

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

SUMMARY RECORD OF 22nd MEETING OF THE RECONSTITUTED COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The Twenty Second (22nd) meeting of the Reconstituted Expert Appraisal Committee for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during **September 18-19, 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 21st EAC Meeting:

The Minutes of the 21st Meeting of EAC held during August 28th - 29th, 2017 were circulated.

2.1 J-11015/215/2016-IA.II(M): Sand Mine of M/s Kawaljeet Singh Batra located at MT Karhera Block, YNR B-13, Tehsil Yamunanagar, District-Yamunanagar, Haryana for the production capacity of 23.60 Lakh TPA of sand in ML Area of 67.79 Ha.-Consideration for EC (IA/HR/MIN/65268/2016)

The proposal of **M/s Kawaljeet Singh Batra** is for the production of 29.50 Lakhs TPA(**modified capacity 23.60 LTPA**) of **sand (minor mineral)**. The lease area lies on Yamuna riverbed. The total **mine lease area is 67.79 Ha** which is non- forest land. The proposed mining project land has been allotted as a single unit for mining of Sand (Minor Mineral) through the riverbed of District Yamuna Nagar (Haryana). The contractor shall be under obligation to carry out mining in accordance with all other provisions as applicable under the Mine Act, 1952, Mines and Minerals (Development and Regulation) Act, 1957, Indian Explosive Act, 1884, Forest (Conservation) Act, 1980 and Environment (Protection) Act, 1986 and the rules made there under, Wild Life (Protection) Act 1972, Water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act, 1981. Letter of Intent (LoI) for mining lease for sand minor mineral over an area of 67.79 Ha. has been granted to M/s Kawaljet Singh Batra from Director of Mines and Geology Department, Govt. of Haryana vide Memo No. DMG/HY/ M.T. Karhera Block Cont/ NYR B5 /2016/5412 dated 20.10.2015. The lease is located in the following latitude and longitude: Pillar No. A: N 30° 00' 10" E 77° 14' 38.5" Pillar No.B: N 30° 00' 10" E 77° 14' 39.5" Pillar No. C: N 30° 00' 09" E 77° 14' 40" Pillar No. D: N 29° 59' 59" Pillar No. E: 77° 14' 36.5" E N 29° 59' 58" E 77° 14' 37.5" Pillar No. F: N 29° 59' 46.5" E 77° 14' 37" Pillar No.G: N 29° 59' 46" E 77° 14'39" Pillar No. H: N 29° 59' 42" E 77° 14'37" Pillar No. I: N 29° 59' 42" E 77° 14' 32.5" Pillar No. J: N 29° 59' 38" E 77° 14' 27.5" Pillar No. K: N 29° 59' 36" E 77° 14' 27.5" Pillar No. L: N 29° 59' 36" E 77° 14' 25" Pillar No. M: N 29° 59' 28" E 77° 14'

25" Pillar No. N: N 29° 59' 28" E 77° 14' 22.5" Pillar No. O: N 29° 59' 07" E 77° 14' 15" Pillar No. P: N 29° 59' 06" E 77° 14' 13.5" Pillar No. Q: N 29° 59' 06.5" E 77° 14' 12" Pillar No. R: N 29° 59' 16" E 77° 14' 07" Pillar No. S: N 29° 59' 24" E 77° 14' 07" Pillar No. T: N 29° 59' 40" E 77° 14' 09" Pillar No. U: N 29° 59' 50" E 77° 14' 17" Pillar No. V: N 29° 59' 50" E 77° 14' 18.5" Pillar No. W: N 29° 59' 52" E 77° 14' 19" Pillar No. X: N 29° 59' 52" E 77° 14' 17.5" Pillar No. Y: N 29° 59' 54" E 77° 14' 17.5" Pillar No. Z: N 29° 59' 54" E 77° 14' 21" Pillar No. A1: N 30° 00' 02" E 77° 14' 25" Pillar No. B1: N 30° 00' 02" E 77° 14' 27.5" Pillar No. C1: N 30° 00' 04" E 77° 14' 30" Pillar No. D1: N 30° 00' 04" E 77° 14' 35" Pillar No. E1: N 30° 00' 06" E 77° 14' 35" Pillar No. F1: N 30° 00' 06" E 77° 14' 33"

The PP has proposed to excavate approximately 29.50 Lakhs Tons per annum of sand from the bed of the Yamuna River. The sand will be replenished during monsoon season every year, as the mining will be undertaken on a rotation basis, in such a way that excavated areas of previous years of mining will act as depository for the post monsoon season. Mining activity will be carried out by open cast semi-mechanized method. Light weight excavators will be used for digging and loading of mineral in tippers. No OB/ waste material will be produced. No drilling/ blasting is required as the material is loose in nature. Proper benching of 3.0 m height will be maintained. Roads will be properly made and sprayed by water for suppression of dust. Roads in the lease area for the movement of loaded trippers/ trucks will not have slopes more than 1 in 20. Extraction activities will start in the blocks from the upstream side to downstream side. This will not obstruct the movement of water, if any, during monsoon period in the river course. Approach roads from this block are as already described earlier will be merging with permanent tar roads on both sides of the river for transportation of the mineral to final destinations.

The PP has submitted that the total water requirement will be 40 KLD. This water will be sourced from the nearby villages through tankers. All the activities will be carried out in a mechanized manner. The material will be excavated and loaded directly into dumpers, tractors-trolley etc. by the diesel run excavator cum loaders. The mining operation will be done only from sun rise to sun set. So there is no power requirement for the mining activity.

The green belt shall be developed as per approved eco-friendly mine lease plan and as per CPCB guidelines. The project proponent shall also develop greenbelt in the premises of the schools, hospitals and also carry out the avenue plantation in the vacant areas along roads. The greenbelt shall be developed by planting indigenous species with the consultation of the State Forest Department.

The PP has submitted that no sewerage system is proposed. However, for sanitation purpose portable toilets will be made available. Negligible quantities of silt/clay mixture will be generated, most of which will be left on stream bed for back filling and remaining will be used for plantation. No waste water will be generated from the mining activity of mineral as the project only involves extraction of sand. Domestic waste water will be disposed in soak pits via septic tank.

The PP has informed that there is no human settlement within the mine contract area. No human settlement will be disturbed due to the mining activity. So, no Rehabilitation and resettlement is proposed. Total cost of the Project is approximately Rs.

3.5 Crore/-.

The proposal was placed for consideration in the EAC meeting held on 23-25 November 2016. The committee did not consider the proposal and deferred the proposal for granting ToR as the project proponent **had not submitted the KML file**. The committee also noted that the proposal needs to be revised as the downstream replenishment will be less because of upstream extraction and it needs to be taken into consideration.

The project proposal was once again considered during the EAC meeting held during 15-16 December 2016. Based on the information furnished and discussion held, the Committee noted that there were other contiguous mining projects of similar mineral upstream and downstream. The Committee was of the opinion that 20% of the capacity be reduced as replenishment will be affected because of three contiguous projects. After deliberation the committee recommended the **reduced capacity of 23.60 Lakh TPA** and prescribed the Standard ToR for undertaking detailed EIA study as per Annexure-I.

The proponent submitted that Mining Plan and Progressive Mine Closure Plan was approved by Department of Mines and Geology, Haryana vide memo NO. DMG/HY/MP/MT Karhera Block/YNR-B-13/2016/778 dated 23.02.2017.

The proponent submitted the Final EIA report online on 08.06.2017. But as the proponent did not submit the District Survey Report (DSR) in the format as given in the notification dated 15-01-2016, and the copy of letter from DFO was illegible, PP was asked to submit the DSR, a clear copy of the DFO letter mentioning no forest land is involved and distance in Kilometer from the nearest protected area.

The project proponent submitted the copy of DSR in format as given in the notification dated 15-01-2016, a clear copy of the DFO letter mentioning no forest involved and distance in Kilometer from the nearest PA on 17.08.2017.

The proponent mentioned in the Final EIA Report that the base line data is collected for Post Monsoon Season i.e. 1st December 2016 to 28th February 2017 and the Air, Noise, Soil and water quality are within permissible limits. No wildlife sanctuary/biosphere reserve/national parks is present within 10 Km radius of the study area. One species of schedule-I and two species of Schedule-II were observed during study. Subsequently, a budget of ₹ 10.00 Lakhs has been earmarked for conservation of wildlife.

The proponent mentioned that the impact on the present noise levels due to mining operations will be restricted to the work zone areas only. The impact on the ambient noise levels will not be felt in the settlement areas due to masking effect with the existing noise levels. There is no drilling and blasting envisaged in the sand mining so there is no impact of vibration due to this project. Hence, the noise levels and vibration impact due to the proposed mining operations on the community will be minimal.

The Proponent mentioned that the public hearing was conducted on 23.05.2017 at 11.00 am at Mine Site in village- M.T. Karhera (Yamuna Nagar) under the chairmanship of Deputy Commissioner, Yamuna Nagar. The major issues raised during the Public Hearing

are proper compensation for the land, providing mineral on concessional rate to villagers, the villagers should also allow to use the road that would be constructed for transportation of mineral, providing basic facilities such as drinking water and construction of toilets, compensation to other land owners whose land are outside lease area etc.

The proponent during the public hearing committed that 1) before starting the mining, the damaged roads will be repaired by the lease holder for smooth transportation of the mineral .In addition to this the lease holder will construct a separate road of transportation, so that no villagers will be harmed due to this project,2) new toilets will be constructed and drinking water will be provided in nearby villages,3) The proponent before the start of mining settled the compensation for the land with the land owners. In case of non-settlement, application will be filed to Deputy Commissioner through Mining officer along with tentative compensation in shape of bank draft i.e. 10% of annual contract money for settlement of compensation,4) assured to provide mineral to villagers for their community requirements and social works on concessional rate, 5)The Mining will be done up to 3m depth and a safety zone will be left on both the banks. Mining will be done on the central part of the river as per approved mine plan,6)assured that villagers can also use that road constructed by PP, 7) under the Haryana Minor Minerals Concession Rules, 2012 there is a provision that Lease holder will deposit 10% of auction money under Mines and Minerals Development, Restoration and Rehabilitation Fund which will be utilized for restoration and rehabilitation of the area affected due to mining. The amount of this fund in this project is 35.25 lakhs/year, and 8) 105 skilled/unskilled employment will be generated directly from this project, however, many other employment opportunities will also come indirectly through this project like drivers, helper, shopkeepers, tea stalls, repair workshops, gardeners, bill clerks, security guards etc.

The project proposal was considered during the EAC meeting held during 18-19th September, 2017 for consideration of the EC. The committee noted that production capacity of the project is 23.60 Lakh TPA but the emission rate is calculated on 21.00 Lakh TPA.The water requirement for dust suppression is 22 KLD but in the mitigation measures it is mentioned as 40 KLD. The Committee directed the PP to re-calculate the emission rate and water requirement as per proposed production rate. PP mentioned that the water will be drawn from bore-wells. The committee noted that this will affect the ground water level of the area and require permission from the central ground water board. The committee noted that the traffic study is conducted for State and District Roads only , but as per proponent five haul roads will be constructed to connect the mining area with State and District Roads. The impact on environment due to transportation on these haul roads needs to be assessed and a detailed mitigation plan along with budget needs to be submitted. The financial provision for ESR needs to be clearly mentioned in the EIA Report. The committee also noted that as per District Survey Report there are around 20 other sand mining leases in the upstream of this project. The committee felt that how the replenishment of the downstream area would be possible if this much amount is excavated in the upstream, Committee asked the Ministry to seek the comments of State Mines and Geology Department on the same. The committee also noted that PP has mentioned in the EIA report that the soil removed from outside riverbed will be simultaneously utilized for reclamation purpose, but as per Mine Plan the PP is only allowed to carry out mining in the river bed.

After due deliberation the **committee deferred the proposal** and was of the opinion that the proposal can be considered after the submission of following:

- 1) Comments of the Department of Mines and Geology, Haryana on the replenishment of the downstream area.
- 2) Revised EIA Report after incorporating the correct emission rate, GLC of PM₁₀&PM_{2.5}, water requirement for the project, monitoring plan for free silica, assessment of impact on environment due to transportation on the five haul roads along with mitigation plan and budget for the same, summary of EIA report needs to be revised as the mining is not permitted outside the riverbed.
- 3) The worst case scenario needs to be submitted (i.e. level of pollutants without using any mitigation measures).
- 4) Legal Status of the bore-wells from which water will be withdrawn and permission of Central Ground Water Control Board for withdrawal of ground water.

2.2 J-11015/214/2016-IA.II(M): Sand Mine of M/s M.P. Traders located at Nagli Block, Yamuna Nagar B-15, Tehsil Radaur, District Yamuna Nagar, State Haryana for production capacity of 28 Lakh TPA in 77.25 ha. of Mine lease area.

The proposal of M/s M.P. Traders is for the production of 35 Lakh TPA of sand in mine lease area of 77.25 Ha. **However, finally, the proposal has been considered for the production of 28 Lakh TPA only.** The lease is located at Nagli Block, Yamunanagar B-15, Tehsil Radaur, Yamunanagar, Haryana. The LOI is over an area of 77.25 ha. Mining lease has been granted in favor of M/s. M.P. Traders by The Director General, Department of Mines & Geology, Haryana vide memo no.- DMG/ HY/ Cont/ Nagli Block/ YNR B 15/ 2016/ 5414 dated 20.10.2016 for a period of 10 years. The lease area lies on riverbed of Yamuna River in District- Yamuna Nagar (Haryana). Total M.L. area is 77.25 ha which is non- forest land. The proposed mining project land has been allotted as a single unit for mining of Sand (Minor Mineral) throughout the riverbed of District Yamuna Nagar (Haryana). The lease is located in the following latitude and longitude: Pillar No. A- N 29° 58' 29" E 77° 13' 47" Pillar No. B -N 29° 58' 30" E 77° 13' 50.5" Pillar No. C- N 29° 58' 16" E 77° 13' 48.5" Pillar No. D- N 29° 58' 02" E 77° 13' 46" Pillar No. E- N 29° 58' 02" E 77° 13' 45" Pillar No. F- N 29° 57' 38" E 77° 13' 45" Pillar No. G- N 29° 57' 24" E 77° 13' 37" Pillar No. H- N 29° 57' 38" E 77° 13' 13" Pillar No. I- N 29° 57' 40" E 77° 13' 20.5" Pillar No. J- N 29° 57' 46" E 77° 13' 27" Pillar No. K- N 29° 58' 06" E 77° 13' 28" Pillar No. L- N 29° 58' 10" E 77° 13' 32" Pillar No. M- N 29° 58' 10" E 77° 13' 39" Pillar No. N- N 29° 58' 15" E 77° 13' 43" Pillar No. O- N 29° 58' 15" E 77° 13' 42" Pillar No. P- N 29° 58' 25" E 77° 13' 42".

The project proponent has submitted that mining activity will be carried out by open cast semi-mechanized method. Light weight excavators will be used for digging and loading of mineral in tippers. No OB/ waste material will be produced. No drilling/ blasting is required as the material is loose in nature. Proper benching of 3.0 m height will be maintained. Roads will be properly made and sprayed by water for suppression of dust.

Roads in the lease area for the movement of loaded trippers/ trucks will not have slopes more than 1 in 20. Extraction activities will start in the blocks from the upstream side to downstream side. This will not obstruct the movement of water, if any, during monsoon period in the river course. Approach roads from this block are as already described earlier will be merging with permanent tar roads on both sides of the river for transportation of the mineral to final destinations.

The Project Proponent has submitted that the total water requirement will be 45 KLD which will be sourced from the nearby villages through tankers. No liquid effluent will be generated at the mine site due to the mineral excavation. Only domestic waste water will be generated from mine office etc. which will be disposed of in septic tank via soak pits. The mining lease is a part of river bed of Yamuna River in Tehsil- Radaur, District- Yamuna Nagar (Haryana). The proposed activity is to take place in dry part of river bed where the excavated sand will be replenished during rainy season every year and hence there will be no change in land use. There will be no OB or waste generation as the sand is exposed in the river bed. But, at the later stage, if any soil or waste will be obtained during mining, then same will be stored with proper protection and will be used for reclamation (plantation).

The PP has submitted that the green belt shall be developed as per approved eco-friendly mine lease plan and as per CPCB guidelines. The project proponent shall also develop greenbelt in the premises of the schools, hospitals and also carry out the avenue plantation in the vacant areas along roads. The greenbelt shall be developed by planting saplings per year. Indigenous species with the consultation of the State Forest Department shall be planted and maintained.

The PP has informed that there is no human settlement within the mine contract area. No human settlement will be disturbed due to the mining activity. So, no Rehabilitation and resettlement is proposed. Total cost of the Project is approximately ₹ 9 Crore/-.

The proposal was placed for consideration in the EAC meeting held on 23-25 November 2016. The committee did not consider the proposal and deferred the proposal for granting ToR as the project proponent had not submitted the KML file. The committee also noted that the proposal needs to be revised as the downstream replenishment will be less because of upstream extraction and it needs to be taken into consideration.

The project proposal was once again considered during the EAC meeting held during 15-16 December 2016. Based on the information furnished and discussion held, the Committee noted that there were other contiguous mining projects of similar mineral upstream and downstream. The Committee was of the opinion that 20% of the capacity be reduced as replenishment will be affected because of three contiguous projects. After deliberation the committee recommended the reduced capacity of 28 Lakh TPA and prescribed the Standard ToR for undertaking detailed EIA study.

The proponent submitted that Mining Plan and Progressive Mine Closure Plan was approved by Department of Mines and Geology, Haryana vide memo NO.

The proponent submitted the Final EIA report online on 10.07.2017. But as the proponent did not submit the District Survey Report (DSR) in the format as given the notification dated 15-01-2016, Annexure of EIA Report was not attached and the copy of letter from DFO was illegible. PP was asked to submit the same.

The project proponent re-submitted the Final EIA Report along with annexures , copy of DSR in format as given in the notification dated 15-01-2016, a clear copy of the DFO letter mentioning no forest land is involved and distance in Kilometre from the nearest PA on 17.08.2017.

The proponent mentioned in the Final EIA Report that the base line data is collected for Post Monsoon Season i.e. 1 st December 2016 to 28th February 2017 and the Air, Noise, Soil and water quality are within permissible limits. There is no wildlife sanctuary/biosphere reserve/national parks present within 10 Km radius of the study area. One species of schedule-I and two species of Schedule-II were observed during study. Subsequently, a budget of ₹ 10.00 Lakhs has been earmarked for conservation of wildlife.

The proponent mentioned that the impact on the present noise levels due to mining operations will be restricted to the work zone areas only. The impact on the ambient noise levels will not be felt in the settlement areas due to masking effect with the existing noise levels. There is no drilling and blasting envisaged in the sand mining so there is no impact of vibration due to this project. Hence, the noise levels and vibration impact due to the proposed mining operations on the community will be minimal.

The Proponent mentioned that the public hearing was conducted on 23.05.2017 at 12.00 am at Mine Site in Village Nagli. (Yamuna Nagar) under the chairmanship of Deputy Commissioner, Yamuna Nagar. The major issues raised during the Public Hearing are employment generation, arrangement for health check-up of mine workers, benefit of the project, no. of trees to be planted, proper compensation for the land, providing mineral on concessional rate to villagers, what kind of pollution to be generated due to mining activities, provision of social development of the village and providing sand to the villagers free of cost etc.

The proponent during the public hearing committed that **i)** 115 skilled and semi-skilled people will get direct employment from this project. 105 dumpers will be used in this project and each dumper requires 4-5 people i.e. driver, cleaner, helper. About 500-700 people will be employed for this purpose. Every year 7,800 trees will be planted that will need so many gardeners to take care of the plants. 22 KLD water will be used for dust suppression for which many persons will be employed. Bill clerks will also be needed for this project and to fulfil this purpose graduated students will be employed from the local villages. These are the direct employment opportunities. Apart from this so many indirect employment will also be generated i.e. many hotels, workshop repair, tea stalls, general store will be established and so many employment opportunities will be generated. Lease holder assured that first priority for employment will be given to local villagers only, **ii)** A budget of ₹ 10 Lakhs per year is proposed for occupational health safety of mine workers.

A qualified MBBS doctor will be appointed, first aid, medical Centre will be established at project site. Regular health check up will be conducted by doctors and villagers also take advantage of that. Dust mask will be provided to the workers to protect themselves from dust. Awareness training programme will also be organized periodically to the workers to minimize the impact of air pollution. Proper care will be taken of the workers so that it won't affect the health of workers. Medical camps will be organized quarterly/ six monthly in which our workers and villagers will also be benefitted, **iii)** A budget of ₹ 30 Lakhs/year has been proposed for EMP. 7,800 trees will be planted per year that means approx. 39000-40000 trees will be planted in five years. Only local species of trees will be planted after consultation with DFO. The Plantation will also be done along with the road of transportation, premises of Gram Panchayat Bhawan, Hospitals, schools etc.

The project proposal was considered during the EAC meeting held during 18-19th September, 2017 for consideration of the EC. The committee noted that production capacity of the project is 28 LTPA but the emission rate is calculated on 21.0 LTPA. The water requirement for dust suppression is 22 KLD but in the mitigation measures it is mentioned as 45 KLD. The Committee directed the PP to re-calculate the emission rate and water requirement as per proposed production rate. PP mentioned that the water will be drawn from bore-wells. The committee noted that this will affect the ground water level of the area and require permission from the central ground water board. The committee noted that the traffic study is conducted for State and District Roads only, but as per proponent, five haul roads will be constructed to connect the mining area with State and District Roads. The impact on environment due to the transportation on these haul roads needs to be assessed and a detailed mitigation plan along with budget needs to be submitted. The financial provision for ESR needs to be clearly mentioned in the EIA Report. The committee also noted that as per District Survey Report there are around 20 other sand mining leases in the upstream of this project. The committee felt that how the replenishment of the downstream area would be possible if this much amount is excavated in the upstream, Committee asked the Ministry to seek the comments of State Mines and Geology, Department on the same. The committee also noted that PP has mentioned in the EIA report that the soil removed from outside riverbed will be simultaneously utilized for reclamation purpose, but as per Mine Plan the PP is only allowed to carry out mining in the river bed.

After due deliberation the **committee deferred the proposal** and was of the opinion that the proposal can be considered after the submission of following:

- 1) Comments of the Department of Mines and Geology, Haryana on the replenishment of the downstream area.
- 2) Revised EIA Report after incorporating the correct emission rate, GLC of PM₁₀&PM_{2.5}, water requirement for the project, monitoring plan for free silica, assessment of impact on environment due to transportation on the five haul roads along with mitigation plan and budget for the same, summary of EIA report needs to be revised as the mining is not permitted outside the riverbed.
- 3) The worst case scenario needs to be submitted (i.e. level of pollutants without using any mitigation measures).

- 4) Legal Status of the bore-wells from which water will be withdrawn and permission of Central Ground Water Control Board for withdrawal of ground water.

2.3 J-11015/262/2009-IA.II(M): Shirale Bauxite Mine (2.5 MTPA) of M/s Anand Mines located at Village Panundre and Mhalaswade, District Kolhapur, Maharashtra (278.85 ha)

The proposal by **M/s Anand Mines** is for **Shirale Bauxite Mine** (278.85 ha) with proposed production of 0.25 Million TPA at Village Panundre and Mhalaswade, District Kolhapur, Maharashtra.

The proponent submitted that the Letter of Intent from Ministry of Coal & Mines Dept. of Mines Govt. of India, New Delhi on 28th Jan 2008. The mine is falls in Survey and India Topo-sheet No. 47H/13 (E43T13) and lies between Latitude -16°50'15" to 16°51'41.75" N and Longitude-73°52'50" to 73°56'00" E. The Mining Plan Approved of date 22-10-2009 vide letter no MB/KLP/Goa (MAH) BX- 193-SZ for period 5 years.

The mine working will be opencast mechanized with jack hammer. Ultimate working is 1.5m bgl. Ground water table is reported to vary between 80-100m bgl. The mine working will not intersect the ground water table. Life of mine is 7 years. Water requirement is 47 KLD which will be obtained from ground water. The baseline AAQ data showed that the levels are within permissible limits. TOR for this project was prescribed on **09.11.2009**. Public hearing has been held on 02.12.2010. The issues raised during public hearing were also considered and discussed during the meeting. It was reported that there is no court case pending against the project. The proposal was considered by the Expert Appraisal Committee in its meeting held on 28th -30th November, 2011. Based on the presentation made and discussions held, the Committee sought information on:

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

submitted in this regard. Document in support of the reported postponement of PH should also be submitted.

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

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

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

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

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

later than eight weeks from date of order.

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

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

1) A certificate from State Forest Department that the Forest Compartment no 1051,1052,1054 and 1055 is outside the mining lease area and there is no forest land involved in mine lease area.

**2.4 J-11015/85/2017-IA.II (M): Ahirgaon Limestone Mining Project (Mining Area: 2130.015 ha) Limestone Production Capacity 3.75 million TPA At Villages – Bhumkahr, Ahirgaon, Bachwai, KarhiKothar, Gaura, Rampur Chourasi, Bhad, Sagma&Majhgawan, Tehsil – Raghuraj Nagar , District–Satna (Madhya Pradesh) by Talavadi Cement Ltd.
IA/MP/MIN/67159/2017**

The proposal of Talvandi Cement Limited is for the mining of the Limestone with proposed production capacity of **3.75 Million TPA** at the Villages – Bhumkahr, Ahirgaon, Bachwai, KarhiKothar, Gaura, Rampur Chourasi, Bhad, Sagma & Majhgawan, Tehsil – Raghuraj Nagar, District: Satna, Madhya Pradesh. The Mining lease area is **2130.015 Ha** which falls in the Survey of India Topo-sheet No.63 D/10, 63 D/14 and lies between Latitude: 24⁰35'45.2" to 24⁰38'47.0" N and Longitude: 80⁰45'20.3" to 80⁰49'22.6" E.

The proponent submitted that the Mining Lease grant order over an area of 2130.015 Ha was issued vide order No F-3-51/2007/12-1 dated 7.09.2013 and the lease deed was executed on 10.01.2014. As the Mining Lease area being more than 10 sq km, permission under Section 6 (1) (b) MMDR Act 1957 has been accorded by the Central Government vide order no. 4/107/2008-M.IV dated 08.01.2012. The total Mining area of 2130.015 Ha comprises of Govt. land (33.746 Ha)& private agricultural land (2096.269 ha).

The proponent submitted that method of Mining is fully mechanized open cast with the help of Heavy Earth Moving Machineries, drilling and blasting. The infrastructure such as crusher, mine office, workshop and other statutory buildings will be constructed. The Limestone will be transported through dumpers up to crusher hopper and from crusher the crushed limestone will be further transported to cement plant by a covered conveyor belt. The total water requirement for mining project is estimated as 100 KLD, which will be sourced from ground water.

The proponent submitted the over burden waste generated during mining will be dumped in the dumping yards in the mining lease area. Soil will be stacked separately and will be used for plantation purpose. The domestic wastewater will be generated from mine office, which will be disposed of in soak pit via septic tank. A small quantity of the spent oil will be generated, part of which will be re-used for lubrication of external parts of machine, lubrication of drill machine hammers, etc. & balance will be sold to Authorized Recyclers.

The project proposal was considered in the EAC meeting held during 18-19th September, 2017 for consideration of the ToR. The Committee **deferred the proposal** as the proponent did not attend the meeting.

2.5 J-11015/15/2017-IA.II (M):Chintalayapalle Limestone Mine by M/s Ramco Cements Limited Mining lease area: 491.55 Ha with the capacity 4.00 MTPA Situated at Chintalayapalle & Itikyala Villages, Kolimigundla Mandal, Kurnool Dist., Andhra Pradesh. IA/AP/MIN/62749/2017

The proposal of M/s Ramco Cements Limited is for the mining of 4.0 MTPA limestone in a mine lease area located at Chintalayapalle & Itikyala Villages, Kolimigundla Mandal, Kurnool Distt., Andhra Pradesh. The proponent submitted that the mine lease area is spread over an area of 491.55 Ha out of which 449.34 ha. is patta land and 42.21 ha is Govt. land under the jurisdiction of Chintalayapalle & Itikyala Villages, Kolimigundla Mandal, Kurnool District, Andhra Pradesh. The proponent submitted that the Industries & Commerce (M-III) Department, issued Order vide Memo No. 576/M.III (1)/2015, dated: 16.10.2015 for extension of lease.

The proponent submitted that the mine has about 169.72 Million Tonnes of mineable reserves (approx.) which will last for about 45 years with proposed production capacity of 4.0 Million Tonnes Per Annum (MTPA) as the proposed total production in first five years is 10.00 Million Tonnes only. The mine operation will be by Opencast Mechanized method of mining. The limestone produced will be directly transported to the crusher located at Plant site. Hence a separate area for stacking of the limestone is not required. The interstitial clay and waste rock that will be generated during the course of mining will be transported to the dump yard. This material will ultimately be utilized for reclamation once the mined out area is available. It is not possible to reclaim the entire mined out area, hence a part of the area will be retained as water reservoir for future use.

It was mentioned by the proponent that the water requirement for the proposed mine is about 150 m³/day for dust suppression, plantation and domestic purposes. This

requirement will be supplied initially by Bore wells available in Mine Lease area and later rain water collected in the mine pit will be used. There is no wildlife sanctuary, national park, Tiger Reserve, Elephant Corridor and eco-sensitive area within the 10 km radius of the project site. The capital Investment Cost for environmental management is estimated as Rs. 80.00 lacs. The total project cost will be 10.75 Cr. The total employment potential is 120 persons (direct and indirect).

The project proposal was considered in the EAC meeting held during 20-21 March 2017 for consideration of ToR. The committee noted that Industries & Commerce (M-III) Department, issued Order vide Memo No. 576/M.III(1)/2015, dated: 16.10.2015 **clearly mentioned that the extension was subject to the proponent getting an EC from the MOEF&CC within 12 months of the date of issue.** As the proponent has applied for ToR after 12 months, the committee needed clarification on the validity of the mine lease. Based on the KML file submitted by proponent, the committee noticed that the DSS showed the major part of the mine lease area was under agriculture land.

After due deliberation the committee deferred the proposal and was of the opinion that the proposal can be considered after the proponent submits the following:

- i) A certificate from the Department of Industries & Commerce that the mine lease is valid as on date and has been granted to M/s Ramco Cements.
- ii) A land use conversion certificate from the competent Authority.
- iii) As the DSS showed that it was an agricultural area, number of families whose patta lands are involved, the number of families doing agriculture and number of dwelling units involved within the project area.

The project proposal was considered in the EAC meeting held during 18-19 September 2017 for consideration of the ToR. The project proponent vides its letter dated 14.08.2017 and during the presentation before EAC stated the following:

- a) The Industries & Commerce Department, Andhra Pradesh G.O. MS No. 138 dated 15.02.2000, the same has been extended vide Memo No. 576/M.III (1) /2015 dated 16.10.2015. The GO was further extended vide Memo No. 5002/M.III (1) /2017 dated 17.07.2017 (copy submitted to MoEF&CC) for a period of three years regarding the validity of 4 Nos. of Mining leases. The validity of the G.O. dated 17.07.2017 is till 16.07.2020.
- b) The Government of Andhra Pradesh is about to reduce the rate of Non-Agricultural Land Assessment (NALA) from 9% to 3% and necessary order will be issued by Govt. of AP. The NALA fee will be paid with new rates of Assessment and certificate from competent authority will be submitted to the Ministry before commencement of operations of the Mine.
- c) Out of 491.55 Ha lease area, 449.34 Ha is patta land and remaining 82.74 Ha is Govt. land. Out of 408.81 Ha of patta land, 408.81 Ha has already purchased by Ramco Cement Company (formerly Madras Cement Company) during 2006&

2007. The Ramco Cement Company also allowed the previous land owners to carry out agricultural activities till the land put in use. There is no dwelling unit within the mining lease area.

Based on the information furnished and discussion held, the Committee **recommended the proposal** for grant of standard ToR as per Annexure-1 with additional condition that as the other mines are already operating in the buffer zone, EIA study should also reflect the cumulative impact on the environment. The proponent should also submit the maximum level of pollutant i.e. without taking mitigation measures into consideration.

2.6 J-11015/18/2017-IA-II(M): Kanakadripalli limestone mine of M/s Ramco Cements Limited Mining lease area: 435.24 Ha with the capacity of 3.15 MTPA at Petnikota & Itikyala Villages, Kolimigundla Mandal, Kurnool District, Andhra Pradesh. (IA/AP/MIN/62752/2017)

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

The proponent submitted that the mine has about 45.253 Million Tonnes of mineable reserves (approx.) which will last for about 47 years with proposed production capacity of 1.0 Million Tonnes Per Annum (MTPA) as the proposed total production in first five years is 3.00 Million Tonnes only. The mine operation will be by Opencast Mechanized method of mining. Limestone produced from this mine will be transported to crusher located at cement plant through haul roads.

It was mentioned by the proponent that the water requirement for the proposed mine is about 100 m³/day for dust suppression, plantation and domestic purposes. This requirement will be initially met from Ground water and will be used for the purpose of domestic, dust suppression and afforestation in mines. Later the rain water collected in the mine pit will be used. There is no wildlife sanctuary, national park, Tiger Reserve, Elephant Corridor and eco-sensitive area within the 10 km radius of the project site. The capital Investment Cost for environment management is estimated as ₹ 39 Lakhs. The total project cost will be 3.76 Cr. The employment potential will be 40.

The project proposal was considered in the EAC meeting held during 20-21 March 2017 for consideration of ToR. The committee noted that Industries & Commerce (M-III) Department, issued Order vide Memo No. 576/M.III(1)/2015, dated 16.10.2015 clearly mentioned that the extension was subject to the proponent getting an EC from the MOEF&CC within 12 months of the date of issue. As the proponent has applied for ToR after 12 months, the committee needed clarification on the validity of the mine lease. The committee was also displeased that the proponent had not submitted a KML file of the

lease area. After due deliberation the committee deferred the proposal and was of the opinion that the proposal can be considered after the proponent submits the following:-

- i. A KML file of the mine lease area.
- ii. A certificate from the Department of Industries & Commerce that the mine lease is valid as on date and has been granted to M/s Ramco Cements.
- iii. As the proponent mentioned that it was an agricultural area, number of families whose patta lands are involved, the number of families doing agriculture and number of dwelling units involved within project area.

The project proposal was considered in the EAC meeting held during 18-19 September 2017 for consideration of the ToR. The project proponents vide its letter dated 14.08.2017 and during the presentation before EAC stated the following:

- a) The Industries & Commerce Department, Andhra Pradesh G.O. MS No. 138 dated 15.02.2000; the same has been extended vide Memo No. 576/M.III (1) /2015 dated 16.10.2015. The GO was further extended vide Memo No. 5002/M.III (1) /2017 dated 17.07.2017 (copy submitted to MoEF&CC) for a period of three years from regarding the validity of 4 Nos. of Mining leases. The validity of the G.O. dated 17.07.2017 is till 16.07.2020.
- b) The Government of Andhra Pradesh is about to reduce the rate of Non-Agricultural Land Assessment (NALA) from 9% to 3% and necessary order will be issued by Govt. of AP. The NALA fee will be paid with new rates of Assessment and certificate from competent authority will be submitted to the Ministry before commencement of operations of the Mine.
- c) Out of 435.24 Ha lease area, 378.61 Ha is patta land and remaining 56.63 Ha is Govt. land. Out of 378.61 Ha of patta land, 378.61 Ha has already purchased by Ramco Cement Company (formerly Madras Cement Company) during 2007 & 2008. The Ramco Cement Company also allowed the previous land owners to carry out agricultural activities till the land put in use. There is no dwelling unit within the mining lease area

The Committee observed on viewing the KML file on Google that the Mining has already been carried out in the mining lease area and asked the Ministry to seek clarification from State Mine & Geology Department, Andhra Pradesh on the same. Based on the information furnished and discussion held, the Committee **deferred** the proposal and was of the opinion that the proposal can be considered after receipt of clarification from State Mine & Geology Department, Andhra Pradesh.

2.7 J-11015/190/2016-IA.II(M): Kakra-Panna Limestone Mine of M/s Jaykaycem Central Limited located at Villages Kakra, Kamtana, Saptai, Judi, Devripurohit&Devra, Tehsil Amanganj, District Panna of State Madhya Pradesh (area – 1594.34 Ha to produce : Normative Capacity : 4.0 MTPA Maximum Achievable Capacity : 4.08 MTPA ha.) (IA/MP/MIN/58058/2016)

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, Devripurohit & 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 240 19'46.6"N to 240 22'15.3"N and 790 56'15.5"E to 790 59'38.2"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 equipment 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 from the project is for 300-350 persons. The project cost is estimated about ₹572.58 crore.

The proposal was considered in the EAC Meeting held on 24th July, 2017. 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.

The PP submitted the above information online and mentioned that to suppress the dust at crusher area Dry Fog System will be installed at crusher hopper and at discharge point jet plus bag filter of capacity more than 100000 m³/hr will be installed.

The PP mentioned that an area of 1725.87 hect. was applied for grant of mining lease after extensive mineral exploration. After consideration and deduction of habitation, Nallas and Road etc. deductible under Rule 27 (h) of Mineral Concession Rules'1960 the State Govt. after seeking due concurrence from the Central Govt., granted mining lease over mineral bearing area of 1594.34 Ha. PP mentioned that no displacement is required as the Government has already deducted the habitat area, roads, nalla etc. along with safety zone as per rules.

The PP submitted that the total number project affected household is 445 within the ML area and 1007 outside the ML area. Out of 1007 household about 319 house hold will lose part of their land holdings. Therefore, total PAH will be 764 in number (445 + 319). We are proposing the R&R plan for these households in line with the Land Acquisition, Rehabilitation and Resettlement Act, 2013

The PP submitted that as per the information received from the Agricultural Extension Officer in Dist. Panna M.P., out of the total required land demarcated for the purpose, approximately 65% of the total land is agricultural while remaining 35% is barren or with rock exposures. The irrigation for farming in the area is sourced from the ground water rather than by rains. The numbers of crops in a year are three. The average income of the project affected people is around ₹ 90,000 per household per year.

The project proposal was considered in the EAC meeting held during 18-19 September 2017 for consideration of the ToR. Based on the information furnished and discussion held, the Committee observed that:

1. Major part of the mine lease is agricultural land and it is a pulse production area,
2. Large number of families are going to be affected by mining activities,

The Committee advised the PP to revise & minimise the land requirement taking into consideration the mineral deposits and location of villages so that impact on agriculture and communities is minimised. The Committee also requested the Ministry to constitute a sub-committee consisting of three members to visit the project site to ascertain and suggest the ways to minimise the impact of the mining activities on communities in line with the Ministry's O.M. dated 29.08.2014 prescribing specific mitigation measures to deal with cases involving habitation related issues.. Accordingly, committee **deferred** the proposal.

2.8 Rama Iron Ore Mine of M/S JSW Steel Ltd for increase in iron ore production from 0.5 to 0.94 MTPA,ML area 33.80 Ha located at Ramgad Forest, Ramgad Village, Sandur Mandal, Ballari District, Karnataka State.

The Proposal is for increase in iron ore production from 0.5 to 0.94 MTPA of Rama Iron Ore Mine of M/S JSW Steel Ltd over an area of 33.80 Ha located at Ramgad Forest,

Ramgad Village, Sandur Mandal, Ballari District, Karnataka State. The proposal was considered in the EAC Meeting held during 18-19 September, 2017. Committee **deferred** the proposal as the PP did not attend the meeting.

2.9. Santonachi Upri mine of M/s Sociedade Zarapkar & Parkar Limitada located at Dabel, Sanguem, South Goa, Goa - EC amendment and lifting of abeyance – regarding. (J-11015/59/2005-IA-II(M))

The proposal of M/s Sociedade Zarapkar & Parkar Limitada is for EC amendment and lifting of abeyance. The EC granted to M/s Sociedade Zarapkar & Parkar Limitada vide no.J-11015/59/2005-IA-II(M) dt 28th October 2005 was kept in abeyance in MoEF&CC letter dated 20.3.2015 as it was one of the 22 cases which had forest land in the lease area or dispute on involvement of forest land and Forest Clearance was not available.

The proponents mining lease bearing T.C. No. 34/1955 earlier comprised of partly Forest and partly of non-Forest land in their mine lease area of 98.3095 ha. The proponent has mentioned that the said mining lease is a deemed mining lease and has been granted a deemed extension Order bearing no. 96/118/87- IIR/Mines/1694 dated 27.09.2016 and the validity of the lease is extended up to 31.03.2020. Subsequently the proponent had sought for deletion of the area designated as forest/forest land falling within the said mine area which is confined to 4.6350 Ha. The proponent has submitted that the Directorate of mines and Geology approved the surrender of such land in term of such application.

Vide letter no. 96/118/87-IIR-Mines/2670 dated 02.01.2017, Directorate of Mines & Geology called upon the Conservator of Forest, for a joint inspection at the site /said mine on 06.01.2017, to verify the boundary pillars for the deleted area of 4.6350 Ha. The joint inspection was done in the presence of the presence of the respective representatives of the concerned departments came to be held on 06.01.2017 and the DGPS plan deleting the area of 4.6350 Ha.

The proponent also submitted the KML file which was forwarded to the FC division to check on DSS. The DSS cell informed that there was 17.51 ha. recorded forest area inside the ML boundary. A letter dated 6th April 2017 was addressed to the Goa Forest Department to clarify the 17.51 ha. of forest land involved in the mine lease area of Sociedade Zarapkar & Parkar Limitada in TC no. 34/55 situated at Codli.

The Deputy Conservator of Forest, Goa Forest Department vide Letter no.6-13-(269)-2005-FD/604 dated 03.05.2017 has informed that the forest area of 4.6350 ha. belonging to M/s Sociedade Zarapkar & Parkar Limitada in TC no. 34/55 situated at Codli has been excluded from the lease. It is also mentioned in the letter that the recorded forest area in the mining lease boundary was only 4.6350 ha and not 17.51 ha.

The project proponent clarified that the original lease was 98.3095 ha. However, after DGPS surveys conducted as per IBM circular vide no.2/2010 dt. 06.04.2010, the lease area was demarcated as 97.2192 ha. After deleting the 4.6350 ha. of forest land in the mine lease area, the lease area was further reduced to 92.5842 ha. The PP also submitted a copy of the letter dt.04.08.2017 from IBM approving the revised mining plan and mine

closure plan for the reduced area of 92.5842 ha. The project proponent also submitted a copy of the revised executed mine lease document dated 11th January 2017 for the reduced area of 92.5842 ha.

The project proponent in view of the deletion of the forest land from the lease area, has requested to lift the abeyance from the EC granted to them. As the mine lease area had been reduced from 98.3095 ha. to 92.5842 ha, the proposal was placed in the EAC meeting held during 18th and 19th September 2017 for technical appraisal and consideration of amendment of EC.

The Committee noted the submissions made by the PP and made detailed deliberations on the proposal. After due deliberation the committee **recommended** the amendment of EC and lifting of abeyance from the EC no.J-11015/59/2005-IA-II(M) dt 28th October 2005. The committee also recommended the following additional conditions to be added in the amended EC.

- i. The State Govt. of Goa shall develop and implement a credible mechanism to regularly monitor and ensure that capping of 20 MTPA on the mining leases in the State of Goa is implemented as per the directions of the Hon'ble Supreme Court of India in its order dated 21.04.2014 and any further order in the matter of Goa Foundation v/s Union of India in W.P no 435 of 2012.
- ii. No mining shall be allowed in the forest land for which FC is not available
- iii. The mining of dumps is not permitted unless mentioned in the approved mining plan and EC letter.
- iv. Dumping material outside the mine lease area is not permitted unless mentioned in the approved mining plan and EC letter.
- v. Prior permission be obtained from CGWB for drawal of ground water and intersection of ground water table as applicable.
- vi. Violation will be dealt as per the existing law and lifting of abeyance if EC will not in any manner affect that.
- vii. If any violation is observed in future, the EC will be cancelled as per rules.
- viii. State Government will take action in case of violation under section 15 and 19 of EPA, 1986 as noted and recommended in the EAC report.
- ix. The project proponent will file six monthly compliance report to regional office, MoEFCC and State Pollution Control Board regularly.

(2.10) Enhancement of production from 2.824 Million TPA to 4.324 Million TPA in respect of Birla Cement Limestone mines of M/s. Birla Cement Works in M.L. Area of 588.59 Ha located at Villages – Bherda, Jai, Surjana & Nagri, P.O. Semalpura, Tehsil & District Chittorgarh (Rajasthan) (IA/RJ/MIN/22914/2014) – Consideration of Environmental Clearance regarding [File No. J-11015/73/2014-IA.II (M)]

The proposal of M/s. Birla Cement Works is for enhancement of production capacity from 2.824 Million TPA to 4.324 Million TPA in respect of Birla Cement Limestone mines of M/s. Birla Cement Works in M.L. Area of 588.59 Ha. The project also envisages installation of Beneficiation Plant with capacity of 200 TPH for the crusher waste; Installation of

Stationary/ Mobile Crusher with capacity of 500 TPH at Nagri pit; Installation of Over Land Belt Conveyor (OLBC) with capacity of 900 TPH from Nagri pit to Jai Surjana crushed limestone stock yard; and Installation of 5 MW Solar Power Plant at Bherda. The mine is located at Villages – Bherda, Jai, Surjana & Nagri, P.O. Semalpura, Tehsil & District Chittorgarh (Rajasthan). The instant mine lease area is spread into two blocks viz. Block B (Village - Bherda) & Block C (Villages -Jai, Surjana & Nagri which fall in Survey of India Topo sheet No. 45L/9. The Block B of mining lease area falls between 24°54'45.42"N to 24°56'4.47"N latitudes and 74°38'4.84"E to 74°39'27.5"E longitudes while the Block C of mining lease area falls between 24°56'2.2"N to 24°58'17.3"N latitudes and 74°39'58.8"E to 74°42'5.4"E longitudes. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

2. The proposal of ToR was earlier considered by the EAC in its meeting held during April 30, 2014 wherein the Committee recommended for grant of ToR to the PP. The Ministry issued Terms of Reference (ToRs) for the preparation of the Environmental Impact Assessment (EIA) Report and Environmental Management Plan (EMP) vide their letter no. J-11015/73/2014-IA.II (M) dated 10.09.2014 and amendments in ToR & extension of the validity of ToR (up to 09.09.2017) was issued on 10.06.2016. **The Committee noted that the proposal of PP is based on 4.324 Million TPA of limestone ore, however, PP is advised to indicate total excavation (equivalent to 4.324 Million TPA of limestone production) as per the approved Mining plan based on EC capacity shall be fixed.** The EIA Report/ EMP was submitted to Ministry on 24.05.2017 for appraisal. The Committee observed the past production details submitted by PP and noted the PP's submission that first EC was obtained EC in 2003-04 and then in 2007-08, however, the past production details indicate that it has made expansion in production under EIA, 1994 progressively. However, the PP submitted that it had valid Consent at the time of production. **The Committee, therefore, asked the PP to present details of permissions obtained by it since 1993-94 (EC as well as Consent) vis-a-vis authenticated production figures for further examination of the issue in view of the judgement passed by Hon'ble Supreme Court of India on 02.08.2017 in the matter of Common Cause Vs Union of India & Others.**

3. PP reported that lease area involves 27.13 Ha of forest land for which diversion letter has been issued by MoEFCC, New Delhi vide letter no. 8-31/96-FC dated 06th February 2001. The Divisional Forest Officer, Chittaurgarh issued a letter for handover the forest land for mining activities in favor of M/s. Birla Cement Works vide letter no./Tech/05/4492-98 dated 06.07.2005. The Deputy Conservator of Forest, Chittaurgarh issued a letter regarding status of forest land vide letter no. 1253 dated 05.02.2013 mentioning that NPV was not applicable on date 06.02.2001 (date of grant of FC) & Compensatory Afforestation Cost was applicable only. The Deputy Conservator of Forests (Wildlife), Chittaurgarh vide its letter no.F() Survey/DFO/WL/17-18/4094 dated 25.08.2017 has mentioned that the boundary of mine lease area is 8.1 km away from the Bassi Wildlife Sanctuary which is also declared as a Eco-Sensitive Zone as per the Draft ESZ notification. However, since final ESZ notification has not yet come, buffer zone of 10kms from lease area has been considered. The authenticated list of Schedule-I species has also been provided vide letter dated 25.08.2017. The PP has submitted Wildlife Conservation Plan in respect of 4 species namely Peafowl, Leopard, Python and Indian Lizard with budgetary

allocation of ₹117.5 lakhs for 10 years. However, the exact period of start and end of the conservation plan is not clear. Further, as the mine is an existing operational mine, it is not clear from the MoEFCC R.O. Compliance Monitoring report whether any wildlife conservation plan was approved earlier and implemented in consultation with State Forest Department. **The Committee further noted that the mine is operating since 1964 and the Bassi Wildlife Sanctuary is falling within the buffer zone of 10 Kms, hence, the PP was required to take NBWL Clearance after 2009. Hence, the Ministry may take action as per applicable provisions. The Committee also asked the PP to increase the budget of the Wildlife Conservation Plan as the area is rich in bio-diversity. The PP submitted to increase the budget of the Wild Life Conservation Plan to ₹225 Lakhs from ₹117.5 lakhs for 10 years, however, the Committee asked the PP to present breakup of the after consultation with State Forest Department.**

4. PP reported that the company was granted mining lease of 1546.8 Ha in year 1964 which was spread into three blocks viz. Block A (Village Bhoikhera – 72 Ha), Block B (Village Bherda – 700 Ha) & Block C (Villages Jai, Surjana & Nagri – 774.8 Ha). The company surrendered 958.21 Ha of the lease area i.e. Bhoikhera – 72 Ha, Bherda – 476.21 Ha and Jai, Surjana & Nagri – 410 Ha. During demarcation for second renewal, in Bherda Block the area was reduced from 234.00 Ha to 223.79 Ha (8.79 Ha was allotted to quarry licenses by State Govt. and 1.42 ha is not available for grant due to computation error, hence, finally retained lease area is 588.59 Ha which is lying in Block-B and Block-C. The lease documents submitted by the PP indicate that first renewal was done from 19.06.1984 to 18.06.2004, however, the second lease was pending thereafter. The Environment clearance was granted for Jai Surjana limestone mine (M.L. Area 364.80 Ha) by MoEFCC, New Delhi vide letter no. J-11015/256/2005-IA.II (M) dated 17.09.2007 Bherda Limestone Mine (M.L. Area - 234 ha) vide letter no. J-11015/232/2005-IA.II (M) dated 25.09.2007.

5. The Department of Mines and Geology vide its letter dated 16.03.2015 has mentioned that post MMDR Amendment Act, 2015; the mine lease validity has been extended to 31.03.2030. It is also mentioned in the letter that the mine lease was valid only till 18.06.2004. **The Committee noted the same and considering the past production details, observed that a clarity from the State Government is required as to how such cases be dealt wherein lease validity has been extended retrospectively. In the instant matter, the mine has operated after end of mine lease validity i.e. 18.06.2004.** The Scheme of Mining along with Progressive Mine Closure Plan for 588.59 ha was approved by IBM, Udaipur vide their letter no. 682(23) 739/2010 KHA-N-.KHA (U) UDAY dated 30.04.2015.

6. PP reported that mining was being done using deep hole blasting loading by hydraulic excavator into dumpers and unloading into 1000 TPH impact crusher hopper located within mining lease. But mining operations got majorly discontinued from 20.8.2011 to 29.7.2013 as per the orders of Honorable High Court on a PIL filed by locals. During hearing on 29th July 2013, Hon`ble Supreme Court permitted mechanical excavation of rocks without blasting, hence mechanical excavation started with ripper attached to Excavators, Surface Miner, Terminator & Rock Breaker etc. During further hearing on 23 Sept 2013, Hon`ble Supreme Court has advised Central Building & Research Institute (a branch of CSIR) to conduct long term study to understand impact on Chittaurgarh Fort due

to full scale mining operations and submit report within six months. The final report has been submitted by CBRI to Hon`ble Supreme Court on 30thSept 2014 but final judgement is awaited. Blasting will be done if permitted by Hon`ble Supreme Court. **The Committee asked the PP to submit an Undertaking clearly stating that they will be abiding to the interim orders of the Hon`ble Supreme Court at present.**

7. PP has reported that existing water requirement is 365 KLD and total water requirement for this project after expansion will be 1505 KLD which will be met from the mine sump water thus there will be no ground water abstraction except for drinking. The primary baseline data for site specific micro meteorology data, ambient air quality, water quality, noise level, soil and flora & fauna has been collected during Post monsoon Season i.e. from October – December, 2014. The monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and the same were reported to be in respective prescribed ranges viz. NAAQS-2009 (for air monitoring), IS:10500-2012 (for ground water & surface water) and ambient noise limits prescribed by CPCB. The soil quality was observed to be neutral in nature with good nitrogen content. The water level in the core area varies from 9 to 46 m below ground level (bgl) (388 to 351 mRL) in Block B and 34 to 44 m bgl (361 to 351 m RL) in Block C. The ultimate working depth will be 48 m bgl (347 m RL). Hence, water table will be intersected during mining activities (Refer Pg.183 of EIA Report/ EMP). However, it has been mentioned in ToR compliance that groundwater intersection will not take place. **The Committee, accordingly, asked the PP to mention clearly whether groundwater intersection shall be encountered or not and if any application has been made to CGWA in this regard.**

8. PP has reported that one seasonal nallah passes through Nagri pit of the mining lease which will require diversion within the lease area. Afterwards, the diverted nallah will be joined with the original course of mining lease area with proper safeguard measures as per the approved mining plan. **The Committee discussed the matter in details and asked the PP to substantiate its submission with facts and a detailed hydro-geological study clearly mentioning the impact of diversion of Nallah on nearby areas.** PP reported that there is no court case/ litigation pending against the project except the one mentioned above related to blasting issues in the vicinity of Chittaurgarh fort. The Committee took note of the Compliance Report of MoEFCC R.O. Lucknow dated 18.01.2017 and noted that PP has reportedly complied with the conditions prescribed by MoEFCC.

9. Public hearing for the project was conducted on 30.08.2016 at Near Mahakaleshwar Temple, M/s Birla Cement Lime Stone Mines, Villages – Jai, Tehsil and District - Chittaurgarh under the chairmanship of Additional District Collector, Chittaurgarh and Regional Officer, Rajasthan State Pollution Control Board. During the public hearing, the major issues raised by the local people were related to damaged road to village-Nagri, location of crusher in grazing land, no development in the area, discharge of wastewater from mines, noise pollution by mining operations and cement plants, blasting/ vibration from machines leading to cracks in houses, opening of hospital in the area and provision of free medical facility, adverse impact of mining on human health and cattle stock, , adverse impact of mining on agriculture and other local development related issues. PP submitted that it is engaged in social upliftment of the area and providing the basic amenities to

nearby villagers for water distribution, building of schools, hospitals, etc. and all this adds to the economic benefits to the locals of the activity area. It has made expenditure for the same over the years and proposes to further augment the activities by providing a budgetary allocation of ₹1.65 Crores under CSR and ₹1.35 Crores under ESC budget. **However, the Committee noted that PP needs to enhance its budget to address the issues raised in Public hearing under Enterprise Social Commitment. The PP submitted to increase the ESC budget to ₹275 Lakhs from ₹135 lakhs for 5 years, however, the Committee asked the PP to present breakup of the same.**

10. The Committee made detailed deliberations on the proposal & presentation, and **deferred the proposal** for want of additional information from PP as well as examination of the proposal at Ministry in respect of the following:-

- Quantity of Total excavation (equivalent to 4.324 Million TPA limestone)
- Examination of the proposal in view of the judgement passed by Hon'ble Supreme Court of India on 02.08.2017 in the matter of Common Cause Vs Union of India & Others after submission of details of permissions obtained by it since 1993-94 for mining operations (EC as well as Consent) vis-à-vis year-wise authenticated production figures.
- Initiating action as per applicable provisions as the mine is operating since 1964 and the Bassi Wildlife Sanctuary is falling within the buffer zone of 10 Kms, hence, the PP was required to take NBWL Clearance after 2009.
- Clarification from State Mining Department on how such cases are being dealt at State level considering that lease validity has been extended retrospectively in 2015. In instant matter, the first renewal expired on 18.06.2004 while PP continued mining till 2015 and was granted extension under MMDR Amendment Act, 2015.
- Breakup of activities to be undertaken for addressing PH under Enterprise Social Commitment with budget of ₹275 Lakhs.
- Breakup of Wildlife Conservation Plan of ₹225 Lakhs
- Detailed hydro-geological study clearly mentioning the impact of diversion of Nallah on nearby areas
- Undertaking by PP clearly stating that it is abiding to the interim orders of the Hon'ble Supreme Court at present in the on-going case relating to Chittaurgarh Fort.
- Clarification with respect to mine working below ground water table.

(2.11) Enhancement of limestone production from 0.101 Million TPA to 0.50 Million TPA (equivalent to 0.72 Million TPA of ROM) in respect of Melavenkateswarapuram limestone mines of M/s The Ramco Cements Ltd. (earlier M/s Madras Cements Limited) in M.L. Area of 98.62 Ha located at villages - Pudur, Nadukattur, Senayyampatti, Tehsil - Vilathikulam, Thoothukudi, Tamil Nadu (IA/TN/MIN/18557/2013) – Consideration of Environmental Clearance regarding [File No. J-11015/136/2013-IA.II(M)]

The proposal of M/s The Ramco Cements Ltd. (earlier M/s Madras Cements Limited) is for enhancement of production capacity from 0.101 Million TPA to 0.50 Million TPA (equivalent to 0.72 Million TPA of ROM) in respect of Melavenkateswarapuram Limestone mines in M.L. Area of 98.62 Ha. The mine is located at Villages – Pudur, Nadukattur, Senayyampatti, Tehsil - Vilathikulam, Thoothukudi (Tamil Nadu). The mine

lease area falls between latitudes of 9°17'31.5"N to N 9°18'08.1"N and longitudes of 78°09'48.7"E to 78°11'04.0"E in Survey of India topo-sheet no. 58 K/3. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

2. The proposal of ToR was granted vide letter no. J-11015/136/2013-IA.II(M) dated 09.09.2013 for enhancement of production from 0.101 Million TPA to 0.50 Million TPA (0.72 Million TPA ROM) in mine lease area of 103.53 Ha. The ToR amendment was granted for revised extent of 98.62 Ha vide letter dated 12.06.2015 and extension for validity of amended TOR was also obtained vide J-11015/136/2013-IA.II (M) dated 17.09.2015, extended up to 08.09.2016. Further extension of ToR was applied by PP and deliberated in the EAC meeting on 16.12.2016 wherein EAC noted that ToR validity is not needed since EIA/EMP report has already been submitted. The EIA Report/ EMP was submitted to Ministry on 13.04.2016 for appraisal. Environmental clearance was granted to Melavenkateswarapuram mines vide letter no. J-11015/6/99-IA-II(M) dated 22.11.1999 for expansion involving 1,01,500 TPA from the 103.53 Ha of lease area and 4,06,300 TPA involving additional lease area of 150.10 Ha. (i.e. 1,01,500 TPA from the 103.53 Ha of Melavenkateswarapuram limestone mines and additional 3,04,800 TPA from Sivalarpatti Mines of 150.10 Ha). Subsequently, amended EC for Sivalarpatti limestone mine expansion from 0.304 Million TPA to 0.69 Million TPA was obtained vide letter No. J-11015/192/2005-IA.I(M) dated 09.01.2007. **The PP has not provided authenticated past production details. However, it has mentioned in the EIA Report/ EMP that production of 1,47,000 Tonnes was achieved in 1992-93. The Hon'ble Supreme Court of India on 02.08.2017 in the matter of Common Cause Vs Union of India & Others has mentioned that only 1993-94 shall be taken as the base year for assessing expansion of production and ordered recovery of excess mineral as compensation. The Committee, therefore, asked the PP to present year-wise details of permissions obtained by it since 1992-93 (EC as well as Consent) vis-a-vis authenticated production figures for further examination.**

3. PP reported that the lease area does not include any forest lands which is certified by District Forest Officer vide its letter dated 09.02.2017. No ecologically sensitive features like national parks, biospheres, sanctuaries, elephant corridors, Tiger reserves, flight paths of migrating fauna, etc occur in core areas of the project. The Wildlife Conservation Plan has been submitted by the PP and approved by District Forest Officer vide its letter dated 05.04.2017 with budgetary allocation of ₹5 lakhs for 5 years (@₹1 lakh/ annum) starting from 2017-18. The area is reportedly not covered under CRZ category.

4. PP reported that mining lease was granted for the area of 103.53 Ha for a period of 5 years vide G.O.Ms.No.1033 dated 28.07.1982 and the lease deed was executed on 29.07.1983. Subsequently, the same lease was extended for periods of 20 years from 29.07.1983 vide G.O.Ms.No.497 dated 23.03.1988. The mining lease was valid upto 28.07.2003 and the renewal application applied vide letter dated 22.07.2002. The same was renewed vide G.O.(Ms).No.168 dated 17.11.2014 for a period of 20 years (from 29.07.2003 to 28.07.2023) for an area of 98.62 Ha as against the earlier granted lease area of 103.53 Ha. An area of 4.905 Ha of land comprising 0.275 ha of poramboke land and 4.63 ha of patta dry land was excluded. It was also mentioned by PP that as per MMDR

Amendment Act, 2015, the Mining Lease is valid up to 28.07.2033. **The Committee noted that the PP has submitted executed lease deed mentioning validity as 28.07.2023. The PP is required to submit communication/ supplementary deed in support of lease validity up to 28.07.2033.**

5. The Scheme Of Mining and Progressive Mine Closure Plan for the scheme period 2013-2014 to 2017-2018 for the enhanced limestone production capacity of 0.50 Million TPA for 98.62 Ha has been approved vide IBM letter no TN/TKD/MB/LST-1949-MDS dated 18.05.2015. PP reported that mechanized open cast mining is adopted in Melavenkateswarapuram mines using heavy earth moving machinery since its inception and the same is proposed to be followed. The bench height is maintained at 9 meters commensurating the digging height of the shovel. Latest Blasting techniques are adopted like NONEL, Electronic System of Initiation system to maintain charge per hole and charge per delay. The present water requirement for the Melavenkateswarapuram limestone mines is about 50 m³/day comprising of 3.0 m³/day for domestic needs and 47.0 m³/day for Industrial purposes such as Water sprinkling and dust suppression etc and the required water is met from Mine Pit in Pandalgudi Mines which is kept as a reservoir mine sump. No additional water is required after expansion. The exhausted and is being utilized for other captive mines also. **The Committee noted that the PP shall not use groundwater without prior permission of Central Ground Water Authority as it has reportedly made alternative arrangements of water source.**

6. PP reported that the baseline data on micrometeorology, Air, Water, Noise & Soil has been generated during winter season (December, 2013 – February, 2014). The monitoring results of ambient air for SO₂, NO₂, PM₁₀ and PM_{2.5} are within the prescribed CPCB limits for “Industrial, Residential, Rural & other areas”. The water quality of ground water samples were found to be within the prescribed IS:10500 norms. The mine pit water quality is found to be within the prescribed TNPCB Norms. The monitored ambient noise levels were within the limit values for Residential areas. The results of the soil samples show that the pH values were ranging between 8.59 –8.84 and Electrical Conductivity values were ranging between 65.52 - 152 µs/cm. Soils are generally Silt loam type with high sodium and potassium concentration. PP submitted that during the initial phase of mine excavation, ground water was intersected at about 12m depth which gradually diminished and next intersection occurred at depths of 25m to 28m in the limestone formations. The application to PWD is already made for Ground Water Clearance. **The Committee noted the same and asked the PP to obtain prior-clearance for groundwater intersection before executing the instant proposal.** PP has reported that No stream passes through lease area and no diversion of water bodies is required. PP reported that there is no court case/ litigation pending against the project.

9. Public hearing for the project was conducted on 25.02.2016 at T.R. Subbaraj Kalyana Mahal, Paralachi Road, Pudur, Villathikulam Taluk, Thoothukudi District through District Collector -Thoothukudi, District Environmental Engineer - Tamil Nadu Pollution Control Board. During the public hearing, the major issues raised by the local people were related to provision of bore-wells, up-gradation of existing school from 5th to 8th standard/ higher studies, employment to youth of the area, blasting to be done without vibration in area, water supply to villages, opening of college in the area etc. The participants of the PH

also supported the project and acknowledged the welfare activities carried out by the PP in past. PP submitted that it is engaged in social upliftment of the area and providing required support towards basic amenities to nearby villagers for water distribution, building of schools, hospitals, etc. and all this adds to the economic benefits to the locals of the activity area. An expenditure of ₹21.96 lakhs was spent in year 2015 – 2016 for CSR activities under lease area of Melavenkateswarapuram Limestone Mine and it has been proposed to spend ₹20 lakhs per annum under CSR. The project also provides direct employment to 46 and indirectly to 200 persons for allied services. **However, the Committee noted that PP needs to address the issues raised in Public hearing under Enterprise Social Commitment, which is exclusive of CSR expenditure and therefore, asked the PP to prepare and submit a detailed plan with enhanced budgetary provisions.**

10. The Committee took note of the Compliance Report of MoEFCC R.O. Chennai dated 12.04.2017 and noted that PP has given work for rehabilitation & stabilisation of OB dump to outside party M/s Auroville, Pondicherry. The Compliance report mentioned that greenbelt is done at some places only with 5125 number of native species. Further, 6650 saplings are planted outside lease area, however, the same are not included in the condition of 10 Ha. Hence, the green belt development is not complete around ML area as of now; however, no timeline is mentioned in the EC condition. **The Committee noted the details and asked the PP to give specific details on plantation and green belt development carried out till date within and outside the M.L. area. Further, the plantation and green belt development may be shown through KML also. The Committee also noted that the PP needs to revamp its plantation programme w.r.t. selection of plant species and avoid inclusion of Casuarinas, Eucalyptus and Coconut. The status of backfilling of topsoil/ rejects may also be provided along with the proposed timelines. The Committee also deliberated on the Occupational health Action Plan and asked the PP to revamp the same.**

In view of the above, after making detailed deliberations, the Committee **deferred the proposal** for want of additional information from the PP in respect of the following:

- Examination of the proposal in view of the judgement passed by Hon'ble Supreme Court of India on 02.08.2017 in the matter of Common Cause Vs Union of India & Others after submission of details of permissions obtained by it since 1993-94 for mining operations (EC as well as Consent) vis-a-vis year-wise authenticated production figures.
- Executed lease deed in support of lease validity till 28.07.2033.
- PP to prepare breakup of activities and submit a detailed plan with enhanced budgetary provisions for Enterprise Social Commitment.
- PP to provide specific details on plantation and green belt development carried out till date within and outside the M.L. area. Further, the plantation and green belt development may be shown through KML also. PP to revamp its plantation programme with budgetary provisions w.r.t. selection of plant species and avoid inclusion of Casuarinas, Eucalyptus and Coconut.
- PP to provide status of backfilling of topsoil/ rejects along with the timelines proposed for the same.
- PP to revamp and prepare breakup of activities covered under the Occupational health Action Plan with budgetary provisions.

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

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

2. The proposal of TOR was considered by the EAC in its meeting held during July 29-30, 2015 wherein the Committee recommended the proposal for grant of ToR. The Terms of Reference (ToR) was issued vide letter No. J-11015/219/2015-IA.II (M) dated 25th August, 2015. The mining lease area of 129.5 Ha comprises of Govt. waste land of 52.8 Ha and Private Land of 76.7 Ha.

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

Now according to Sec 8A (6) of the Mines and Minerals (D&R) Amendment Ordinance, 2015 the lease period is valid till 21.01.2043.

4. The proposal was considered in May 29-30, 2017 meeting wherein the Committee observed through the KML file that the mine is operational and mining is being carried outside the M.L. area also. The PP was asked to bring past production details during presentation, however, no details were presented during meeting. The Committee also noted that during Public Hearing, issues related to haphazard mining, air pollution, adverse impact on nearby pond, no CSR activities in the region etc. are raised to which the PP has replied that the allegations are baseless. *The Committee, while deliberating and deferring the proposal, asked the PP to amicably address the issues raised during public hearing. The PP was asked to submit authenticated past production details from State Govt., Revised plantation programme and seek details on mining outside mining lease area from State Department of Mines and Geology.*

5. The PP vide its reply dated 14.08.2017 submitted the following:

EAC Query	PP's submission
w.r.t. the observation from KML file that the mine is operational and mining is being carried out side the M.L. area also.	The area was inspected by an official of the M.E. Office, Bikaner on 30.6.2017 and it has been certified that neither mining work was done in the area in the near past by lessee nor any work has been done outside the lease hold (A copy of the M.E. Office report is enclosed)
w.r.t. submission of past production details	Past production details have been submitted
w.r.t. revision of plantation programme by including fodder species and useful plants in it.	The plantation programme has been revised and approved by the Dy. Conservator of Forest, Bikaner, vide his letter no. / 2016-17/5651 dated 4.08.17
w.r.t. amicably address the issue raised in PH	<p>Undertaking is provided to amicably address issues raised during the public hearing along with the difficulties being faced by her.</p> <p>Documents in support of Criminal background of the persons who dominated at the public hearing held On 29.09.2016</p> <p>Documents in support of the recommendations by some of the participants of the public hearing to grant of Environmental Clearance to the project</p>
w.r.t. the issues raised in PH regarding haphazard mining, air pollution, adverse impact on nearby pond, non-performance of CSR activities the region etc	Clarification to the various baseless allegations made by antisocial elements at the time of public hearing

6. The Committee deliberated on the proposal and noted that the proposal does not seem to violate EIA Notification, 1994 and 2006; however, the Supreme Court has now come up with a judgement in the matter of Common Cause Vs Union of India wherein expression of expansion has been interpreted. Hence, Ministry may further examine the matter. The Committee also took note of the submission of PP w.r.t. mining work inside & outside the lease area and corroborated the same with past production details as the mine is non-operational since 01.01.2013. The documents given in support of dubious/ criminal background of the persons participating in PH have been noted by the Committee and additionally, the PP gave an undertaking that issues raised in PH shall be settled amicably. The Committee noted that the PH was presided over by the Additional District Collector (Administration), Bikaner and in presence of Regional Officer, Rajasthan State Pollution Control Board and accordingly, PP is required to bring the facts to the knowledge of the said authorities and submit a factual report from the Collectorate. The Committee further noted that the proposal pertains to minor minerals and as per notification dated 15.01.2016, District Survey Report is needed for appraisal of projects involving mining of minor minerals.

7. In view of the above observations, the Committee **deferred the proposal** and asked PP to submit a factual report from Collector Office, Bikaner on the issues raised in PH and clarification provided by it and District Survey Report (DSR). The Committee further noted that the Ministry may also examine the applicability of Supreme Court judgement in the matter of Common Cause Vs Union of India on the proposal.

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

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

2. The proposal was earlier considered in EAC meeting held in May 29-30, 2017 wherein the PP submitted that the existing EC capacity for mining in South Block Mining Lease stands at 3.15 MTPA. The bauxite production from the South Block has been proposed from the year 2019-20. Accordingly, amendment is sought for the purpose of installation of additional overland conveyor, apron feeder, crusher etc. for additional transportation of 3.15 MTPA bauxite from the central & south blocks of Panchpatmali Mining Lease. The mining infrastructure and other new facilities, apart from the overland conveyor, are proposed to be installed within the existing lease area. The alignment of the

proposed overland conveyor shall be finalized during engineering stage. No additional private or Govt. or forest land acquisition/alienation/diversion is envisaged. The EAC, while deliberating on the proposal, noted that EIA was earlier done considering the transportation of ore through cable belt conveyor. However, the PP now intends to change the transportation mode to overland conveyor system along with installation of Crusher of 1100 TPH with associated equipments and machineries which shall have impact of environment. Hence, the PP was asked to conduct an EIA Addendum Study to assess the impact of the crusher and conveyor system and prepare a mitigation/ management plan.

3. The PP submitted that the Mine lease area of 528.262 Ha comprises of 189.552 Ha forest land. The Stage-1 FC has been obtained for 110.30 Ha and **for balance land of 79.252 Ha Stage-1 FC is in progress**. The PP mentioned the listed of machineries to be employed for Over Land Belt Conveyor (OLBC), Crusher and Excavation of bauxite mineral. The Ambient Air Quality Monitoring (AAQM) stations were set up at eight locations for measurement of Respirable Particulate Matter (PM₁₀), Fine Respirable Particulate Matter (PM_{2.5}), Sulphur dioxide (SO₂), Nitrogen Dioxide (NO₂), Ozone (O₃), Nickel (Ni), Ammonia (NH₃), Benzo(a) pyrene (BaP) in Particulate Phase, Arsenic (As), Carbon Monoxide (CO), Lead (Pb), Mercury (Hg), and Benzene (C₆H₆). The monitored data indicated that the concentration values are within the CPCB prescribed standards for industrial and rural /residential zone.

4. Four sources of groundwater and surface water each were examined for physico-chemical, heavy metals and bacteriological parameters. All the parameters in respect of groundwater samples are within the limits as per IS: 10500. **The Committee noted that the location of surface water samples is largely along the alignment of conveyor line and concentration of Aluminium in the surface water is in the range of 0.03-0.74 mg/l which is suspected indicator of run-off from the mine into the nearby water bodies. Further, the acceptable limit of Aluminium as per IS:10500 (Drinking water standards) is 0.03 mg/l and permissible limit in absence of alternative source is 0.2 mg/l. Hence, 3 out of 4 surface water samples do not fit the criteria as per IS:10500 (Drinking water standards).**The Committee noted PP's submission that while EC has been granted for 6.825 Million TPA bauxite from North and Central Block and the mines are operational, the South block is not operational as of now, however, EC has been obtained for the same for 3.15 Million TPA. **The Committee suspected that the high concentration of Aluminium in surface water samples could be due to operational mines of North and Central Block, therefore, asked the PP to present the MoEFCC R.O. compliance report w.r.t. the EC granted for North and Central Block.**

5. The noise monitoring was also carried out at 8 locations and as per the noise monitoring results submitted by the PP, noise levels varied between 60.0-72.5 dB (A) during the day time. Similarly, noise levels varied between 68.9-56.4dB (A) during the night time. The Committee observed that the noise levels are within the prescribed ambient noise standards. The modelling carried out with respect to air quality and noise modelling indicate that PP has to undertake specific mitigation measures to control the adverse impact of air pollution and noise level generated from mining and crushing operations on nearby population. **The Committee noted the measures suggested by PP to address the**

adverse impacts on all the environmental attributes and asked the PP to implement the same in spirit once the mining operation starts and instant project is executed.

6. The Committee took note of the MoEFCC R.O. EC Compliance report for the project and noted that the monitoring report has mentioned certain non-compliances w.r.t. obtaining forest clearance for 189.552 Ha forestland under Forest (Conservation) Act, 1980 before start of mining operations; 7.5m green belt was not developed all around mine lease with proper demarcation of North, Central & South blocks; implementation of conservation measures to augment groundwater sources and practising rainwater harvesting; selection of ambient air quality station locations; implementation of conservation measures under Wildlife management and conservation plan; submission of report on digital processing of entire mine lease area and carrying out monitoring by third party agencies. The Committee noted that mining operations have not been started in the South block of Panchpatmali Bauxite mines.

7. The Committee deliberated on the proposal and **deferred the proposal** and asked the PP to submit the following:

- Stage-1 FC for balance forestland of 79.252 Ha
- Present the MoEFCC R.O. compliance report w.r.t. the EC granted for North & Central Block
- Present the status of non-compliances mentioned in MoEFCC R.O. Compliance report dated 05.09.2017.

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

The proposal submitted by M/s BALCO is for seeking amendment in EC granted by the MoEFCC vide letter No. J-11015/37/2010-IA-II(M) dated 09.04.2010. The EC was granted for expansion of production from 0.3 Million to 1.25 Million TPA. The amendment in EC is sought for replacing the existing manual breaking and sorting with mechanized crushing and screening without change in the existing approved capacity of 1.25 MTPAodaiDaldali Bauxite mines located at Villages Mundadadar, Keshmarda, Rabda & Semsata, Post Daldali, Bodla Tehsil, Kawardha District, Chhattisgarh in mining lease area of 626.117 Ha.

2. PP submitted that at present manual breaking and sorting of Bauxite is being done which is a time-consuming. Hence, in order to facilitate mechanized sizing and sorting, manual process is proposed to be replaced by mechanized crushing and screening without any change in production capacity and lease area by installation of three number of crushers with screening unit each of 250 TPH (Total 750 TPH). The crushers are proposed to be installed within the M.L. area. There is no requirement of additional land. The Committee noted that as per the information submitted by PP, it has made excessive production in the years 2006-07 and 2007-08 over and above the EC granted capacity of

0.3 Million TPA. The EC was granted on 04.12.2003. **A case has been filed in the court of Chief Judicial Magistrate, Kabirdham District, Chhattisgarh with case no. 1759/2009 against the PP for excessive production under sections 15 & 16 of Environment Protection Act, 1986 and section 34 of Indian Penal Code.**

3. The EAC deliberated on the proposal noted that EIA was earlier done considering manual breaking and sorting of Bauxite. Now the PP intends for mechanized crushing and screening without any change in production capacity in lease area by installation of three numbers of crushers with screening unit each of 250 TPH (Total 750 TPH) which shall have impact of environment. Accordingly, Committee desired the PP to conduct an EIA Addendum Study to assess the impact of the crusher units of 250 TPH each (Total 750 TPH) and prepare a mitigation/ management plan. In view of the above, the Committee asked the PP to update the status of Court case, prepare EIA addendum report (as mentioned above) and submit the MoEFCC R.O. Compliance report. **The proposal is deferred** in view of the above.

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

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

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

The above three proposals were submitted by M/s Tata Steel Limited for seeking amendment in ROM quantity of mineral capacity granted under EC in view of the change in definition of ROM under the recently notified Mineral Concession Rules, 2016.

2. The PP did not attend the meeting and accordingly, the Committee **deferred the**

proposals.

- (2.18) Proposal of M/s Ambuja Cement Ltd. for expansion in production capacity of RAS-I Limestone Mine (M.L. No. 10/94) from 0.279 Million TPA to 2.80 Million TPA in mine lease area of 183.53 Ha located at villages Kotadiya, Sewariya, Bhaktawarpura and Dhaneriya, Tehsil- Jaitaran, District- Pali, (Rajasthan) (IA/RJ/MIN/66058/2017) – Consideration of ToR regarding [File No. J-11011/54/2010-IA.II (I)]**

The proposal of M/s Ambuja Cement Ltd. is for seeking ToR for conducting EIA studies for expansion in production capacity of RAS-I Limestone Mine (M.L. No. 10/94) from 0.279 Million TPA to 2.80 Million TPA in mine lease area of 183.53 Ha. The mine is located at villages Kotadiya, Sewariya, Bhaktawarpura and Dhaneriya, Tehsil- Jaitaran, District- Pali (Rajasthan). The lease area is bounded between latitudes and longitude coordinates of 26°23'12.75" N to 26°24'16.61"N and 74°13'26.32" E to 74°14'35.49"E respectively. The area is located on Survey of India Topo-sheet no. 45 J/3. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

2. The proposal was considered in August, 2017 EAC meeting wherein the Committee recommended the proposal for grant of ToR mentioning the capacity of crusher as 800 TPH. However, The PP vide its letter dated 06.09.2017 has mentioned that it has revised its proposed capacity of crusher from 800 TPH to 1200 TPH and shall undertake EIA/ EMP study accordingly. The proposal is hence, again placed before the EAC wherein the EAC deliberated on the proposal and recommended the proposal for grant of ToR for Mining as well as Beneficiation projects (for crusher of 1200 TPH).

The meeting ended with vote of thanks to the Chair.

Standard Terms of Reference (TOR) for Mining Project

- 1) Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
- 2) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
- 4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 5) Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- 6) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- 7) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
- 8) Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- 9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.

- 11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
- 12) A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- 13) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- 14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- 18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
- 19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
- 20) Similarly, for coastal Projects, A CRZ map duly authenticated by one of the

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

- 21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
- 22) One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season) ; December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM₁₀, particularly for free silica, should be given.
- 23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
- 24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- 25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
- 26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 27) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
- 28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-

alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.

- 29) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
- 30) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
- 31) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
- 32) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
- 33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- 34) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
- 35) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 36) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 37) Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 38) Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of

agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.

- 39) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- 40) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 41) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- 42) A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 43) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 44) Besides the above, the below mentioned general points are also to be followed:-
 - a) All documents to be properly referenced with index and continuous page numbering.
 - b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
 - d) Where the documents provided are in a language other than English, an English translation should be provided.
 - e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
 - f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
 - g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
 - h) As per the circular no. J-11011/618/2010-IA.II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
 - i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

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Standardization of EC conditions in Non-coal mining sector

A. Specific conditions

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

B. Standard conditions

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

- 10). Mining shall be carried out as per the provisions outlined in mining plan approved by Indian Bureau of Mines (IBM)/State Mines and Geology Department as well as by abiding to the guidelines of Directorate General Mines Safety (DGMS).
- 11). The lands which are not owned by Proponent, mining will be carried out only after obtaining the consents from all the concerned land owners as per the provisions of the Mineral Concession Rules, 1960 and MMDR Act, 1957.
- 12). Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment, Forest and Climate Change its Regional Office.
- 13). Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of anti- snake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- 14). The critical parameters as per the Notification 2009 such as PM₁₀, PM_{2.5}, NO_x, and Sox etc. in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- 15). The Proponent shall install online Ambient Air Quality Monitoring System and there should be system for display of digital AAQ data within 03 months at least at three locations as per wind direction. Online provisions of pH and turbidity meters at discharge points of STP and ETP and also at water storage ponds in the mining area may be made. Project Proponent should display the result digitally in front of the main Gate of the mine site.
- 16). Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM₁₀ and PM_{2.5} such as haul road, loading and unloading point and transfer points. Fugitive dust emissions from all the sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the

Central Pollution Control Board in this regard. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board.

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

Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.

- 23). Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers. Crusher and material transfer points should invariably be provided with Bag filters and or dry fogging system. Belt-conveyors should be fully covered to avoid air borne dust.
- 24). Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers. The material transfer points should invariably be provided with Bag filters and or dry fogging system. In case of Belt-conveyors facilities the system should be fully covered to avoid air borne dust; Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured.
- 25). Sufficient number of Gullies to be provided for better management of water. Regular Monitoring of pH shall be included in the monitoring plan and report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.
- 26). There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.
- 27). The Project Proponent has to take care of gullies formed on slopes. Dump mass should be consolidated with proper filling/levelling with the help of dozer/compactors.
- 28). The reclamation at waste dump sites shall be ecologically sustainable. Scientific reclamation shall be followed. The local species may be encouraged and species are so chosen that the slope, bottom of the dumps and top of the dumps are able to sustain these species. The aspect of the dump is also a factor which regulates some climatic parameters and allows only species 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 should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo

textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.

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

Environment, Forest and Climate Change and its Regional Office.

- 35). As per the Company Act, the CSR cost should be 2 % of average net profit of last three years. Hence CSR expenses should be as per the Company Act/Rule for the Socio Economic Development of the neighbourhood Habitats which could be planned and executed by the Project Proponent more systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. The report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.
- 36). Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- 37). Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs.
- 38). Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19thMay, 1993 and 31stDecember, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.
- 39). Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
- 40). A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- 41). The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office.
- 42). The project authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- 43). The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest and Climate Change, its Regional Office, Central Pollution Control Board and State Pollution Control Board.

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

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



Sl. No.	Name and address	Designation	Sine 18-9-17	Sine 19-9-17
1.	Dr. Ajai Kumar B-1302, BestechParkView Spa, Sector-47, Gurgaon, Haryana	Chairman	<i>[Signature]</i>	<i>[Signature]</i>
2.	Shri B Ramesh Kumar H-No. 6-1-134/6, Balram Compound, Padmarao Nagar, Secundrabad- 500025, Andhra Pradesh	Member		
3.	Prof. Dr. K.S. Rana Maharana Manzil, 18, Dholpur House, (D.M. Compound), M.G. Road, Agra-1, Uttar Pradesh - 282001	Member	<i>[Signature]</i>	<i>[Signature]</i>
4.	Prof. A. K. Bhatnagar, JA/4B, Ashok Vihar-I, Delhi - 110052	Member	<i>[Signature]</i>	<i>[Signature]</i>
5.	Dr. N. C. Karmakar Department of Mining Engineering, Indian Institute of Technology (BHU), Varanasi - 221 005, Uttar Pradesh	Member		
6.	Dr. Hemant S. Sahasrabudhe "Utkarsha", LB-53, Housing Board Colony, Laxminagar, Nagpur-440022	Member	<i>[Signature]</i>	<i>[Signature]</i>
7.	Prof. S. Ramakrishna Rao 50-120-9/1, Tulasi Mani Regency North Extension, Seethammadhara, Visakhapatnam - 530013 Andhra Pradesh.	Member	<i>[Signature]</i> 18/9/17	<i>[Signature]</i> 19/9/17
8.	Dr. Himanshu Pathak, Professor, Center for Environment Science and Climate Resilient Agriculture, Indian Agricultural Research Institute, New Delhi 110 012	Member		
9.	Dr. AL. Ramanathan Professor, School of Environmental Sciences, Jawaharlal Nehru University. New Mehrauli Road, New Delhi- 110067	Member		
10.	Dr. Tushar Kant Joshi, Laxmikant Niwas, Salan Gaon, Bhagwantpur, Dehradun-248009, Uttarakhand.	Member		
11.	Shri Santosh Gupta, Flat No. 405, Block -B, Gaur Green Vista, Nyaykhand -1, Indrapuram, Ghaziabad-201014	Member	<i>[Signature]</i> 18/9/17	<i>[Signature]</i> 19/9/17
12.	Representative of Ministry of Mines Shri. Pushpender Gaur, Dy. Controller of Mines, Ministry of Mines, Shastri Bhawan New Delhi-110001.	Member	<i>[Signature]</i> 18/09/17	<i>[Signature]</i> 19/9/17
13.	Representative of Indian Meteorological Mr. V.K. Soni, Scientist "E", (Meteorology/Air Pollution), 609, SatMet Building, Mausam Bhawan, Indian Meteorological Department, Lodhi Road, New Delhi-110003	Member		
14.	Representative of Wildlife Institute of India, Dr. (Ms.) Asha Rajvanshi, Wildlife Institute of India, Chandrabani, Dehradun-248001	Member		
15.	Director/Adviser IA-Division (Non Coal Mining) Vayu-305, Indira Paryavaran Bhawan, Ministry of Environment, Forest & CC, Jorbagh Road, Lodhi Road, New Delhi-110003	Member Secretary	<i>[Signature]</i> 18/9/17	<i>[Signature]</i> 19/9/17

Agenda for 22ND EAC Meeting to be held during on 18TH SEPTEMBER - 19TH SEPTEMBER, 2017