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

SUMMARY RECORD OF 20th MEETING OF THE RECONSTITUTED COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF MINING PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The twentieth 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 on **July 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 19thEAC Meeting:

The Minutes of the 19th Meeting of EAC held during June 28th, 2017 were circulated.

2.1. Z-11013/16/2017-IA-II (M). Comments of the EAC in including an additional ToR condition with regard to S.O.141(E) dt.15/01/2016 making DSR mandatory for granting ECs for Minor Mineral and other related issues.

The following proposals are placed by the Ministry before the EAC for deliberation and consideration:

1. Inclusion of an additional ToR condition with regard to S.O.141(E) dt.15/01/2016 making DSR mandatory for granting ECs for Minor Mineral - The committee after due deliberation agreed that a ToR condition may be added for minor minerals that the EIA or EMP Report should cover the compliance with the provisions of S.O. 141(E) dated 15th January 2016 which has made District Survey report mandatory for mining of minor minerals. The committee noted that many projects are submitted to the EAC without complying with the submission of DSR and this leads to increase in EDS. If it is made a mandatory ToR condition, then the proponent will ensure that DSR is

- submitted when the project is appraised for the grant of EC. The committee was of the opinion that the preparation of District Survey Report for Minor Minerals should be strictly carried out as per the prescribed procedure given in Appendix X of S.O. 141(E) dated 15th January 2016.
- 2. Taking Cognizance of Authenticity of certificates produced by PP The committee noted that certificates issued by various government offices which are submitted by the project proponents as ToR compliance to certify that no forest land was within the mine lease area or for the schedule-I species found in the mine lease area or for other mine leases within 500 mts of the said mine lease etc., it was noticed that the certificates were not typed on proper letter heads and those were not addressed to the Ministry of Environment, Forest and Climate Change. In view of the above, the committee agreed that all certificates submitted by the project proponents should be addressed to the Ministry of Environment, Forest and Climate Change by an officer not below the rank of DFO and the same should be given on a letter heads, with a letter number or dispatch number.
- 3. **Taking cognizance of legal validity of firms/ PPs –** The Committee deliberated and agreed with the recommendation that PP may submit Certificate of Incorporation (CIN) as a part of ToR application to enable the Ministry to ascertain the legal validity of the entity.
- 2.2. J-11015/14/2016-IA.II(M) Limestone Mine of M/s UltraTech Cement with production capacity of 2.074 Million TPA located at Villages-Kalsar, Dayal & Kotda, Taluka-Mahuva, District-Bhavnagar, State- Gujarat (632.0064 ha)- (Consultant: JM EnviroNet Pvt. Ltd)- Re-Consideration of EC.

The proposal of M/s. Ultra Tech Cement Limited is for proposed Limestone Mine with production capacity of 2.074 Million TPA in the Mining Lease Area of 670.4826 ha. The mine is located at Village(s) - Kalsar, Dayal & Kotda, Taluka- Mahuva, District—Bhavnagar (Gujarat). The latitude and longitude of the mine site falls between 21° 7'22.266"N to 21° 9'4.893"N and 71°54'37.446"E to 71°58'53.926"E on Survey of India Toposheet No. 41 O/16 (Restricted). The Project is located in Seismic zone-III. The TOR was issued by MoEFCC vide letter no J-11015/14/2016-IA. II (M) dated 08th February, 2016.

The Project Proponent submitted that the mine lease area is 670.4826 ha comprising of 62.81 ha Government land and 607.6726 ha Private agricultural land. The project proponent submitted that there is no forest land falls within the mining lease

area and submitted a letter from the State Forest Department No.: A/JMN/T. 12/2271-72/ 2016-17 dated 12/09/2016. Letter of Intent (LOI) for the grant of Mining Lease was issued by the Industries & Mines Department, Government of Gujarat vide its letter no. MCR- 1593-(12)-1377- CHH-1 dated 04.06.2001 in favour of Grasim Industries Ltd. Later on, Grasim Industries Ltd. merged with M/s UltraTech Cement Ltd. LOI in the name of M/s UltraTech Cement Ltd. has been granted by State Government of Gujarat vide letter no. MCR/102012/1248/CHH dated 09.07.2015. Mining Plan & Progressive Mine Closure Plan for the proposed limestone mine (ML area 670.4826 Ha.) had been approved by Controller of Mines (North), IBM, vide letter no- 584(23)(309)/2004UDP dated 14.06.2004.

The Project Proponent reported that about 276717 sq. m area (27.6717 ha) of the proposed project site (M.L Area: 670.4826) falls within CRZ-III Zone as per CRZ report and map prepared by Institute of Remote Sensing, Anna University, Chennai (MoEFCC approved agency). The composite block covering an area of 38.4762 ha will be excluded from total ML area of 670.4826 ha during Mining Lease execution as per Condition no. IV of the LOI dated 04.06.2011 & 09.07.2015 granted for the mining lease. The proponent submitted that mining operations will be carried out by non-conventional opencast mechanized method without any drilling and blasting. Surface Miner will be used for mining and limestone will be transported to the proposed cement plant located at District Bhavnagar and existing cement plants located at District Amreli (Gujarat) of UTCL through existing roads. Total minable reserves are 63.58 Million Tones & Life of Mine is ~ 32 years. Ground water table will not be intersected due to mining operations. Salinity ingress due to the project is not envisaged. Isotopic analysis of water samples has been carried out by Nuclear Hydrology Laboratory of the National Institute of Hydrology, Roorkee. Total water requirement for the project is 100 KLD which will be sourced from Narmada Water Supply & Mine sump (as and when developed). Mutual agreement for purchase of water between UTCL & and Mahuva Nagar Seva Sadan (Narmada Water Supply authority) has been done.

The Project Proponent reported that there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves located within 10 km radius of the proposed Mining Lease boundary and submitted a letter from the State Forest Department No.: A/JMN/T. 12/2271-72/ 2016-17 dated 12/09/2016. There is one Reserve Forest (Methala RF) within 10 km radius study area. List of flora & fauna for core and buffer zone & location map has been duly authenticated by Forest Department vide letter no. A/JMN/T. 12/2271-72/ 2016-17 dated 12.09.2016. Conservation Plan for five Schedule-I species namely Chinkara, Lion, Indian Wolf, Leopard & Peafowl, found in the study area has been prepared. The

proponent submitted that as per BNHS, there are no Important Bird Area (IBA) falling within the study area. Nearest IBA i.e. Saltpans of Bhavnagar is 64 km away from the lease area. However, protection plan for three migratory bird species i.e. Common Teal (Anas crecca), Rosy starling (Pastor roseus) & Marsh sandpiper (Tringa stagnatilis) has been prepared with budgetary allocation of Rs. 38 lacs for next 10 years. Baseline data was collected for the Winter Season (December, 2015 to February, 2016). The analytical results of samples collected for all parameters were found within permissible limits.

Public Hearing for the proposed project was conducted on 15th June, 2016 on the proposed mining site at villages -Kalsar, Dayal & Kotda, Taluka- Mahuva, District-Bhavnagar, Gujarat. The Public Hearing was presided over by Shri Aayush Oak, District Magistrate & Collector, Bhavnagar. The advertisement was given on 13th May, 2016 in Sandesh & The Indian Express. The issues raised during Public Hearing were also considered and discussed during the meeting which inter-alia, included impact of project on ecology & biodiversity of the area in terms of mangroves, migratory route of birds, medicinal plants, etc. impact on landuse in fertility of soil, salinity ingress, project falling in CRZ, employment, impact on proposed Methala Bandhara Project, drinking water, name change from Grasim to UTCL, solid waste management, etc. About 1925 representations were received from public during the public hearing for the proposed mining project which included the following common issues: name change in LOI from Grasim to UTCL, the impact of project on the proposed Methala Bandhara Project, impact of project on migratory route of birds, management plan for wild animals in the study area, project falling in CRZ, conducting of Public Hearing for two projects on the same day etc. The proponent submitted that action plan with budgetary allocation against issues raised in public hearing was prepared and submitted.

Total cost of the Project is Rs. 60 crores. Capital Cost for Environmental Protection Measures is Rs. 1.00 crore /- & Recurring cost is Rs. 30 lacs / annum. Expenditure proposed towards CSR activities is Rs. 125 Lacs for next five years. Project Proponent reported that there is no court case/litigation pending against the project. A total of 120 persons will be employed in the mine.

The proposal was considered in the EAC meeting held during 24-25 October 2016. The Committee deliberated at length the information submitted by PP and deferred the proposal and may be considered further after submission of the following information:- (i) PP shall provide the details w.r.t project affected people in respect of purchase of alternate agricultural land at the lower cost in and around nearby villages for livelihood as part of R&R; (ii) Details of Trees species tolerant to the climate

conditions and preferably fruit tree species to be used in the greenbelt plantation need to be provided; (iii) Details of methodology for Mercury pollution survey need to be provided; (iv) Details of methodology for Tuberculosis surveillance in the population need to be provided; and (v) Details regarding adequate routes in the mine area for local people to access the sea needs to be provided.

The PP submitted the information online and the proposal was re-considered in the EAC meeting held during 23-25 November 2016. The committee deferred the proposal as the Ministry has received written complaints from the local people of Bhavnagar forwarded by the Ex MLA Dr. Kanubhai V. Kalsariya. In the complaint it is mentioned that in three different public hearing in two days the company has made demand for 1714 hectares of land (851 ha., 670 ha. and 193 ha. respectively in different villages). Out of the 1714 hectares, 1650 hectares is private fertile land of farmers. Only 63 hectares is Govt. waste land and others. It is also mentioned that not a single person from the whole region or outside has favored the proposal of the company and that video and other evidences have been conveyed to the Gujarat Pollution Control Board.

Two projects (out of three) referred to in the complaint were approved by the EAC earlier. The committee was of the opinion that the present proposal can be considered after a view is taken by the Ministry on the complaints received.

As suggested by the EAC, the Ministry addressed letter to the Chairman, Gujarat Pollution Control Board, the Commissioner of Geology & Mining, Gujarat, the District Collector, Bhavnagar, Gujarat and the Additional Principal Chief Conservator of Forests, Ministry of Environment, Forest and Climate Change, Regional Office Bhopal requesting them to submit a report on the complaints received. The District Collector, Bhavnagar, Gujarat has sent a reply to the Ministry letter. In the letter he mentioned that separate Public Hearings for the three mining projects of Ultra tech Cement Ltd were held during 15.06.2016 and 16.06.2016 at the three proposed project sites. All the written representation received till the date of Public Hearing and during the Public Hearing, oral representations (with translation from vernacular language to English), the responses given by the project proponents for each representation and videography of the entire Public Hearing have been forwarded to the Ministry of Environment Forest and Climate Change, New Delhi. The Collector has mentioned that since the entire Public Hearing was carried out as per the procedure laid down in the Appendix - IV of the EIA Notification, 2006 and the points raised in the letters of the complainant are already included in the Public Hearing Proceedings as well as the EIA submitted by the project proponent, the same may be considered for taking appropriate decision and

further necessary action. The District Collector also enclosed a letter No. GPCB/RO/BHV-17961 00004 12016. Dt: 01.01.1017 from Gujarat Pollution Control Board in which the same opinion is given.

In view of the above the proposal was considered in the EAC meeting held during 30-31 January 2017. The Committee noted that the proposal was earlier considered for the production of 2.074 Million TPA (ROM) in a mine lease area of 670.4826 ha. However, as per the lease granted by the Government of Gujarat, Industries & Mines Department, Gandhinagar vide order number MCR-1593-(12)-1377-Part-CHH dated 08.01.2017 and the lease deed executed on 11.01.2017 the mine lease area has been reduced to 632.0064 ha excluding composite block of 38.4762 ha having 27.6717 ha of CRZ – III zone. The committee noted that as the mine lease area has been reduced without reducing production capacity, the mining plan which was approved for an area of 670.4826 ha, needs to be changed to the reduced area of 632.0064 ha. excluding composite block of 38.4762 ha. having 27.6717 ha of CRZ - III zone. In view of the above, after due deliberation the committee deferred the proposal and was of the opinion that the proposal can be re-considered after the project proponent submits the revised mining plan duly approved by the Deptt. of Mines and Geology for the reduced area of 632.0064 ha. excluding composite block of 38.4762 ha. having 27.6717 ha of CRZ – III zone.

The project proponent submitted online on 22nd June 2017 vide letter dated 12th June 2017 that the Revised Mining Plan duly approved for the reduced area of 632.0064 ha. excluding composite block of 38.4762 ha having 27.6717 ha of CRZ III zone was approved by the IBM vide letter 684(4)(1)/MP 26/2017-GNR dated 01/06/2017. In view of the above, the proposal was considered in the EAC meeting held during 24th July 2017. The Committee examined the information submitted by the project proponent and deliberated whether fresh public hearing is required or not as the mine plan has been changed after the public hearing was conducted and the area has been reduced without reducing the production. After due deliberation the committee was of the opinion that as the area which was reduced was about 5% of the total land involved, fresh public hearing was not needed. Based on the information furnished by the project proponent after due deliberation the committee recommended the proposal for grant of Environmental Clearance for mining of 2.074 Million TPA of limestone in a mine lease area of 632.0064 ha subject to the following conditions.

i. The PP shall ensure the rehabilitation of 147 families and provide a house with a total expenditure of Rs. 12.25 Crores.

- ii. The PP shall help interested PAFs for purchase of alternate agricultural land at the lower cost in and around nearby villages for livelihood as part of R&R.
- iii. Trees species tolerant to the climate conditions and preferably fruit tree species to be used in the greenbelt plantation.
- iv. Adequate routes in the mine area for local people to access the sea, needs to be provided.
- 2.3 Devbhoomi Soapstone Mines of M/s Devbhoomi Mines in 17.824 ha. with production capacity of 25000 TPA (ROM) situated in Village Devli, Tehsil Kanda, District Bageshwar in the Uttarakhand-re-consideration of Environment Clearance-reg. [IA/UK/MIN/62697/2017]

The proposed project is for the mining of Soapstone by M/s Devbhoomi Mines in 17.824 ha situated near Village - Devli, Tehsil - Kanda, District - Bageshwar in the Uttarakhand State. The mine lease area lies in Latitude 29°50′0.24" N to 29°50′25.08"N and Longitude 79°51′5.4"E to 79°51′23.40" E. The proposed Soapstone mining project is category "B2" as per EIA Notification dated 14th September 2006 and its subsequent amendments later by MoEFCC, New Delhi. As the SEIAA, Uttarakhand has not been formed, the proponent has applied to MoEF&CC for the grant of EC.

The proponent submitted that the letter of intent which was issued by State Govt. vide letter no. 1093/VII-I/10- Soapstone/2016/2011 dated 14.07.2016 under MCR 1960 rule 24 (A)6. Scheme of mining & PMCP under Rule 22 (4) of MCR 1960 & 23 (B) of MCDR, 1988 was approved vide letter No.-12- Mu.Kha/ Mining Plan-54/Bageshwar Bhu/ Khani/E/2016-17 dated 09/11/2016 for the period of five years. The proponent submitted that the Mining Lease area falls in non-forest land. The lease area comprises of uneven agricultural land only. The lease area falls within the survey of India Toposheet No. 53 O/13. The Project is located in seismic zone V.

The proponent submitted that 25,000 Tonnes/Annum (ROM) of recoverable quantities of Soapstone will be produced. Life of the mine with the proposed production will be about 50 years. In this area that the total mineral occurs along the slope in entire 17.824 Ha area and upto depth of 18 m and accordingly total Geological reserves in the entire ML area 31,66,917.18 MT. The ultimate pit depth by the end of lease period will 18.0 m. At Post mining stage of proposed project, the existing land shall be reclaimed to its original stage by proper restoration & rehabilitation. During first five years plantation shall be undertaken over benap land outside the mine lease

area. 234 Saplings will be planted during five years.

The proponent submitted that the mining will be done semi-mechanized way in open cast method in quite a systematic mariner by forming 6m high benches. The top soil and inter-burden to be scrapped with the help of JCB machine, dozer, shovels, pickaxe, spade & crowbar and will be stacked. Mules will be utilized for transporting of Soapstone. The proponent submitted that there will be little waste water generation from mining activities. Domestic effluent will be disposed through eco-friendly Mobile Toilet. The mining project shall provide direct employment to about 56 persons. The total project cost is 17 Lakhs.

The project proposal was considered in the EAC meeting held during 20-21 March 2017 for consideration of EC. The committee noted that the KML file submitted by the proponent was skewed and was incorrect. After due deliberation the committee deferred the proposal and was of the opinion the proposal can be reconsidered after the proponent submits the following:- i) A revised KML file. ii) District Survey Report of Bageshwar District for the Soapstone minor mineral duly approved by competent authority. iii) Certificate of presence/absence of other mines within 500 mts of the mine lease area to ascertain whether it is B1 or B2 category as per Notification, S.O. 141(E) dated 15th January 2016. iv) A list of scheduled wildlife species present in the mine lease area duly authenticated by the State Forest Department. v) Conservation Plan for any schedule-I wildlife species located in the mine lease area duly approved by the CWLW and the proof of submission to be submitted to the EAC.

The project proponent submitted the required EMP and other documents online and the proposal was re-considered for grant of EC in the EAC meeting held during 24th July 2017. The KML file when analysed on the DSS showed that there was no forest area involved in the mine lease area and there was no protected area within ten kilometer radius of the mine lease area. The proponent also submitted the certificate from State Forest Department that no forest land is involved in the mine lease area and that two schedule-I species namely Leopard and Black Bear are present in the vicinity of the mine lease area. The proponent submitted a copy of the conservation plan for the schedule-I species at the capital cost of Rs. 8.0 lakhs and recurring cost of Rs. 3.5 lakhs per annum. The proof of submission in the office of Chief Wildlife Warden was also provided. The proponent submitted a certificate from the State Mines and Geology Department vide letter no.1063/1 dated 09/05/2017 that there were no other mine leases for soap stone within 500 mts of the said mine lease. The proponent also submitted the District Survey Report of Bageshwar for soapstone duly approved by the State Mines and Geology

Department.

Based on the information provided by the project proponent and the analysis of the KML file in the DSS the committee noted that the mine lease area showed mining activity. The committee noted that the mine plan also mentioned that part of the mine lease was already quarried. The committee also noted that the proponent did not have a valid LoI and he had submitted for consideration of EC after the 6 month validity of the LoI was over. The committee after due deliberation **deferred** the proposal for the grant of Environmental Clearance and requested the proponent to submit the following documents before the proposal can be reconsidered.

- i. A letter from the State Mines and Geology department revalidating the
- ii. A letter from the State Mines and Geology department certifying that no mining had taken place in the mine lease area and the reason for the presence of quarried pits mentioned in the mine plan.
- iii. As the area was prone to cloud burst, a detailed impact assessment/chemical analysis study is to be submitted by the proponent that the run-off will not leach into the surrounding agriculture fields or water bodies.
- iv. The species to be planted in the greenbelt are to be revised.

2.4. Khatigaon & Rangdev Soapstone Mine project of M/s Dewan Singh Papola for mining of 25,389 Tonnes/Annum (ROM) Soapstone in Mine Lease Area 8.529 Ha. at Village Khatigaon & Rangdev, Tehsil & District-Bageshwar, Uttarakhand-Environment Clearance-reg. [IA/UK/MIN/ 65092/2017]

The proposed project of Soapstone Mine of Sri Deewan Singh Papola in 8.529 ha areas and is situated near Village – Khatigaon & Rangdev, Tehsil & District - Bageshwar in the State of Uttarakhand. The mine lease area lies in Latitude: 29° 53′8″N to 29° ′54′6″N79° 56′14″E to 79° 57′18″E. The proposed Soapstone mining project is category "B2" as per EIA Notification dated 14th September 2006 and its subsequent amendments later by MoEFCC, New Delhi. As the SEIAA, Uttarakhand has not been formed, the proponent has applied to MoEF&CC for the grant of EC.

The proponent submitted that the letter of intent was issued by State Govt. vide letter no. 316 (1)/VII- 1/16/62-Kha/2012 dated 28.11.2016 under MCR 1960 rule 24 (A) 6. Mining Plan & PMCP under Rule 22 (4) of MCR 1960 & 23 (B) of MCDR, 1988 was approved vide letter Mu.Kha/MiningPlan-22/BageshwarBhu/Khani/E/2016-17 dated

04/03/2017 for the period of five years. The lease area falls within the survey of India Toposheet No. 53 O/13. The Project is located in seismic zone V.

The proponent submitted that 25,389 Tonnes/Annum (ROM) of recoverable quantities of Soapstone will be produced by the end of fifth year. Life of the mine with the proposed production will be about 20 years. In this area that the total mineral occurs along the slope in entire 8.529 Ha area and upto depth of 9 m and accordingly total Geological reserves in the entire ML area 6,87,154 MT. The ultimate pit depth by the end of lease period will be 3.5m to 9.0m. Mining is proposed in two pits and separate areas are selected for stacking of waste in external dump and stacking of top soil adjacent to the mining pit. At Post mining stage of proposed project, the existing land shall be reclaimed to its original stage by proper restoration & rehabilitation. Year wise plantation over the van Panchayat land will be taken up during first five years. 200 Saplings will be planted during five years.

The proponent submitted that the mine lease area is private agricultural land on hill terrain and the project will extract the mineral (Soapstone) by manual open cast method of mining without blasting. The excavated pits would be restoring by the back filling. Mules will be utilized for transporting of Soapstone. The proponent submitted that there will be little waste water generation from mining activities. Domestic effluent will be disposed through eco-friendly Mobile Toilet. The mining project shall provide direct employment to about 98 persons. The total project cost is 8.50 Lakhs.

The project proponent submitted the EMP and the other relevant documents online and the proposal was considered in the EAC meeting held during 24th July 2017 for consideration of EC. The KML file when analysed on the DSS showed that there was no forest area involved in the mine lease area and there was no protected area within ten kilometer radius of the mine lease area. The proponent also submitted the certificate from State Forest Department that no forest land is involved in the mine lease area and that two schedule-I species namely Leopard and Black Bear are present in the vicinity of the mine lease area. The proponent submitted a copy of the conservation plan for the schedule-I species at the capital cost of Rs. 8.0 lakhs and recurring cost of Rs. 3.5 lakhs per annum. The proof of submission in the office of Chief Wildlife Warden was also provided. The proponent submitted a certificate from the State Mines and Geology Department vide letter no.29/2017 dated 21/03/2017 that there were no other mine leases for soap stone within 500 mts of the said mine lease. The proponent also submitted the District Survey Report of Bageshwar for soapstone duly approved by the State Mines and Geology Department.

Based on the information provided by the project proponent and the analysis of the KML file in the DSS the committee noted that the mine lease area showed mining activity. The committee noted that the mine plan also mentioned that part of the mine lease was already quarried. The committee also noted that the proponent did not have a valid LoI and he had submitted for consideration of EC after the 6 month validity of the LoI was over. The committee after due deliberation **deferred** the proposal for the grant of Environmental Clearance and requested the proponent to submit the following documents before the proposal can be reconsidered.

- i. A letter from the State Mines and Geology department revalidating the
- ii. A letter from the State Mines and Geology department certifying that no mining had taken place in the mine lease area and the reason for the presence of guarried pits mentioned in the mine plan.
- iii. As the area was prone to cloud burst, a detailed impact assessment/chemical analysis study is to be submitted by the proponent that the run-off will not leach into the surrounding agriculture fields or water bodies.
- iv. The species to be planted in the greenbelt are to be revised.

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

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

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

has given an undertaking to reclaim, restore and re-vegetate the entire barrier with native plant species thereafter.

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

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

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

The project proponent has submitted the Impact Assessment & Hydro Geological Report on decreasing the barrier/buffer area from 100m to 40m – conducted by Tesla Innovations, IIT Bombay (SINE). The proposal was re-considered in the EAC meeting held during 29th May 2017. After due deliberation on the study report submitted by the project proponent, the committee was of the view whether to endanger the river for removal of just 0.2 MTPA of medium grade ore is justified from environmental angle.

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

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

outside such outermost embankment.

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

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

The project proponent submitted the required information online and the proposal was re-considered for amendment of EC in the EAC meeting held during 24th July 2017.

The committee also took into cognizance the Draft River Regulation Zone notification which is to be notified by the MoEF&CC which has demarcated certain areas as Prohibited Activity Zone.

The committee after due deliberation **rejected the proposal** considering that only 0.2 MTPA of medium grade mineral was to be retrieved and may possibly impact the ecology and environment of the river and thereby agriculture and rural life in adjoining areas, the benefits are far outweighed by the potential adverse environmental impact.

(2.6) Proposal of Miragpur Manganese Ore Mines of M/s Special Blasts Ltd. with production capacity of 4000 TPA in M.L. area of 15 Ha located at Miragpur Forest, Tehsil-Katangi, District: Balaghat Madhya Pradesh. (IA/MP/MIN/61889/2017) - Consideration of ToR regarding File No. J-11015/59/2017-IA.II(M)

The proposal submitted by M/s Special Blasts Ltd. is for seeking ToR for conducting EIA studies for Miragpur Manganese Ore Mines with production capacity of 4000 TPA in M.L. area of 15 Ha. The mine is located at Miragpur Forest, Tehsil-Katangi, District: Balaghat Madhya Pradesh. The lease area is bounded between latitudes and longitude coordinates of 21°38'02.00"N & 79°47'23.77"E; 21°37'57.90"N & 79°47'43.40"E; 21°37'53.40" & 79°47'18.00"E; 21°38'02.50"N & 79°47'40.30"E; 21°37'52.09"N & 79°47'28.98"E and 21°38'01.36"N & 79°47'33.90"E and is located on Survey of India Topo-sheet no. 55 O/14. PP reported that the M.L. area is less than 15 Ha, however, due to the distance of Maharashtra State boundary at 4.5 kms, the project is considered as

Category-A project. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS. The PP informed that ore body is in form of underground deposit as well as stabilized dump. The KML file showed that there is a Nallah in the mine lease area draining into a water body of 10 Ha which is outside M.L. area.

The LoI for mine lease was reportedly granted by Govt. of Madhya Pradesh, Mineral Resource Department, Mantralaya, Bhopal for Manganese ore vide order No. F-2-173/2008/12-1 dated 16.01.2013 in an area of 15 hectares located at Miragpur Forest Compartment No. 551. The M.L. deed has been executed between the PP and State Government of Madhya Pradesh on 11.01.2017 and electronically registered on 12.01.2017. The lease deed is valid for 50 years. The Mining Plan was approved by IBM vide letter no. MP/ Balaghat/Manganese/MPLN/G-10/16-17/128 dated 09.01.2017. **The Committee also asked the PP to submit the incorporation certificate in support of its valid legal identity.** The Committee noted that the data presented in pre-feasibility report is of 2010 and hence, the same needs to be updated in line with the estimates made by the Ministry of Steel in National Steel Policy.

PP reported that the mines lease is an existing closed mine with pit(s). The old pit is about 450 m in length with average width and depth of about 55 m and 11 m respectively. The entire mine lease area is a forestland. The application for seeking forest clearance under Forest (Conservation) Act, 1980 was applied by the PP on 25.01.2017. The estimated water requirement for dust suppression on haulage road and plantation purpose is 50 KLD. The estimated capital investment for the project is 212.0 Lakhs.

The PP informed during the presentation that 4000 TPA of manganese mineral from the instant mine shall be required to meet its total requirement of 40,000 TPA of manganese ore for Iron Ore beneficiation plant. The Committee noted that only 10% of the ore requirement is proposed to be fed from the instant mine lease and that the water body serves as irrigation source to the nearby population. Further, Manganese being a toxic element has the risk to come into food chain considering the location of the manganese deposit very near the water body. It was also noted that the area is a high rainfall area and the chances of run-off from the mine reaching to the water body is quite high. Hence, the Committee concluded that the economic benefits arising out from the project are not justified enough to allow mining in the area considering the wider ramification of manganese toxicity in the water body and the whole food chain. Hence, the Committee rejected the proposal.

(2.7) Proposal of M/s RMG Superconductors Ltd. with production capacity of 2.5 Million TPA in M.L. area of 740.35 Ha located at Villages Jamuwani Kalan, Khirwa & Durjanpur, Tehsil - Vijayraghavad, District - Katni, Madhya Pradesh (IA/MP/MIN/65784/2017) – Consideration of ToR regarding

File No. J-11015/62/2017-IA.II(M)

The proposal of M/s RMG Superconductors Ltd. is for seeking ToR for conducting EIA studies for Jamuwani Kalan, Khirwa & Durjanpur limestone mines with production capacity of 2.5 Million TPA in M.L. area of 740.35 Ha. The mine is located at Villages Jamuwani Kalan, Khirwa & Durjanpur, Tehsil - Vijayraghavad, District - Katni, Madhya Pradesh. The lease area is bounded between latitudes and longitude coordinates of 24°02′8.3″N to 24°07′4.6″N and 80°39′50.9″E to 80°44′1.4″E respectively. The area is located on Survey of India Topo-sheet no. 64 D/12.

The Committee noticed that the papers related to the presentation of the proposal were not complete and therefore, informed the PP to come in next meeting with complete presentation and accordingly, deferred the proposal.

(2.8) Kottameta Limestone Mine of M/s Dalmia Cement (Bharat) Ltd. with production capacity of 3.0 Million TPA in M.L. area of 801.171 Ha. located at village - Katamater, Tehsil & District - Malkangiri, Odisha (IA/OR/MIN/65111/2017) - Consideration of ToR regarding File no. J-11015/63/2017-IA-II(M)

The proposal of M/s Dalmia Cement (Bharat) Ltd. is for seeking ToR for conducting EIA studies for Kottameta Limestone Mine with production capacity of 3 Million TPA in M.L. area of 801.171 Ha. The mine is located at village - Katamater, Tehsil & District - Malkangiri, Odisha. The area is located on Survey of India Topo-sheet no. 65 F/11. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS. The lease area is bounded through pillars between latitudes and longitude coordinates as mentioned below:

Latitude	Longitude
18°20'46.32144"N	81°39'34.86060"E
18°20'53.76444"N	81°41'38.08968"E

18°20'17.73492"N	81°41'37.45248"E
18°20'17.29176"N	81°41'02.05584"E
18°19'27.10956"N	81°41'00.44700"E

18°19'28.18920"N	81°39'55.68264"E
18°19'40.76796"N	81°39'41.81076"E

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PP reported that the Government of Odisha has issued a Letter of Intent vide letter No. IV(MISC)SM-09/2017/850/SM, dt. 27.01.2017 under rule 10(2) of the Mineral (Auction) Rules, 2015 for grant of Mining Lease for the said block in Malkangiri district after it was declared as the "Preferred Bidder" under Rule 9(4)(b)(iii) of the Mineral (Auction) Rules,2015 for grant of a mining lease for Kottameta Limestone Block over an area of 801.171 Ha in Malkangiri district, Odisha through the e-auction conducted by the Government of Odisha. The M.L. area of 801.171Ha comprises of 462.247 Ha forestland (Gramya jungle + jungle) & 338.924 Ha non-forest land (Govt. wasteland -190.058 Ha & Private S.T. land - 148.866 Ha) as provided by the Directorate of Mines, Government of Odisha. The Mining plan has reportedly been approved by Indian Bureau of Mines, Bhubaneshwar vide letter no MP/FM/34-ORI/BHU/2017-18 dated 08.06.2017. The reported mineral reserves are 97.51 million Tonnes of cement grade limestone whereas the peak production capacity is 3.0 MTPA of limestone equivalent to 7.14 Million TPA ROM. The Committee asked the PP to prepare and present the proposal during EIA/ EMP stage on 7.14 Million TPA (ROM) basis.

PP reported that opencast fully mechanized mining method is proposed to be adopted including drilling, blasting, loading and transportation to the crusher. The excavated limestone will be transported by dumpers to crusher which will be within the M.L. and crushed limestone will be transported to the proposed cement plant. The Committee noted that PP has not mentioned the capacity of crusher proposed to be installed in the Form 1 as well as Pre-Feasibility Report. The Committee asked the PP to carry out the impact assessment and mitigation study for crusher and incorporate the necessary details in the EIA/ EMP Report.

PP further reported that during the conceptual period the total waste generation shall be 59.978 million m³. The waste dumps will be temporary in nature and will be used for reclamation. The topsoil will be spread over reclaimed area and plantation will be done such that there will be no dump at the conceptual stage. It was also reported that waste can also sold to outside parties for road making etc. after obtaining necessary permission from the authorities. The Committee clarified that if any material is intended to be sold as a mineral for which royalty is to be paid to the concerned mining department, then the same may be included in Lol and approved Mining plan and necessary inclusions be made in the EIA/ EMP report. No mineral shall be extracted and sold without valid Lol, Mining Plan and EC.

As per submissions made by PP, at the conceptual stage, out of the total ML area 801.171 Ha, 511.506 Ha will be mined out (24.322 Ha shall be reclaimed with the waste materials up to 170 mRL and the balance quarry area shall be reclaimed by plantation with proper fencing of the pits), 33.177 ha will be under plantation, 6.369 ha will be under roads, infrastructure & crusher and remaining 250.119 ha land will be undisturbed over which plantation will be done. The Committee noted PP's submissions and mentioned that MoEFCC, while granting EC, prescribes certain set of general and specific conditions related to mine working which are required to be adhered.

The water requirement for the project was reported as 83 KLD which is proposed to be met by ground water or from nearby water sources after obtaining necessary permission from the competent authority. The expected employment generation from the project is for 77 persons. The entire project cost, including land cost and mine closure cost, is estimated about ₹22067 lakhs.

The Committee deliberated on the proposal and noted from the KML/ SHP file that the lease boundary is adjacent to the Sabari River and involves forest land. Hence, adequate safeguards to protect the river along with necessary forest clearance shall be required as per the applicable regulations. In view of the above, the Committee deferred the proposal for grant of Standards ToR for Mining as well as beneficiation projects and asked PP for 'proof of submission' of Stage-1 FC proposal under Forest (Clearance) Act, 1980.

(2.9) Karhi - Chandi Limestone Mine of M/s. Shree Cement Ltd. with production capacity of 1.5 Million TPA (1.5 Million TPA Limestone and 0.5 Million TPA Inter-burden) in M.L. area of 242.127 Ha located near villages Karhi, Chandi & Khapradih, Tehsil- Simga, District Balodabazar - Bhatapara (Chhattisgarh) (IA/OR/MIN/65291/2017) - Consideration of ToR regarding

File no. J-11015/64/2017-IA-II(M)

The proposal of M/s Shree Cement Ltd. is for seeking ToR for conducting EIA studies for Karhi - Chandi Limestone Mine Limestone Mine with production capacity of 1.5 Million TPA (1.5 Million TPA Limestone and 0.5 Million TPA Inter-burden) in M.L. area of 242.127 Ha. The mine is located at village - Karhi, Chandi & Khapradih, Tehsil- Simga, District Balodabazar - Bhatapara (Chhattisgarh). The lease area is bounded between latitudes of 21°36′12.247″N to 21°37′40.574″N longitudes of 82°01′31.413″E to

82°02′34.111″E. The area is located on Survey of India Topo-sheet no. 64 K/2. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

PP reported that the Government of Chhattisgarh has issued a Letter of Intent vide letter no. F 3-03/16/12 dated 28.03.2016 and amended vide letter no. F3-03/16/12 dated 16/09/2016 under rule 9(4)(iii)(b) of the Mineral (Auction) Rules, 2015. The M.L. area of 242.127 Ha comprises of 20.331 Ha is Govt. land, 119.428 Ha private land and 102.368 Ha of own land. There is no forestland involved in the mine lease; however, Dhabadih Reserve Forest is about 4 km from the M.L. boundary.

PP reported that it has proposed expansion of existing Integrated Cement Plant -Clinker (2 x 2.6 to 3 x4.5 Million TPA), Cement (2 x 3.0 to 3 x 5.5 Million TPA), Waste Heat Recovery Power Plant (30 to 100MW) and Captive Thermal Power Plant (25 to 125 MW) near Village Khapradih, Tehsil Simga, District- Balodabazar - Bhatapara (Chhattisgarh) for which the total limestone requirement is proposed to be 22.16 Million TPA which would be met by :- i) Existing Semradih & Bharuwadih Limestone mines (M.L. No. 38/2007) with mine lease area of 531.126 Ha, and (ii) Instant Kahri Chandi Limestone Mines with lease area of 242.127 Ha. The reported mineral reserves are 68.2 million Tonnes of whereas the production capacity is 1.5 Million TPA of limestone equivalent to 2.0 Million TPA (ROM). The Committee asked the PP to prepare and present the proposal during EIA/ EMP stage on 2.0 Million TPA (ROM) basis. The excavated limestone will be transported by dumpers to crusher which will be within the M.L. and crushed limestone will be transported to the proposed cement plant. The Committee noted that PP has not mentioned the capacity of crusher proposed to be installed in the Form 1 as well as Pre-Feasibility Report. The Committee asked the PP to carry out the impact assessment and mitigation study for crusher and incorporate the details in the EIA/EMP Report. PP reported that opencast fully mechanized mining method is proposed to be adopted including drilling, blasting, loading and transportation to the crusher. The water requirement for the project was reported as 150 KLD which is proposed to be met by ground water or from nearby water sources after obtaining necessary permission from the competent authority. The expected employment generation form the project is for 43 persons. The project cost is estimated about ₹34.10 Crores. The estimated capital cost and recurring cost for Environment Management Plan is ₹3.95 Crores and ₹0.22 Crores.

The Committee deliberated on the proposal and noted from the KML file presented by the PP that the lease area comprises of agriculture land and residential

areas. Hence, adequate measures need to be covered and presented in the EIA/ EMP report especially w.r.t. R&R requirement arising out of the project. Further, since the PP has reported forest area in the buffer zone, the Wildlife Conservation Plan, if applicable will be submitted to the Chief Wild Life Warden of the State. In view of the above, EAC **recommended the proposal** for grant of Standards ToR for Mining as well as beneficiation projects.

(2.10) Expansion of Bharuwadih-Samradih Limestone Mine of M/s. Shree Cement Ltd. from 8.6 Million TPA to 22.16 Million TPA limestone (equivalent to 35.46 Million TPA ROM) in mine lease area of 531.126 Ha located near villages: Semaradih & Bharuwadih, Tehsil-Balodabazar in District Balodabazar - Bhatapara, Chhattisgarh (IA/CG/MIN/65313/2017) - Consideration of ToR regarding

File no. J-11015/159/2014-IA II (M)

The proposal of M/s Shree Cement Ltd. is for seeking ToR for conducting EIA studies for Expansion of Bharuwadih-Samradih Limestone Mine from 8.6 Million TPA to 22.16 Million TPA limestone equivalent to 35.46 Million TPA ROM in M.L. area of 531.126 Ha. The mine is located near villages: Semaradih & Bharuwadih, Tehsil- Balodabazar in District Balodabazar-Bhatapara, Chhattisgarh. The lease area is bounded between latitudes of 21°34′36″N to 21°37′ 06″N and longitudes of 82°03′12″E to 82°06′ 12″E. The area is located on Survey of India Topo-sheet no. 64 K/2. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/DSS. The Project is located in Seismic zone-II.

The project was granted EC vide Ministry letter dated 30.03.2017. PP reported that the mining lease over an area of 531.126 ha was granted vide the Government order no. F-2/32/2003/12 (3) dated 25.03.2008 and the mining lease was extended up to 50 years from 11.01.2011 to 10.01.2061 as per Section 8A (5) of M.M.D.R. Amendment Ordinance 2015. Total mine lease area is 531.126 Ha. out of which 452.404 Ha is agriculture land and 78.722 Ha is waste land. The Mining is being carried out by fully mechanized opencast method by a combination of shovel, dumper with drilling & blasting and Heavy Earth Moving Machines. The Limestone from Mine is being transported up to the crusher by dumpers and to cement plant via belt conveyor. There is reportedly no forestland involved in the mine lease. The Dhabadih Reserved Forest is located at 3.5 km from the plant boundary and 0.25 km from the mining lease.

PP reported that it has proposed expansion of existing Integrated Cement Plant -

Clinker (2 x 2.6 to 3 x4.5 Million TPA), Cement (2 x 3.0 to 3 x 5.5 Million TPA), Waste Heat Recovery Power Plant (30 to 100MW) and Captive Thermal Power Plant (25 to 125 MW) near Village Khapradih, Tehsil Simga, District- Balodabazar - Bhatapara (Chhattisgarh) for which the total limestone requirement would be 22.16 Million TPA which would be met by :- i) Instant Semradih & Bharuwadih Limestone mines (M.L. No. 38/2007) with mine lease area of 531.126 Ha, and (ii) Kahri Chandi Limestone Mines with lease area of 242.127 Ha. The reported mineral reserves are 198.3 million Tonnes. The Committee asked the PP to prepare and present the proposal during EIA/ EMP stage on 34.56 Million TPA (ROM) basis. The excavated limestone is proposed to be transported by dumpers to the existing/proposed crushers within the M.L. and crushed limestone shall be transported to the cement plant. The Committee noted that PP's submission to install two crushers viz. 1200 TPH and 450 TPH within the M.L. area in addition to the existing 2 crushers of 1200 TPH each. The Committee asked the PP to carry out the impact assessment and mitigation study for crusher and incorporate the same in the EIA/ EMP Report. The water requirement for the project was reported as 600 KLD which is proposed to be met by ground water or from nearby water sources after obtaining necessary permission from the competent authority. The expected manpower requirement for the project is 389 persons. The project cost is estimated to be ₹141.25 Crores. The estimated capital cost and recurring cost for Environment Management Plan is ₹1 Crore and ₹0.22 Crores.

The Committee deliberated on the proposal and noted that an expansion proposal was granted EC for the same mine lease with 8.16 million TPA on 30.03.2017 and now, after a passage of less than 4 months the PP has come again for approximately 3 fold increase in the production. Further, the compliance report for the latest EC granted for expansion on 30.03.2017 is still to be submitted. As per the submissions of the PP, the earlier granted production capacity of 8.16 million TPA is not achieved as of now and the proposal is linked to the stage-wise expansion of cement plant, a part of which is under construction and expected to be commissioned soon. In view of the above, the Committee observed that the proposal is premature and production targets need to be properly forecasted and aligned. The lease validity is till 2061 and proposed production, if granted, would reduce the mine life to less than 10 years. The proposed steep jump in production capacity requires careful deliberation on the Approved Mining plan (for achieving 34.56 Million TPA (ROM) production capacity) with regard to sustainability aspects. In view of the above, **EAC deferred the proposal**.

2.11 Expansion of Suwakheda Flag Stone mine (Minor Mineral) of M/s

Indira Patthar Shramik Sahkari Samiti Maryadit from 4500 m³/year (eq. to 11,700 TPA) to 1,00,000 m³/year (eq. to 2.6 lakh TPA) production in mine lease area of 117.532 Ha located at village Suwakheda, District Neemuch, Madhya Pradesh (IA/MP/MIN/65269/2017) - Consideration of ToR regarding

The proposal of M/s Indira Patthar Shramik Sahkari Samiti Maryadit is for mining of Suwakheda Flag Stone mine (Minor Mineral) from 4500 m³/year (eq. to 11,700 TPA) to 1,00,000 m³/year (eq. to 2.6 lakh TPA) production in mine lease area of 117.532 Ha. The mine lease area is located at Suwakheda, District Neemuch, Madhya Pradesh. The mine lease area is located on Survey of India topo-sheet number 45L/14 and the location coordinates as as below:

File no. J-11015/348/2008-IA-II(M)

Village Name	Latitude	Longitude
Suwakheda	24 ⁰ 33'07.2"N to 24 ⁰ 33'33"N	74 ⁰ 50'03.4"N to 74 ⁰ 50'33.5"N
Kheda Rathore	24 ⁰ 33'36"N to 26 ⁰ 34'22"N	74 ⁰ 50'07.5"N to 74 ⁰ 50'18.5"N
Kundla	24 ⁰ 33'23.3"N to 26 ⁰ 34'23.3"N	74 ⁰ 50'16.2"N to 74 ⁰ 50'33.5N

PP reported that the project has obtained EC earlier vide letter no. J-11015/348/2008-IA.II (M) dated 22 August, 2014 for mining of flag stone over an area of 117.532 ha, with mining capacity is 11700 TPA or 4500 cum per year. The Quarry lease area is contiguous to three villages viz. Suwakheda, Khor & Kundla.

PP reported that the mineable reserve from the quarry is 20352980 m³ and considering the 1,00,000 m³/annum capacity, the mine life is estimated as 203 years (approx.). The lease is granted by State Govt. of M.P. on 24.09.2013 to the society in public interest for 10 years. The mine lease area of 117.52 Ha is government waste land. and 0.878 Ha private land. The Mining is carried out by manual method. No forest land is reported in the mining lease. The water requirement for the project was reported as 16 KLD which is proposed to be met by ground water. The expected manpower requirement for the project is 50 persons. The project cost is estimated to be ₹54.67 Lakhs. The proponent was also informed about the requirement of District Survey Report in case of minor minerals. The Committee deliberated on the proposal and noted that the past production details for the project are not submitted by the PP. The PP was asked to submit past production details to the Ministry for ascertaining violation, if any. Accordingly, The Committee deliberated on the proposal and recommended the proposal for grant of Standard ToR, in case the violation related

aspects are not established on the proposal by the Ministry.

2.12 Kakra-Panna Limestone Mine of M/s Jaykaycem Central Limited with production capacity of 4.0 Million TPA in mine lease area of 1594.34 Ha located at villages Kakra, Kamtana, Saptai, Judi, Devri purohit & Devra, Tehsil Amanganj, District Panna of State Madhya Pradesh – Consideration of ToR regarding (IA/MP/MIN/58058/2016)

File no. J-11015/190/2016-IA-II(M)

The proposal of M/s Jaykaycem Central Limited is for seeking ToR for conducting EIA studies for Kakra-Panna Limestone Mine with production capacity of 4 Million TPA in M.L. area of 1594.34 Ha. The mine lease is located at villages Kakra, Kamtana, Saptai, Judi, Devri purohit & Devra, Tehsil Amanganj, District Panna, Madhya Pradesh. The mining lease area is covered in parts of Survey of India Topo-sheet No. 54 P/15 and bordered by latitudes and longitudes of 24⁰19'46.6"N to 24⁰22'15.3"N and 79⁰56'15.5"E to 79⁰59'38.2"E respectively. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

PP reported that the Government of Madhya Pradesh granted a prospecting License over an area of 3513.75 Ha in Villages Kakra, Kamtana, Saptai, Judi, Devri Purohit & Devra, Tehsil Amanganj, District Panna, M.P. vide order no. F2-41/2010/12/1, Bhopal dated 15.03.2010 for a period of two years i.e. from 14.06.2010 to 13.06.2012. After subsequent scrutiny, the State Government under Rule 27(h) of MCR 1960, recommended the grant of ML over an area of 1594.34 hectares. As per the exemption under Section 6 (1) (b) of MMDR, 1957 by the Central Govt., the State Government, issued the letter on dated 17.03.2016 and 03.05.2016 for completing all the formalities including obtaining EC and execute the deed for a period of 50 years over an area of 1594.34 hectares. Apart from mining operation, the PP reported about installation of Crusher of 1800 TPH within the M.L. area. The Committee noted the same and asked the PP to invariably incorporate the pollution aspects and mitigation measures related operation of Crusher in the proposal.

About 1518.586 Ha area is private agricultural land and 75.754 Ha is Govt. waste land. There is no forest land involved in the instant M.L. The reported mineral reserves are 230.46 million Tonnes. Mining is proposed to be carried out by deploying Heavy Earth Moving Machinery (HEMM) such as bull dozers, pay loaders and dumpers. The quarried raw material will be transported to the crusher location by means of tippers and dumpers of matching capacity and from there to the cement plant, using

mechanical conveying equipments such as belt conveyors. The oversize queried limestone will be crushed by means of rock breakers before transportation. The estimated requirement of water for operation of crusher, suppression of dust, domestic consumption, plantation and green belt development is 230 KLD which will be sourced from river Ken, rain water accumulated in working pit and bore well. The expected employment generation form the project is for 300-350 persons. The project cost is estimated about ₹572.58 Crores.

The Committee deliberated on the proposal and noted from the KML file presented by the PP that the lease area comprises of 3 villages with pre-dominantly agriculture land (more than 95%). Further, mine lease boundary is close to the river bank at some stretch. The PP submitted that the mine lease area is pulse growing region wherein around 720 families are living. Around 800 families, apart from 720 families, are dependent for livelihood from the area. The Committee noted that adequate environment safeguards along with specific R&R requirement need to be covered while appraising the project. The Committee, accordingly, asked the PP to provide details of household wise agricultural land and income, crop pattern as it is pulse producing area, demarcation of agricultural and barren land, broad contours of R&R plan for project affected households (1520 families), details of agricultural land identified for R&R of project affected households. In view of the above, the **EAC deferred the proposal**.

2.13 Mining of Millstone and Masonary Stone (minor mineral) including Khanda, Gitti and Boulders occurring as overburden and inter-burden with enhancement of production capacity from 1093 TPA to 15 million TPA (ROM) by M/s A Milnstone Pvt. Ltd., located at village (s) Kandoli, Ghata, Bokoli, Mahalpur, Kachhi, Baroli, Dahina, Ranpur, Jatroli, Lakhanpur, Rajpura, Ranpura, Daha Tehsil- Rupbas, District-Bharatpur, Rajasthan (MLA: 964.94 ha & 39/1990) ML (IA/RJ/MIN/29619/2014) - Reconsideration of EC regarding File no. J-11015/98/2014-IA-II(M)

The proposal of M/s A Milnstone Pvt. Ltd. is for mining of Millstone and Masonry stone (minor mineral) including Khanda, Gitti and Boulders occurring as overburden and inter- burden with enhancement of production capacity from 1093 TPA to 15 million TPA (ROM) in the mine lease area of 964.94 ha. The lease area is located at village (s) Kandoli, Ghata, Bokoli, Mahalpur, Kachhi, Baroli, Dahina, Ranpur, Jatroli, Lakhanpur, Rajpura, Ranpura, Daha Tehsil- Rupbas, District-Bharatpur, Rajasthan. The proposal was

earlier considered by EAC in the meeting held during October 25th, 2016; November 23-25, 2016; December 15-16, 2016; January 30-31, 2017, March 20-21, 2017 and April 24-24, 2017. The Committee during January 30-31, 2017 meeting noted that only about 1% millstone is to be mined out from the total ROM and rest is overburden such as Khanda, Gitti and Boulders etc. The fact that overburden can also be sold in the market and generates revenue is only incidental to the stated purpose of mining millstone from the area. The Committee took the view that considering the extremely low mineral density (millstone) in the lease area, mineral (millstone) not being rare or/and critically important and the impact on ecology and environment during mining activities spread over 964 ha affecting many villages, the environmental impacts far outweigh the incidental revenue benefits and rejected the proposal.

The PP, however, again represented before the Ministry for consideration of his proposal on the ground that it possesses all the necessary permissions from State Government and consequently, the proposal was considered before the EAC in its meeting held on March 20-21, 2017 after approval of Competent Authority wherein PP was asked to make a comprehensive presentation. The Committee during earlier meeting observed that the applicant possess permission for Mill Stone only from the State Department of Mines and Geology and Mining plan was also approved for the same. Hence, the Committee advised PP to first obtain Lol/ Permission for Khanda, Gitti and Boulders along with Mill Stone from State Department of Mines and Geology, get the modified mining plan approved and follow due process as per EIA notification, 2006 before seeking EC from the Ministry.

As a follow-up to the earlier meeting, the proposal is again placed before the EAC and presentation is made by the PP. The Committee noted the information furnished by the PP pertaining to Mineral Stripping Ratio for Mill Stone, Physical location of the Geological formation of Mill Stone and Tentative Mill stone reserves in the M.L. area during the presentation. The Committee took note of the Lol bearing no. Dir/P-2(H-1)Roop/K.P.39/90/293 dated 02.06.2017 incorporating Masonry stone along with Mill Stone, which is a minor mineral. The Committee asked the PP to submit District Survey Report (DSR) for Masonry stone & Mill Stone being minor minerals. Further, Committee also noted that the Mining plan is approved by State Department of Mines & Geology vide letter no. SME/BPR/M.Plan/Roopeas/2017/1367 dated 04.07.2017.

The Committee made detailed deliberations on the proposal and noted that the mine lease area is spread over 964 Ha covering many villages and considering the

impact on ecology, environment and nearest habitation from mining activities, it would be appropriate that the mining operation be restricted only to already broken up areas in the mine lease. PP agreed to submit the revised production proposal taking into account the production capacity of already broken up area. The Committee also observed the requirement of DSR. In view of the above, the Committee **deferred the proposal.**

(2.14) Expansion in limestone production from 19.6 to 25.3 Million TPA in Nimbeti and Jawangarh lime stone mine of M/s Shree Cement Ltd in M.L. Area of 750 Ha located near Villages – Nimbeti and Jawangarh, Tehsil- Jaitaran, District- Pali (Rajasthan) - Amendment of Environmental Clearance regarding (IA/RJ/MIN/56863/2015)

(File no. - J-11015/226/2015-IA.II)

The proposal submitted by M/s Shree Cement Ltd is for seeking amendment of earlier EC granted by the MoEFCC vide letter no. J-11015/226/2015-IA.II(M) dated 11.05.2017 with respect to change in Specific condition no. (7), General Condition no. (9), (14), (16), (21) & (27) and , (xxii) and including the Inter-burden capacity in the title of EC granted. The capacity of the Mines is 25.3 Million TPA in mine lease area of 750 Ha. The project is located at Nimbeti and Jawangarh, Tehsil- Jaitaran, District- Pali (Rajasthan). The details of the condition for which amendment is sought are as below:

S.No.	Description	PP's submission
1	Specific condition No. 7	1. Agreed for installation of AAQMS.
		2. Since AAQMS are imported and
	Installation of three numbers of	around 6 – 8 month required for
	online AAQMS within 3 months and	procurement & installation.
	data display at mine gate.	Additional time may be granted for
		installation.
	Online provision of pH and	3. The mine and cement plant are
	turbidity at the discharge point of	adjacent to each other. Hence, all
	STP, ETP and water storage pond	three AAQMS shall be installed at the
	and data display at the mine gate.	boundary of mine & plant.
		4. There is no effluent water discharge
		from mine activities. Only mine
		vehicles washing are carried out and
		waste water is used for dust
		suppression in crusher after removal

		of oil and grosse contents if any
		of oil and grease contents if any.
		5. There is no STP within mine lease
		area. Waste water generated from
		office toilets is being disposed off in
		soak pit via septic tank.
		6. Rain water is collected in mine pit
		and used in mining and plant
		activities. Hence there is no discharge
		from pit water in any
		nalaha/river/pond.
		7. Condition may be removed w.r.t.
		installation of STP and ETP
2	General Condition No. 9	1. Critical parameters are PM ₁₀ , PM _{2.5} ,
	Na mitaria a fariti al managatana	NOx, SO2 & CO in the ambient air
	Monitoring of critical parameters as	quality.
	per the Notification 2009 such as	2. Hence the line 'etc.' to be deleted
	PM10, PM2.5, NOx and SO2etc in	and CO may be mentioned.
	the ambient air quality.	
3	General Condition No. 14	1. In our case some quantity of
	A (burned should be	limestone is transported by already
	A 'bypass' road should be]
	constructed (say, leaving a gap at	
	least 200 meters) for the purpose of	2. Request to remove this condition.
4	transportation of the minerals	1 Based on the westing famility
4	General Condition No. 16	1. Based on the working feasibility,
	Maria Ha land and the discount	main Haulage roads are regularly
	Main Haulage road in the mine	wetted with water tankers fitted with
	should be provided with permanent	pressurized sprinklers before the
	water Sprinklers.	movement.
-	Canada Candii a Na 31	2. Request to amend accordingly.
5	General Condition No. 21	1. As per the approved modified
	The mention we have by Collection	mining plan the maximum height of
	The maximum height of the dumps	dump will be 60 meter in 5 terraces
	shall not exceed 8m and width 20m.	of 12 meter each as mentioned at
		Table no. 29 of para 7b
		2. Request to amend accordingly.
	The entire excavated area shall be	1. As per the approved mining plan,
	backfilled and afforested.	total excavated area will be 450 ha

		out of which 260 ha will be backfilled and 190 ha will be developed as water reservoir. 2. Out of total mining lease area of 750ha, about 250 ha area will be covered under Green belt / Plantation at the end of life of mine. Out of total Green belt area i.e. 250 ha, 115 ha area will be undisturbed area & 7.5 meter barrier along mine lease boundary and 135 ha area of
		waste dump. 3. The same has been mentioned in
		para 7 of EC as well as in table no. 27
		of para 5(f) of approved Mining Plan
		4. Request to amend accordingly.
6	General condition No. 27	1. As per section 135 of the Company
		Act, the CSR cost should be 2 % of
	At least 2.5% of total cost of project	average of last three year profit.
	shall be earmarked towards the	
	enterprise Social Commitment(ESC)	
	based on local need	
7	Inclusion of Inter-burden capacity in	Enhancement of Limestone mine (ML
	the Title of EC granted	Area: 750ha) with production capacity
		from 19.6 million TPA to 25.3 million
	Enhancement of Limestone mine	TPA Limestone and 9.10 million TPA
	(ML Area: 750 Ha) with production	Interburden
	capacity from 19.6 million TPA to	
	25.3 million TPA	

The Committee deliberated on the proposal and made their recommendations as below subject to submission of past production details:

 Amendment requested in <u>Specific condition No. 7 is partially accepted</u> with regard to additional time for installation of CAAQMS. The Committee noted the submission made by PP that it has already initiated action on procurement of CAAQMS and its installation. The Committee asked the PP to submit a status report on the same to the Ministry in support of its claim. Accordingly, the Committee noted that additional time of 6 months may be granted for installation of CAAQMS at three (3) locations to cover the impacts of mining project subject to submission of status report. However, it was also clarified to the PP that two (2) additional stations are required to be put up in windward side to capture the impact due to adjoining Cement Plant. The Committee noted that the submissions made by the PP can be placed as status of compliance by trhe PP before the monitoring authority at the time of inspection and hence, amendment is not required w.r.t. the condition of installation of STP and ETP.

- Amendment requested in <u>General Condition (9)</u> is not accepted with regard to Monitoring of Critical parameters and the Committee clarified the PP that the Ministry vide its O.M. dated 27.05.2009 had prescribed parameters to be monitored for mining projects. However, after notification of NAAQS, 2009, projects are required to monitor the critical parameters as mentioned in the EC. Additionally, the CTO granted by SPCBs also mention the parameters relevant for a particular type of project. Hence, PP is advised to carryout ambient air quality monitoring as per the CPCB/ SPCB protocol and finalize the critical ambient air quality parameters in consultation with SPCBs.
- Amendment requested in <u>General Condition (14)</u> is not accepted with regard to construction of by-pass road and the Committee noted the PP's submissions that limestone is transferred from mine to the cement plant through belt conveyor; however, a small quantity of mineral is transported to other cement plant through existing State Highway. Accordingly, Committee asked the PP to mention this aspect while giving status of compliance to monitoring agencies at the time of inspection and hence, amendment is not required.
- Amendment requested in <u>General Condition (16)</u> is not accepted with regard exempting the provision of permanent water sprinklers and the Committee noted that the provision is required with a view to control dust emission emanating from the transportation of mineral outside lease area. A strict compliance of the said provision is required to be carried out by the PP.
- Amendment requested in <u>General Condition (21)</u> is partially accepted with regard to amending the land use of mine as per the approved Mining plan for backfilling and reclaiming the area. The Committee noted that the 'End of life' land use of Mine lease area is governed by the Approved Mine plan wherein provisions relating backfilling of area, plantation, development of water reservoir, undisturbed area, waste dump etc. have been made. However, prior clearances as required under various statutes like Forest (Conservation) Act, 1980; MMDR Act, 1952 etc. are a pre-requisite for the same. <u>With regard to height of dumps</u>, the Committee noted that similar amendments were

requested by other PP's (who operate limestone mines) in the past which were not accepted by the Committee considering the stability of dumps, management of runoff generated from dump and other vital conditions having environmental impacts. However, PP's may request IBM to examine the technical aspects and related environmental impacts of increasing the dump heights and send a consolidated report on the same to the Ministry for further consideration.

- Amendment requested in <u>General Condition (27)</u> is not accepted with regard to removal of 2.5% of project cost as Enterprise Social Commitment (ESC) and prescribing CSR cost as 2% of average of last three years profit. The Committee clarified that doing CSR expenditure is a mandatory statutory liability of the PP under Companies Act, 2013. However, the Ministry has prescribed 2.5% of Total Project Cost as Enterprise Social Commitment (ESC) to catalyze the social upliftment of the area with special emphasis on the issues raised during Public Hearing. Hence, the scope of ESC and CSR are not identical. The Committee further noted that big projects with significant environmental impacts sometimes run in losses and accordingly, remain out of the purview of Companies Act, 2013. However, PP is required to fulfill their obligations under ESC till they are running.
- The aspect of 'Inclusion of Inter-burden capacity in the Title of EC granted' is accepted by the Committee. The Committee deliberated and clarified that EC was granted based on limestone production capacity as per the approved mining plan which essentially involve excavation of inter-burden. Hence, including the inter-burden in the EC capacity shall not change the extent of production allowed in the EC as the same is governed by the approved mining plan. The PP also submitted that this does not involve change in machinery, production capacity, method of mining etc. However, it will include the total excavation done to achieve the EC granted capacity.
- (2.15) Amendment of EC granted for Kodingamali Bauxite Mining Project of M/s Odisha Mining Corporation Limited located in Kodingamali, Tahasil Koraput, District Koraput, Odisha (MLA: 447.25Ha. production of 3.0 MTPA Bauxite ore)

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

The proposal submitted by M/s Odisha Mining Corporation is for seeking amendment in EC granted by the MoEFCC vide letter No. J-11015/439/2007-IA-II(M) dated 28.05.2008. The project is for mining of Bauxite with production capacity of 3.0 million

TPA in Kodingamali Bauxite Mining Project located at Kodingamali, Tahasil Koraput, District Koraput, Odisha in mining lease area of 447.25 Ha. The amendments are sought with respect to (1) Inclusion of Road as mode of transportation; (2) Proposed Land use plan in line with the Stage - I Forest clearance granted by MoEF&CC. The proposal was earlier considered in 18th EAC Meeting held during May 29-30, 2017 wherein the Committee asked the PP to submit the requisite information on environmental impact due to transportation of ore by road, Carrying Capacity Study w.r.t. road network and Water drawl permission.

As a follow-up to the earlier observations, PP submitted and presented the information before the Committee and observations have been made by the Committee as below:

- Environmental Impact Assessment Study to Evaluate the Impact of Ore Transportation by Road from Kodingamali Bauxite Mining Project The Committee deliberated on the PP's study and observed that the anticipated incremental concentration of air quality parameters is not realistic considering PP's submission that a minimum of 800 trucks are likely to ply in a day once the project gets operational. Hence, the modeling for anticipating impact due to transporting ore by road needs to be done on realistic basis considering an identical scenario. The Committee, accordingly, opined the PP to collect data from a representative road/ highway and use the same as a input for deriving incremental concentrations through modeling and predict Ground Level Concentrations (GLCs). Similar, observations were w.r.t. conducting Noise quality and Soil quality monitoring. The Committee asked the PP to highlight the anticipated Heavy Metal concentration in soil due to truck movement.
- Permission to abstract ground water up to 400m³/day for Kodingamali Bauxite Mining Project The Committee noted the submission made by the PP.
- Carrying Capacity Study for assessing adequacy of existing transport infrastructure to handle traffic load The Committee deliberated on the study presented by the PP and noted that the existing infrastructure can carry 1.26 Million TPA, after minor modifications which may require 2-3 months. It was also noted that further strengthening of carriageway to 7m width and 2.5m shoulder width may increase the carriage capacity to 3.7 Million TPA. The PP submitted that all the necessary modifications shall be carried out by State PWD department/ National Highways and the PP is already coordinating with them.
- The PP also requested for reduction in M.L. area from 447.25 Ha to 428.075 Ha The Committee noted the submissions of the PP that Govt. of Odisha issued

conditional grant order of ML over 715.075 ha of bauxite mine on dt. 01.02.1999 for a period of 30 years in accordance with the letter of Ministry of Mines, Govt. of India dt 11.01.1999. Mining operation in the ML area has never been carried out previously. Subsequently, OMC submitted a revised application over 447.25 ha deleting the non-mineralized area. Department of Steel and Mines, Govt. of Odisha on dated 11.09.2015 further reduced the ML area from 447.25 ha to 428.31 ha which, after DGPS survey came to 428.075 Ha. The Committee noted the submissions made by the PP and asked the PP to submit M.L. deed indicating 428.075 Ha, Approved mining plan for the same area and a communication from Department of Steel and Mines, Government of Odisha stating 428.075 Ha mine lease area for the project.

In view of the above, the **proposal was deferred** pending submission of information from PP.

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 begiven.
- 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 thelessee.
- 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 bufferzone).
- 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 concernedauthority.
- 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 EIAReport.
- 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 / leaseperiod.
- 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 begiven.
- 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 begiven.
- 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 AppraisalCommittees.
- 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 befurnished.
- 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 copyfurnished.
- 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 beconsidered.
- 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 featuressuchasmangroves,ifany,shouldbefurnished.(Note:TheMiningProjects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- 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 theReport.
- 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 begiven.
- 23) Airqualitymodelingshouldbecarriedoutforpredictionofimpactoftheprojectonthe air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on themap.
- 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 beindicated.
- 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 copyfurnished.

- 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 broughtout.
- 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 thesame.
- 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 topollution.
- 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 CongressGuidelines.
- 33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIAReport.
- 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 ElAreport.
- 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 budgetaryallocations.
- 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 forimplementation.
- 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 proposedProject.
- 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 begiven.
- 41) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly speltout.
- 42) A Disaster management Plan shall be prepared and included in the EIA/EMPReport.
- 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 befollowed:
 - a) All documents to be properly referenced with index and continuous pagenumbering.
 - b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should beindicated.
 - 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 theProject.
 - 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 befollowed.
- 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 reviseddocumentation.
- 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 beapplicable.
- i) The EIA report should also include (i) surface plan of the area indicating contours of main topographicfeatures, 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 thisproject.
- 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 Miningproject.
- 3). The Project Proponent shall obtain Consent to Operate from the concerned State Pollution Control Board and effectively implement all the conditions stipulatedtherein.
- 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 PublicHearing.
- 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 ControlBoard.

- 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 forapproval.
- 8). No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment, Forest and ClimateChange.
- 9). No change in the calendar plan including excavation, quantum of mineral and waste should bemade.
- 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 RegionalOffice.
- 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 miningactivities.
- 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 itscompliance.

- 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 minesite.
- out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as haulroad,loadingandunloadingpointandtransferpoints. Fugitive dustemissions 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 WaterBoard.

- 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 ControlBoard.
- 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.
- Catch drains and siltation ponds of appropriate size shall be constructed 30). 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 regularintervals.
- 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 fiveyears.

- 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 leasearea".
- 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 monthlybasis.
- 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 theproject.

- 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 workshopeffluents.
- 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 RegionalOffice.
- 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 developmentwork.
- 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 / monitoringreports.
- 45). A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while

processing the proposal.

- 46). State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.
- 47). The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment, Forest and Climate Change at www.environmentclearance.nic.in and a copy of the same should be forwarded to the RegionalOffice.

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

SI. No.	Name and address	Designation	Signature 24-07-17
1.	Dr.Ajai Kumar B-1302, BestechParkView Spa, Sector-47, Gurgaon, Haryana	Chairman	A Cu
2.	Shri B Ramesh Kumar H-No. 6-1-134/6, Balram Compound, Padmarao Nagar, Secundrabad- 500025, Andhra Pradesh	Member	10 mm
3.	Prof.Dr. K.S. Rana MaharanaManzil, 18, Dholpur House, (D.M. Compound), M.G. Road,Agra-1, Uttar Pradesh - 282001	Member	Ylen
4.	Prof. A. K. Bhatnagar, JA/4B, Ashok Vihar-I, Delhi – 110052	Member (dellar?
5.	Dr. N. C. Karmakar Department of Mining Engineering, Indian Institute of Technology (BHU), Varanasi – 221 005, Uttar Pradesh	Member	
6.	Dr.Hemant S. Sahasrabuddhe "Utkarsha", LB-53, Housing Board Cology, Laxminagar, Nagpur-440022	Member	
7.	Prof. S. Ramakrishna Rao 50-120-9/1, Tulasi Mani Regency North Extension, Seethammadhara, Visakhapatnam - 530013 Andhra Pradesh.	Member	Mariakni 25/11
8.	Dr.HimanshuPathak, 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	or 15/7/
10.	Dr.Tushar Kant Joshi, LaxmikantNiwas, SalanGaon, Bhagwantpur, Dehradun- 248009, Uttrakhand.	Member	Dann
11.	ShriSantosh Gupta, Flat No. 405, Block –B, Gaur Green Vista, NyayKhand -1, Indrapuram, Ghaziabad-201014	Member	
12.	Representative of Ministry of Mines Shri. Pushpender Gaur, Dy. Controller of Mines, Ministry of Mines, Shastri Bhawan New Delhi-110001.	Member	1 25 0 117.
13.	Representative of Indian Meteorological Mr. V.K. Soni, Scientist "E", (Meteorology/Air Pollution), 609, SatMet Building, MausamBhawan,Indian Meteorological Department,Lodhi Road, New Delhi-110003	Member	They keems
14.	Representative of Wildlife Institute of India, Dr. (Ms.) AshaRajvanshi, Wildlife Institute of Inida, Chandrabani, Dehradun-248001	Member	
15.	Director IA-Division (Non Coal Mining) Vayu-305, Indira ParyavaranBhawan, Ministry of Environment, Forest& CC, Jorbagh Road, Lodhi Road, New Delhi-110003	Member Secretary	Dan 24