhan/17,18/2444 Kohlapur-3 dated 6.10.2017 issued by Dy. Conservator of Forest, Kolhapur Forest Division, confirming that the Forest Compartment No 1051,1052,1054 and 1055 are outside the mining lease area and the project proposal does not bear any forest area. The PP also submitted that the Mining lease was executed on 07.04.2017.

Based on the discussion held and document submitted by the proponent the committee was in opinion that as the i) proposal was already recommended for EC in the EAC Meeting

held on 19-21st December, 2012 ii) The Hon'ble NGT in its order pronounced on 2nd February 2017 in the matter of Ex-Serviceman Welfare Association, directed MoEF&CC "to reconsider the application of the appellant in the light of the exception provided in the moratorium dated 13.11.2013 and consider the proposal of the appellant applying the provisions of EIA Notification of 2006" iii) The Hon'ble NGT in its order dated 21.08.2017 directed the Ministry to dispose of the application of M/S Anand Mines as expeditiously as possible iv) The final notification of the ESZ notification around Western Ghats is not yet published and v) As per Sl. No 9 (vii) of Ministry O.M No. 1-4/2012-RE (Pt) dated 20.12.2013 "*The following category of new and expansion project/activities shall be prohibited in the identified Ecologically Sensitive Area except those cases which have been received by EACs/MoEF or SEACs/SEIAAs before the date of putting HLWG report on the website of the Ministry i.e 17.04.2013 and which are pending with EAC/MoEF or SEACs/SEIAAs. Such projects will be dealt under the guidelines and rules applicable at the time of application before the respective EAC/MoEF or SEACs/SEIAAs*" and in the instant case PP applied for EC before 17.04.2013.

In view of the above, the Committee recommended the proposal for the grant of EC.

2.17: J-11015/246/2014-IA.II (M) Munsar opencast and underground Manganese Mine of M/s MOIL Limited located at Villages Munsar & others, Tehsil Ramtek, District Nagpur, Maharashtra (133.78 ha; expansion from 0.049 to 0.125 MTPA) (Area 133.78 Ha) (Kratin Solutions Pvt. Ltd.)-Consideration of EC-[IA/MH/MIN/24357/2014]

The proposal of M/s MOIL. Ltd. is for enhancement of production of manganese from 49,992 TPA to 1,25,000 TPA w.r.t. Munsar Manganese Mines (133.78 Ha). The Mine Lease Area is spread over the villages Munsar, Chargaon, Khairi, Parsoda and Kandri, Tehsil: Ramtek, Dist: Nagpur, Maharashtra. The area is undulated. The shape of lease area is irregular and the lease area 133.78 consist of 108.63 Ha and 25.15 Ha leases combined. Scheme of mining is approved for this combined proposal from Indian Bureau of Mines (i.e. 133.78 Ha with a proposed production capacity of 1,25,000 TPA clean manganese ore). The latitude and longitude of the center is 21⁰ 24'06"N, 79⁰ 16'45"E. The area can be located in Survey of India Topo-sheet No. 55 O/7. The Consultant has presented the details of mine site using KML/SHP files on Google Earth.

The proposal for TOR was considered in EAC meeting held during September 25-26, 2014, to determine the Terms of Reference (TOR) for undertaking detailed EIA study. TOR was issued by MoEFCC vide letter no. J-11015/429/2007-IA. II(M) dated 07.11.2014.

The total lease area is 133.78 ha, out of which 15.55 ha is Forest land, 82.81 Revenue land and 35.42 Private land. The Stage-I Forest Clearance over an area of 12.15 Ha has been obtained vide letter No. 8C/5/604/98-FCW/2171 Dt. 18.10.2000 and for 3.40 ha has been obtained vide letter No. 8C/5/594/98-FCW/2138 Dt.16.10.2000 as per FC Act, 1980.

The environmental clearance under EIA Notification 2006 has been obtained vide Letter No. J-11015/429/2007-IA.II (M) dated 26.12.2007. The 149.06 Ha ML consisted of 5 leases viz. 108.63 Ha, 25.15 Ha, 8.27 Ha, 5.7 Ha, and 0.97 Ha. Out of these five leases 8.27 Ha lease has been surrendered and there is no proposal for increase in production from 5.7 Ha and 0.97 Ha leases. Hence, the application is made for combined proposal of 133.78 Ha consisting of 108.63 Ha and 25.15 Ha. Monitoring report of earlier Environmental Clearance from Regional Office, Bhopal vide Letter No. 3-44/2007(ENV)/214 dated 08.03.2016 was submitted. The Compliance

of the Environmental Conditions is satisfactory.

Considering the scale of operation, geological setting and the nature of deposit, it is proposed to adopt combination of opencast & underground method of mining involving ripping / dozing, drilling- blasting, manual sorting, sizing and stacking as well as mechanized loading and transportation. It is estimated that 10 Million m³ waste will be generated during the mining scheme period. The mine waste is in the form of mica schist, quartzite, bed rejects comprised of gondite manganese quartzite and rejects below threshold value of 10% Mn. It is proposed to carryout simultaneous backfilling of the OB/Schist of exhausted pits. Backfilling of old excavated and exhausted workings will be done towards western side in and around Durga Pit in 2.40 hect area. Besides this, Bunglow Pit and Parsoda pit each having around 2.40 hect area will also be backfilled upto ground level. Sinking of vertical shaft was started on 20.05.2010 at Ch. 2600, shaft collar is located at 347 MRL the finished diameter of the sinking shaft was 4.5 m. It has a capacity to hoist 1,60,000 Tones ROM per year. It is also proposed to sink additional new vertical shaft in the property of 108.93 Ha area.

The period of baseline data collection was the Winter Season of 2014 i.e. October, November & December 2014 (first week of January 2015). Ambient air quality monitoring has been carried out at 12 locations during 09/10/2014 to 06/01/2015 (Winter season 2014) and the data submitted indicated PM₁₀ (42.9 µg/m³ to 55.1 µg/m³), PM_{2.5} (22.9 µg/m³ to 27.8 µg/m³), SO₂ (10.4 µg/m³ to 15.8 µg/m³), NO_x (13.2 µg/m³ to 23.7 µg/m³) and Free Silica in PM₁₀ (.0001 %). The results of the modeling study indicates that the maximum increase of GLC for the proposed project is 4.46785 µg/m³) with respect to the PM₁₀. Soil quality, water quality and noise levels in the study area is within the permissible limit. It was reported by the PP that no Schedule I fauna are reported in the lease area and buffer zones.

It was reported that no Biosphere reserve, National Park, Sanctuary and elephant or wildlife corridors in lease and study area of Munsar Manganese Mines of M/s MOIL Limited. A site of archeological importance exists near the mine. In addition there are various places of worship/ tourist place and historical places exists in 15 Km radius of the project. Necessary precautions have already been taken for the protection of Archeological site.

The public hearing was conducted on 28.08.2015 at 11 AM. at 16.00 Hrs venue at Munsar Manganese Mine, Near Vertical Shaft, Additional District Magistrate, Nagpur presided the Public Hearing. Most of the participants have expressed their willingness for the proposed enhancement in the production of manganese ore as there will be generation of more employment. Issues regarding road development, water supply and pollution were also discussed and project proponent has ensured to resolve the road and water problem under proposed CSR scheme. The Project Proponent comments that; the mines has provided dust suppression measures at all dust generating points. Dust suppression and Water pollution control system are already done in compliance with stipulated norms. Effective measures for soil and water conservation has also been undertaken. An Effluent Treatment Plant for treatment of waste water for workshop is being constructed besides providing Sewage Treatment Plant for colony sewage water. It is also clarified that NOC from Central Ground Water Board is being obtained. Plantation of 73500 trees has already been done in & around the mine lease hold area covering 20.50 Ha area with various local varieties of trees. Plantation of various local tree species @ 2000 trees per annum is proposed. Priority will be given to locals for employment. Since the mining operations are carried out at Munsar Manganese mine from a long period, various

mitigative measures are already adopted and the same will be continued after the proposed expansion. All provisions of occupational health are complied. The frequency and magnitude of the adopted measures will be improved during this expansion program.

The approximate cost of the project is around Rs. 17.38 Crores for implementation of expansion of production. The total Capital cost of Environmental Control Measures is Rs. 90,00,000.00. The total recurring costs per annum, excluding man power cost is Rs. 1,14,000.00. It was reported by the PP that there is no litigation pending against the proposed project.

The proposal was considered in the EAC Meeting held on 21-22 July, 2016. The Committee deliberated at length the information submitted by PP and **recommended the Proposal for Environmental Clearance** for Munsar opencast and underground Manganese Mine for expansion from 49,992 TPA to 1, 25,000 TPA **subject to submission of distance certificate from the Chief Wildlife Warden of the State Government with respect to Pench Tiger Reserve** which has been observed as per KML/SHP file.

The Committee also recommended additional specific conditions viz. (i) Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical check-up once in six months and necessary medical care/preventive measures undertaken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers should also be adopted; (ii) Prevention Measures for possible impacts of Manganese poisoning shall be implemented. Regular medical examination of workers will be done for diagnosis or symptoms of any disease due to manganese poisoning, neurological examination, X-ray etc. will also be done of employees in a regular interval. Analysis of manganese content in dust will be done and the compliance Report has to be submitted to the Regional Office of the Ministry; (iii) Project Proponent shall carry out vibration studies well before approaching any such habitats or other buildings to evaluate the zone of influence and impact of blasting on the neighbourhood. Within 500 meters of such sites vulnerable to blasting vibrations, avoidance of use of explosives and adoption of alternative means of mineral extraction, such as ripper/dozer combination/rock breakers/surface miners etc. should be seriously considered and practiced wherever practicable. A provision for monitoring of each blast should be made so that the impact of blasting on nearby habitation and dwelling units could be ascertained. The covenant of lease deed under Rule 31 of MCR 1960 provides that no mining operations shall be carried out within 50 meters of public works such as public roads and buildings or inhabited sites except with the prior permission from the Competent Authority. (iv) Main haulage road in the mine should be provided with 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; Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured; (v) 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; (vi) The Regular monitoring of ground water table to be carried out by establishing a network of existing wells and constructing new piezometers. The Reports shall be submitted at interval of six months to the Regional Office of the Ministry and State Pollution Control Board; (vii) The water auditing shall be carried out and measures for reducing the consumption of water shall be taken up and reported to the Regional Office of the Ministry and State Pollution Control Board; (viii) The 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 at interval of six months to the Regional Office of the Ministry and State Pollution Control Board; (ix) The Plantation/Green belt at the periphery of the water body shall be maintained in the mined out area in order to reduce the loss of surface water.

The PP submitted the distance certificate issued by the Chief Wildlife Warden of the State Government vide letter No.Desk-23(2)/WL/Survey/C.No.214/679/2017-18 dated 1.06.2017 confirming that the distance of the Mining leases is 16.15 KM from Pence Tiger Reserve Forest. In the same letter it was mentioned that the Madangoan Wildlife Sanctuary is 6.5 KM from the ML area. The proposal was examined in the Ministry and it was observed that PP did not obtain the clearance from the Standing Committee of NBWL and it has decided to initiate the action as per EP, Act 1986 for the period for which it was in violation. It has also observed that in the earlier EC granted to M/S Moil Limited the capacity of each mine was not mentioned rather a combined capacity of all the mines was mentioned as 4166 TPM i.e. is 49,992 TPA and the Proposal of the PP as per EIA Report is for increase in the production from 49,992 TPA (5 mining leases) to 1, 25,000 TPA (i.e. only from the 2 mining leases) and the production from the remaining two mining leases will remains the same. 49,992 TPA is the total production capacity of 5 mining leases and 1,25,000 TPA is proposed production capacity of two mining lease and if the production of remaining two mining lease will be added to the new proposed capacity then the total production capacity will cross the 1,25,000 TPA. The proposal was thus placed in the EAC meeting held on 23-24 October, 2017. **PP submitted that they will not increase the total production capacity beyond 1, 25,000 TPA and capacity of the individual mining will be (1, 24,475 TPA from 108.93 Ha; 480 TPA from 25.15 Ha; 20 TPA from 5.74 Ha; and 25 TPA from 0.97 Ha).** PP also submitted that the maximum production from the each mining lease from 2007-2017 was (48787 TPA from 108.93 Ha; 480 TPA from 25.15 Ha; 20 TPA from 5.74 Ha; and 0 TPA from 0.97 Ha). Based on the information submitted and discussion held, the committee observed the following:

- i) Year-wise past production details submitted by the PP are not matching with what provided in the EIA Report.
- ii) The modelling has been carried out to predict the impacts of the Manganese Mine in Munsar with drilling & blasting (elevated point sources), excavation (open pit source), stone crushing, screening (area) and transportation (line) operations with quantity of 125000 tonnes/annum. The 125000 TPA is the quantity of the clean ore only and modelling should be done on the total excavation in order to predict the overall impact.
- iii) As per SI No 7 of ToR “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”. But the quantity of the waste generation for the life of the mine / lease period is not provided.
- iv) As per SI No 16 of ToR “. Details of flora and fauna, duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan for their conservation should be prepared in consultation with State Forest”. PP submitted that as per secondary information Indian bison (*Bos gaurus*) is present in the

buffer zone. *Bos gaurus* is a schedule-1 species according to IWPA 1972 and conservation plan for the same is not submitted by the PP.

- v) As per Sl No. 27 of ToR "...In case the working will intersect groundwater table, a detailed hydro geological study should be undertaken and report furnished. Necessary permission from the Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished". PP submitted that the intersection of ground water table have been occurred in both open cast & underground mine. Copy of permission from the Central Ground Water Authority for working below ground water and for pumping of ground water was not submitted by the PP.
- vi) As per S.L No. 9 of ToR "Details of the land for any Over Burden dump 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". PP submitted that no over burden dump outside the mine lease area is proposed. But at per Sl. No. 4.11.4 of the EIA Report "As already elaborated earlier dumping will be done in **outside the pit limit** and in Durga Pit, which have mined out and back filling of the Durga pit has already been mentioned in the approved Mining Plan/SOM of the Munsar Lease 5.74 ha area".
- vii) As per the report submitted by the Regional Office, Bhopal there are some non-compliance of the EC Conditions. PP needs to submit the proper justification for the same and an undertaking with a time frame for the compliance of the EC conditions.

In view of the above, the Committee **deferred the proposal** and was of the view that proposal may be re-considered after the PP submits the following information:-

Past production details since 1993-94 duly authenticated by the State Mining and Geology Department and **an undertaking to the effect that it shall inform the Ministry once demand is raised by State Government and adhere to the orders of the State Government, directions of the Hon'ble Supreme Court** in the matter of Common Cause Vs Union of India (W.P.C.No.114/2014) **or any other court of law/ Tribunal..** Provide the copy of consent to operate valid prior to grant of earlier EC. Impacts due to drilling & blasting (elevated point sources), excavation (open pit source), stone crushing, screening (area) and transportation (line) operations should be calculated considering the total excavation quantity needs to be submitted.

Quantity of the waste generation for the life of the mine / lease period needs to be provided in the EIA Report.

List of schedule -1 species duly authenticated by the State Forest Department and proof of submission of the wildlife conservation plan to the Chief Wildlife Warden for the schedule -1 species present in the study area.

Copy of permission from the Central Ground Water Authority for working below ground water and for pumping of ground water needs to be submitted.

Justification for the Committee's observation made in Sl. No VI and VII above.

2.18 IA-J-11015/92/2017-IA-II (M) Khapa Padriwar Manganese Mine (Area: 7.088 ha.) of M/s Modern Mineral Industry at located at Village- Khapapadriwar, Tehsil-Sausar, District- Chhindwara, Madhya Pradesh. (Proposed Production 25,000 TPA max) [IA/MP/MIN/61769/2017]

The proposal of **M/s Modern Mineral Industry** is for the mining of the **Manganese** with proposed production capacity of **25,000 TPA** at Village- Khapapadriwar, Tehsil-Sausar, District- Chhindwara, Madhya Pradesh. The Mining lease area is **7.088 Ha** which falls in the Survey of India Topo-sheet No.55 K/15 (F44M15) and lies between Latitude: 21029'30.405" to 21029'33.661" Longitude: 78055'5.515" to 78055'8.778".

The proponent submitted that the Mining Lease area involves forest land (7.088 Ha) and prior approval from Central Govt. for grant of mining lease granted vide letter no. 5/94/2010 M.IV dated 21.04.2011. The letter of Intent was issued on 15.06.2016. The PP has already applied for Stage-1 Forest Clearance.

The proponent submitted that method of Mining is semi-mechanized open cast. The drilling and blasting will be done occasionally. The height of the bench will be 3 m and width of the bench will be 10 M. Total 2638 cum of top soil and 90489 cum of OB/waste will be generated during the conceptual period, which will be dumped in the dumping yard located within the mine site. Soil will be kept in 7.5m wide strip and used in the plantation. A retaining wall along with garland drain with some check dams will be erected at the foot of the dump to prevent and arrest any run-off during the rainy season.

PP submitted that about 10KLD water will be required for sprinkling, plantation and drinking purpose. About 200 Liter Diesel per day will be required for mining equipment. The project cost is about Rs. 50 Lac and it will provide direct employment to 17 persons.

The project proposal was considered in the EAC meeting held during 23-24th October, 2017 for consideration of the ToR. During the meeting after the detailed discussion the PP submitted that they want to re-plan the proposal and requested the committee to allow them to **withdraw** the proposal. The Committee therefore **deferred the proposal**.

**2.19 Madkasur Manganese Ore Mine, at proposed production of 5850 TPA, spread in an area of 10.00 ha., located at Village - Madkasur, Tahsil – Bichwa, District – Chhindwara, M.P by M/s Modern Minerals Industry.
IA/MP/MIN/69680/2017**

Online Ref: IA/MP/MIN/61769/2017

The proposal of **M/s Modern Mineral Industry** is for the mining of the **Manganese**

with proposed production capacity of **5850 TPA** at Village- Madkasur, Tahsil – Bichwa, District – Chhindwara, Madhya Pradesh. The Mining lease area is **10.0 Ha** which falls in the Survey of India Topo-sheet No.55 K/14 and 55O/2 and lies between Latitude- 21⁰ 38' 2.167" N" to 21⁰ 38' 8.28" N Longitude: 78⁰ 59' 53.08" E to 79⁰ 00' 15.6" E.

2. The proponent submitted that the Mining Lease area involves forest land (10.00 Ha) and prior approval from Central Govt. for grant of mining lease granted vide letter no. 5/95/2010 M.IV dated 08.07.2011. The letter of Intent was issued on 15.06.2016. The PP has already applied for Stage-1 Forest Clearance.

3. The proponent submitted that method of Mining is semi-mechanized open cast with drilling and blasting. The height of the bench will be 1.5 m and width of the bench will be 1.5 M. Total 1487 cum of top soil and 12121 cum of OB/waste will be generated during the conceptual period, which will be dumped in the dumping yard located within the mine site. A retaining wall along with garland drain with some check dams will be erected at the foot of the dump to prevent and arrest any run-off during the rainy season.

4. PP submitted that about 20 KLD water will be required for sprinkling, plantation and drinking purpose. About 120 Liters of Diesel per day will be required for mining equipment. The project cost is about Rs. 200 Lakh and it will provide direct employment to 43 persons.

5. The project proposal was considered in the EAC meeting held during 23-24th October, 2017 for consideration of the ToR. During the meeting after the detailed discussion the PP submitted that they want to re-plan the proposal and requested the committee to allow them to **withdraw** the proposal. The Committee therefore **deferred the proposal**.

2.20 IA-J-11015/94/2017-IA-II(M): River Sand Quarry At Tawa River, at Proposed Capacity-1,68,880 cu.mtr/ Year, Lease Area: 10.555 Ha. located at Vill.-Raipur, Tehsil-Hoshangabad District- Hoshangabad (M.P) by M/s Shivam Enterprises-[IA/MP/MIN/69594/2017]

The proposal of **M/s Shivam Enterprises** is for mining of 1, 68,880 cum of Sand from mine lease area of 10.555 Ha located at Village- Raipur, Tehsil- Hoshangabad District- Hoshangabad (M.P). The Latitude and longitude of the ML are (A) 22°47'41.733"N 77°47'42.412"E (B) 22°47'41.691"N 77°47'33.495"E (C) 22°47'38.440"N 77°47'31.713"E (D) 22°47'35.567"N 77°47'29.577"E (E) 22°47'31.726"N 77°47'34.446"E (F) 22°47'28.332"N 77°47'34.446"E (G) 22°47'34.943"N 77°47'38.664"E. The PP submitted that mining lease was registered on 30.03.2017, the Mining plan was approved on 04.05.2016 and the Environmental Clearance was granted by SEIAA Madhya Pradesh on 02.12.2016.

The Hon'ble NGT vide its order 29.08.2017 set aside the EC granted to the proponent in the 143th meeting of MPSEIAA held on 03.03.2017 as the coordinate which was submitted by the project proponent before MPSEIAA for grant of EC were as follows:

(A) 22°47'38.55"N 77°47'24.69"E ; (B) 22°47'39.54"N 77°47'33.88"E
(C) 22°47'47.65"N 77°47'37.10"E ; (D) 22°47'50.29"N 77°47'29.83"E

Whereas the actual coordinates as per the reply submitted by the Mining Corporation are as

follows:

- (A) 22°47'41.733"N 77°47'42.412"E;(B) 22°47'41.691"N 77°47'33.495"E
(C) 22°47'38.440"N 77°47'31.713"E;(D) 22°47'35.567"N 77°47'29.577"E
(E) 22°47'31.726"N 77°47'34.446"E;(F) 22°47'28.332"N 77°47'34.446"E
(G) 22°47'34.943"N 77°47'38.664"E.

The Hon'ble NGT was in agreement with the submission of the Learned Counsel for the appellant that matter needs to be re-examined and the EC granted on the coordinates which were submitted by the project proponent must be reviewed by the Competent Authority. As the **MPSEIAA is not** operational in the Madhya Pradesh the Hon'ble NGT directed the Ministry to take a decision on the fresh application.

The proposal was placed in the 23rd EAC Meeting held on 23-24th October, 2017 and the KML file submitted by the PP based on the **new coordinates** was verified on Google earth and committee observed that with the new coordinates the shape and area of the Mining lease are not matching with the Geo-Reference Map prepared by Mining Corporation. The mining lease area with new coordinates is coming less than 10.555 Ha. The Committee was of the view that the **new coordinates** need to be re-verified by the Mining Corporation. The Member Secretary informed the Committee that the MPSEIAA is now operational in the Madhya Pradesh. Based on information submitted and presentation made the Committee was of the view that as the project is 'B2' Category and MPSIEAA is now operational, the **proposal should be transferred** to MPSIEAA for consideration of EC and MPSEIAA should appraise the proposal on priority as per direction of the Hon'ble NGT. The PP was also agreed with the recommendation of the Committee.

2.21: J-11015/58/2017- IA.II (M) Pagara-Jhiriya Limestone Deposit Mine of M/s Dalmia Cement (Bharat) Ltd. for 2.41 Million TPA (ROM) capacity located near village - Pagra, Jhiriya Kothar, Jhiriya Bajpain & Jhiriya Koparihan, TehsilAmarpatan, District- Satna (Madhya Pradesh) in M.L. area of 395.965 Ha. – Re- Consideration of ToR-Reg [IA/MP/MIN/64735/2017]

The proposal submitted by M/s Dalmia Cement (Bharat) Ltd. is for seeking ToR for conducting EIA studies for Pagara-Jhiriya Limestone Deposit Mine of 2.41 Million TPA (ROM) in mine lease area of 395.965 Ha. The mine is located near village –Pagra, Jhiriya Kothar, Jhiriya Bajpain & Jhiriya Koparihan, Tehsil- Amarpatan, DistrictSatna (Madhya Pradesh). The lease area falls between latitudes of 24°26'41.5"N to 24°28'18.30"N and longitudes of 81°09'42.60"E to 81°12'27.60"E and is located on Survey of India Topo-sheet no. 63H/3. 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 considered for grant of ToR in EAC meeting held during June 28, 2017 wherein the Committee, based on the submissions of PP, noted that the project lease comprises of more than 90% agricultural land on which the population from nearby villages is dependent for their livelihood. The mining lease area includes 3 villages, over 350 houses and about 1500 population. The operation of mine in such an area shall not only involve loss of livelihood for villagers but shall also be hazardous for day-to-day life of villagers due to blasting, mechanized mining operations, transportation of mineral, generation of pollution etc. The Committee

concluded that the adverse social and environmental aspects of the project outweigh the economic benefits from the project. Hence, the Committee, after careful deliberations, rejected the proposal for grant of ToR.

The PP vide its letter dated 18.08.2017 and 21.08.2017 represented before the Competent Authority in the Ministry mentioning that it has already incurred significant expenditure on the project and many projects of similar nature have been granted ToR in the recent past. Further, Ministry vide its O.M. dated 29.08.2014 had prescribed specific mitigation measures to deal cases involving habitation related issues. Hence, one more opportunity may be given to explain the issues to EAC in light of the O.M. dated 29.08.2014. During the meeting, the PP submitted that it will adhere to all the conditions, as may be prescribed by EAC, for implementation of required environmental safeguards for protection of environment as well as safety of the inhabitants of the area. It also submitted that the project will not only help in the economic development of the area but also provide improved basic facilities related to sanitation, healthcare, infrastructure etc. The Committee noted that the proposal also includes installation of Crusher within the lease area whereas the details of the same are not furnished by the PP in the Form-1 as well as PFR.

The Committee deliberated on the submissions made by the PP w.r.t. mining in the area and observed that before considering mining proposal in such an area as per the provisions of the O.M. dated 29.08.2014, the PP is required to provide the following information:

- i. Plan and Sections (drawing) showing clear demarcation of the active mining area;
- ii. Provision of safety zone/ barriers from human habitation as per the provisions of the O.M. dated 29.08.2014;
- iii. Details of latest blasting techniques for mining operations,
- iv. Revised Mining plan showing active mining area and modified production capacity;
- v. Plan (drawing) of providing access to inhabitants of villages covered in M.L. area;
- vi. Broad contours of R&R plan proposed by the PP clearly stating number of families in habitated areas, compensation proposal, alternative land arrangements for the affected households etc.
- vii. Details of the Crusher proposed in the mine lease.

In view of the above, the proposal was deferred for grant of ToR pending above information from the PP.

The PP submitted the above information online and the proposal was considered in EAC Meeting held on 23-24th October, 2017. The committee noted that some mining has already been carried out in the Mining lease area and asked the Ministry to seek the clarification from the State Mines and Geology Department for the same. The Committee also observed that PP in its reply mentioned that “Mining Plan shall be revised once the proposed modification is accepted by MoEF&CC and EAC along with any further recommendations. Modified mining plan shall be accordingly prepared and submitted to IBM after approval of ToR based on the modified and approved mine plan EIA and EMP report shall be prepared”. Based on the document submitted and discussion held, the Committee **deferred** the proposal and was in view that the proposal may be considered after submission of the following:

1. Clarification from the State Mines and Geology Department that no mining has been carried out by the PP in the Mining lease area.
2. Revised Surface Geological Plan & section clearly showing the area to be mined as suggested during the meeting along with provision of safety zone/ barriers from human habitation.
3. Submit conceptual mining plan for the revised area.
4. In respect of each block PP should provide the area of the block, mineral reserve, grade of limestone, depth of mining etc.
5. Transportation route of the mineral from each block to the crusher.

2.22: -J-11015/227/2016-IA-II (M): Kawatha Manganese Deposit of M/s Rachna Belokar located at Kawatha village, Tehsil Saoner, District Nagpur, Maharashtra (26.67 ha. and 4900 TPA) [IA/MH/MIN/60128/2016]

The proposal of M/s Rachna Belokar located at Kawatha village, Tehsil Saoner, District Nagpur, Maharashtra is for the production of 4900 TPA of Manganese in a mine lease area of 26.67 ha. The mine lease is an existing non-operational Stone Quarry having area of 26.67 ha. and located at Kh No. 251, 253, 254, 255, 259, 27, 268, 269, 271, 272 in Kawatha Village, Tehsil Saoner, District Nagpur, Maharashtra.

The proponent submitted that now this is a new proposed Manganese mine having area of 26.67 Ha & is a Category 'A' project as per EIA Notification 2006 and its subsequent amendments as the inter-State boundary is within 5 Km. The lease area falls under Survey of India Topo-sheet no. 55K/15 and lies between Latitudes 21° 29' 57.810" N to 21° 29' 32.541" N & Longitudes 78° 53' 39.245" E to 78° 54' 5.703" E.

The proponent submitted that the Letter of Intent is issued by Government of Maharashtra vide letter no. MMN-0915/CN99/industry-9 dated 18 January 2016 and that the lease has been granted by the State Government of Maharashtra vide letter no. MMN-0915/CR99/industry-9 on 11 January 2017 subject to the condition that the lease is to be executed within 3 months.

The proponent submitted that the prospecting licence for Manganese over an area of 26.67 ha. had been granted to the applicant on 22-09-2008 for a period of 2 years. The said prospecting license was executed with the Collector, Nagpur on behalf of the Govt. of Maharashtra on 15th January 2009 and valid up to 14th January 2011. The proponent also submitted that after receiving Letter of Intent dated 18 Jan 2016 against Mining lease application dated 20 Jan 2011, from Gov. of Maharashtra vide number MMN-0915/CN99/industry-9, Directorate of Geology & Mining, Nagpur has approved the mining plan vide Letter No. NGP/MN/MPW-1173/NGP-2016 dt.03.08.16.

The proponent submitted that it is proposed to mine manganese from the mine by opencast method of mining. The mining activity will be carried out within mine lease area and no mineral processing is proposed as the mined out Manganese mineral after excavation will be

dispatched to nearby crusher for screening and sizing. There is no residential area within the mine lease area and no residential structure is proposed as the required manpower will be employed from nearby villages having their own accommodation. Green Belt Plantation over an area of 0.2850 ha. has been proposed (at end of 5 year period) with suitable native species along the safety zone & on vacant unused land within mining lease area progressively with mine operation till mine closure.

The project proposal was considered during the EAC meeting held during 20-21 February 2017. During the presentation, based on the information provided by the proponent the Committee noted that the existing approved mining plan is only for extraction of 2732 TPA (ROM) and the proponent has requested a capacity of 4900 TPA (ROM). The Committee also noted that the proponent had not completely explored the mineral reserves and only 30% of the land mentioned in the lease had been acquired. The Committee also noted that even though the proponent had submitted vide letter 20.02.2017 that the entire lease was private revenue land, and as per forest records the mine lease is 10 Km away from any eco-sensitive zone, the DSS showed that part of protected forest was involved in the mine lease area and Pench Tiger Reserve was within 10 KM radius of the mine lease area.

The proposal was considered in the EAC Meeting held on 20-21, February, 2017. Based on the information furnished and deliberation held the committee deferred the proposal and was of the view that the proposal can be considered after the proponent submits the following:

- i) A revised mine plan duly approved by the competent authority for 4900 TPA (ROM) based on complete exploration of the mineable minerals available in the mine lease area.
- ii) A complete executed lease for the entire area of 26.67 ha.
- iii) A certificate from the State Forest Department that no forest land is involved in the mine lease area.
- iv) A certificate from the State Government regarding distance of Pench Tiger Reserve from the mine lease area and take steps for NBWL clearance if it is within 10 Km of Pench Tiger Reserve

The proponent submitted the above information online and it has observed that PP did not revise the mining plan for 4900 TPA rather PP reduced the production capacity from 4900 TPA to 2732 TPA by submitting the revised Form-1. PP submitted the executed lease deed, a letter issued by the Nagpur Forest Sub-division office confirming that the Khasra number 251,253,255,259,267,268,269,271 and 272 do not fall under the forest and the distance of the wildlife sanctuary is 12 Km from the mining lease.

The proposal was considered in the EAC meeting held on 23-24th Oct, 2017. Based on the discussion held and document submitted by the proponent the committee **recommended** the proposal for grant of standard ToR as per Annexure-1 for a production capacity of 2732 TPA (ROM) subject to submission of English conversion of the letters issued by the Forest Department, Nagpur, letter issued by Thasildar and letter issued by the Land Record Department.

2.23-Cement plant of M/s Ramco Cements Ltd. (775.57 ha.) capacity of 3.15 Million TPA

Clinker & 2.0 Million TPA (MTPA) of cement at Kalavatala Village, Kolimigundla Mandal, Kurnool District, Andhra Pradesh- Consideration of ToR- [IA/AP/MIN/69990/2017]

The proposal of M/s The Ramco Cements Limited is for mining of limestone (1.5 MTPA) from Nayanapalli Limestone mine (775.57 Ha) located at Villages, Kolimigundla Mandal, Kurnool District, Andhra Pradesh. The Mining lease falls under Survey of India Topo Sheet No 57 I/4 and between Latitude 15°04'51.2" N - 15°06'44.4" N and longitude 78°03'35.0" E - 78°06'23.7" E.

The proponent submitted that the mine lease area is spread over an area of 775.57 Ha out of which 592.56 ha. is patta land and 183.01 Ha is Govt. land under the jurisdiction of Kolimigundla and Petnikota Villages, Kolimigundla Mandal, Kurnool District, Andhra Pradesh. The Industries & Commerce Department, Andhra Pradesh G.O. MS No. 138 dated 15.02.2000, the same has been extended vide Memo No. 576/M.III (1) /2015 dated 16.10.2015. The GO was further extended vide Memo No. 5002/M.III (1) /2017 dated 17.07.2017 (copy submitted to MoEF&CC) for a period of three years from regarding the validity of 4 Nos. of Mining leases. The validity of the G.O. dated 17.07.2017 is till 16.07.2020.

The proponent submitted that the mine has about 89.70 Million Tonnes of mineable reserves (approx.) which will last for about 63 years with proposed production capacity of 1.5 Million Tonnes Per Annum (MTPA) as the proposed total production in first five years is 3.2 Million Tonnes only. The mine operation will be by Opencast Mechanized method of mining. The limestone produced will be directly transported to the crusher located at Plant site. Hence a separate area for stacking of the limestone is not required. The soil generated during the course of mining will be transported to temporary dump yards. This material will ultimately be utilized for back filling once the entire mineral is mined out. It is not possible to refill the entire mined out area, hence a part of the area will be retained as water reservoir for future use and also as part of landscape beautification.

It was mentioned by the proponent that the water requirement for the proposed mine is about 100 m³/day for dust suppression, plantation and domestic purposes. This requirement will be supplied by existing pits of the other mines of the group and rain water collected in the mine pit will be used. There is no wildlife sanctuary, national park, Tiger Reserve, Elephant Corridor and eco-sensitive area within the 10 km radius of the project site. The capital Investment Cost for environmental management is estimated as Rs. 1.075 Cr. The total project cost will be 11.0 Cr. The total employment potential is 60 persons (direct and indirect).

The project proposal was considered in the EAC meeting held during 23-24th October 2017 for consideration of ToR. Based on the KML file submitted by the proponent, the committee noticed that land not owned by the PP is not properly demarcated. Committee after detailed deliberation **recommended** the proposal for grant of standard ToR as per Annexure-1 subject to submission of revised KML file and map clearly showing the Mining lease area and land not owned by PP.

2.24-J-11015/96/2017-IA.II(M) Cement plant of M/s Ramco Cements Ltd (255.00ha.) capacity of 3.15 Million TPA of Clinker& 2.0 Million TPA of Cement at Kalvatala Village, Kolimigundla Mandal, Kurnool Dist, Andhra Pradesh.- Consideration for ToR-[IA/AP/MIN/69982/2017]

The proposal of M/s The Ramco Cements Limited is for mining of limestone (1.0 MTPA) from Kolimigundla Limestone Mine(255.0 Ha) located at Villages, KolimigundlaMandal, Kurnool District, Andhra Pradesh.The Mining lease fall under Survey of India TopoSheet No 57/I/4 and between Latitude 15°03'17.8" N - 15°04'17.6" N and longitude 78°06'18.1" E - 78°08'01.0" E.

The proponent submitted that the mine lease area is spread over an area of 255.0 Ha out of which 238.19 ha. is private patta land and 16.18Ha is Govt. land Kolimigundla, Itikyala&Kalvatala Villages, Kolimigundla Mandal, Kurnool District, Andhra Pradesh. The Industries & Commerce Department, Andhra Pradesh G.O. MS No. 138 dated 15.02.2000, the same has been extended vide Memo No. 576/M.III (1) /2015 dated 16.10.2015. The GO was further extended vide Memo No. 5002/M.III (1) /2017 dated 17.07.2017 (copy submitted to MoEF&CC) for a period of three years from regarding the validity of 4 Nos. of Mining leases. The validity of the G.O. dated 17.07.2017 is till 16.07.2020.

The proponent submitted that the mine has about 35.44 Million Tonnes of mineable reserves (approx.) which will last for about 38 years with proposed production capacity of 1.0 Million Tonnes Per Annum (MTPA) as the proposed total production in first five years is 2.5 Million Tonnes only. The mine operation will be by Opencast Mechanized method of mining. The limestone produced will be directly transported to the crusher located at Plant site. Hence a separate area for stacking of the limestone is not required. The soil generated during the course of mining will be transported to temporary dump yards. This material will ultimately be utilized for back filling once the entire mineral is mined out. It is not possible to refill the entire mined out area, hence a part of the area will be retained as water reservoir for future use and also as part of landscape beautification.

It was mentioned by the proponent that the water requirement for the proposed mine is about 90 m³/day for dust suppression, plantation and domestic purposes. This requirement will be initially met from Ground water and will be used for the purpose of domestic, dust suppression and afforestation in mines. Later the rain water collected in the mine pit will be used. There is no wildlife sanctuary, national park, Tiger Reserve, Elephant Corridor and eco-sensitive area within the 10 km radius of the project site. The capital Investment Cost for environmental management is estimated as Rs. 0.825 Cr. The total project cost will be 6.73 Cr. The total employment potential is for 42 persons (direct and indirect).

The project proposal was considered in the EAC meeting held during 23-24th October 2017 for consideration of ToR. Based on discussions held and information submitted by the PP the Committee **recommended** the proposal for grant of standard ToR as per Annexure-1.

2.25- J-11011/513/2007-IA II (M): Coromandel Limestone Mine by M/S The India Cements Limited to increase of production from 2.0 MTPA to 5.0 MTPA Area: 602.137 Ha located at Chilamkur village in Yerraguntla Mandal, Y.S.R. Kadapa district of Andhra Pradesh-Consideration for ToR-[IA/AP/MIN/69929/2017]

The proposal of M/s **The India Cements Limited** is for increase in production capacity of **Coromandel Limestone Mine** from 2.0 MTPA to 5.0 MTPA. The Mining lease area is 602.137 Ha and mine is located at Chilamkur village in Yerraguntla Mandal, Y.S.R. Kadapa district of Andhra Pradesh.

The proposal was considered in the 23rd EAC Meeting held on 23-24th October, 2017. The Committee **deferred** the proposal as the PP did not attend the meeting.

The meeting ended with vote of thanks to the Chair.

Standard Terms of Reference (TOR) for Mining Project

- 1) Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
- 2) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
- 4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 5) Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- 6) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- 7) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the 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 PM₁₀, particularly for free silica, should be given.
- 23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
- 24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- 25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
- 26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 27) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
- 28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
- 29) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology

- should be 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 4th August, 2009, which are available on the website of this Ministry, should be followed.
 - g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
 - h) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
 - i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

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Standardization of EC conditions in Non-coal mining sector

A. Specific conditions

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

B. Standard conditions

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

- 10). Mining shall be carried out as per the provisions outlined in mining plan approved by Indian Bureau of Mines (IBM)/State Mines and Geology Department as well as by abiding to the guidelines of Directorate General Mines Safety(DGMS).
- 11). The lands which are not owned by Proponent, mining will be carried out only after obtaining the consents from all the concerned land owners as per the provisions of the Mineral Concession Rules, 1960 and MMDR Act,1957.
- 12). Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment, Forest and Climate Change its Regional Office.
- 13). Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of anti-snake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- 14). The critical parameters as per the Notification 2009 such as PM10, PM2.5, NOX, and Sox etc. in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- 15). The Proponent shall install online Ambient Air Quality Monitoring System and there should be system for display of digital AAQ data within 03 months at least at three locations as per wind direction. Online provisions of pH and turbidity meters at discharge points of STP and ETP and also at water storage ponds in the mining area may be made. Project Proponent should display the result digitally in front of the main Gate of the mine site.
- 16). Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as 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 watertable.
- 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 testingcentres.
- 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 suchroads.
- 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/nighthours.

- 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 bornedust.
- 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 beensured.
- 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 monthlybasis.
- 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 WaterBoard.
- 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 ofdozer/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 45⁰. The OB dumps shouldbe 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 monthlybasis.
- 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 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.
- 39). Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
- 40). A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- 41). The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office.
- 42). The project authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- 43). The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest and Climate Change, its Regional Office, Central Pollution Control Board and State Pollution Control Board.
- 44). The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- 45). A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.
- 46). State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.

- 47). The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment, Forest and Climate Change at \equiv a copy of the same should be forwarded to the Regional Office.

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

Sr. No.	Name and address	Designation	Sine 23-10-17	Sine 24-10-17
1.	Dr. Ajai Kumar B-1302, BestechParkView Spa, Sector-47, Gurgaon, Haryana	Chairman	<i>Ajai Kumar</i>	<i>Ajai Kumar</i>
2.	Shri B Ramesh Kumar H-No. 6-1-134/6, Balram Compound, Padmarao Nagar, Secundrabad- 500025, Andhra Pradesh	Member	<i>B Ramesh Kumar</i> 23/10/17	<i>B Ramesh Kumar</i> 24/10/17
3.	Prof. Dr. K.S. Rana Maharana Manzil, 18, Dholpur House, (D.M. Compound), M.G. Road, Agra-1, Uttar Pradesh - 282001	Member	<i>K.S. Rana</i>	<i>K.S. Rana</i>
4.	Prof. A. K. Bhatnagar, JA/4B, Ashok Vihar-I, Delhi - 110052	Member	<i>A. K. Bhatnagar</i>	<i>A. K. Bhatnagar</i>
5.	Dr. N. C. Karmakar Department of Mining Engineering, Indian Institute of Technology (BHU), Varanasi - 221 005, Uttar Pradesh	Member		
6.	Dr. Hemant S. Sahasrabudhe "Utkarsha", LB-53, Housing Board Colony, Laxminagar, Nagpur-440022	Member		
7.	Prof. S. Ramakrishna Rao 50-120-9/1, Tulasi Mani Regency North Extension, Seethammadhara, Visakhapatnam - 530013 Andhra Pradesh.	Member	<i>S. Ramakrishna Rao</i> 23/10	<i>S. Ramakrishna Rao</i> 24/10
8.	Dr. Himanshu Pathak, Professor, Center for Environment Science and Climate Resilient Agriculture, Indian Agricultural Research Institute, New Delhi 110 012	Member		
9.	Dr. AL. Ramanathan Professor, School of Environmental Sciences, Jawaharlal Nehru University, New Mehrauli Road, New Delhi- 110067	Member		
10.	Dr. Tushar Kant Joshi, Laxmikant Niwas, Salan Gaon, Bhagwantpur, Dehradun-248009, Uttarakhand.	Member	<i>Tushar Kant Joshi</i>	<i>Tushar Kant Joshi</i>
1.	Shri Santosh Gupta, Flat No. 405, Block -B, Gaur Green Vista, Nyaykhand -1, Indrapuram, Ghaziabad-201014	Member	<i>Santosh Gupta</i>	<i>Santosh Gupta</i>
2.	Representative of Ministry of Mines Shri. Pushpender Gaur, Dy. Controller of Mines, Ministry of Mines, Shastri Bhawan New Delhi-110001.	Member	<i>Pushpender Gaur</i>	<i>Pushpender Gaur</i>
3.	Representative of Indian Meteorological Mr. V.K. Soni, Scientist "E", (Meteorology/Air Pollution), 609, SatMet Building, Mausam Bhawan, Indian Meteorological Department, Lodhi Road, New Delhi-110003	Member		
4.	Representative of Wildlife Institute of India, Dr. (Ms.) Asha Rajvanshi, Wildlife Institute of India, Chandrabani, Dehradun-248001	Member		
5.	Director IA-Division (Non Coal Mining) Vayu-305, Indira Paryavaran Bhawan, Ministry of Environment, Forest & CC, Jorbagh Road, Lodhi Road, New Delhi-110003	Member Secretary	<i>Director</i> 23/10/17	<i>Director</i> 24/10/17

Agenda for 23rd EAC Meeting to be held during on 23rd OCTOBER - 24th OCTOBER, 2017