

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

SUMMARY RECORD OF 8th MEETING OF THE COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 8th meeting of the Expert Appraisal Committee for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during **August 27-28, 2019**. The list of participants is annexed herewith. After welcoming the Committee Members, discussion on each of the Agenda Items was taken up ad-seriatim.

1.1 Deliberation & Circulation on the Minutes of the 7th EAC Meeting held during July 30-31, 2019:

The Minutes of the 7th Meeting of EAC held during **July 30-31, 2019**, were circulated to the members of the Committee. The Committee made brief deliberations on the proposals placed in the last meeting and approved the same with the following amendments:

(a) Page no.4 of the Minutes of EAC held during July 30-31, 2019:

The line number 7 of para number (xiv) may be read as follow:

“(xiv). PP informed that the information was shared only with regard to proposed cement plant as the PH was for mining proposal.”

(b) Page no.10 of the Minutes of EAC held during July 30-31, 2019:

The para number (vii) may be read as follow:

“(vii) PP should submit the updated status of the court cases for consideration of the proposal.”

DAY 1: August 27, 2019 (Tuesday)

2.1. Environmental Clearance of Sultanpur Thanda Limestone Mine- M/s NCL Industries Limited for production of limestone from 0.05 to 1.0 MTPA over an area of 42.83 Ha in Survey No 540 (P) located at Pedaveedu Village, Matampalli Mandal, Nalgonda District, Telangana [Old File No: J-11015/576/2008-IA. II (M); Proposal No. IA/TG/MIN/53618/2007; New File

No J-11015/159/2016-IA. II (M); New Proposal No: IA/TG/MIN/53620/2016]- EC Regarding

The Proposal of M/s NCL Industries Limited is for enhancement in production of limestone from 0.05 to 1.0 MTPA over an area of 42.83 Ha in Survey No 540 (P) located at Pedaveedu Village, Matampalli Mandal, Nalgonda District, Telangana. The PP applied for grant of EC in Form-II as the information is not sufficient an EDS was raised on 1.03.2019. The PP replied to the EDS on 25.06.2019 and the proposal is now placed in EAC meeting held on 27-28 August, 2019.

The Member Secretary informed the Committee that PP vide its email dated 23.08.2019 communicated that due to unavoidable circumstances he is not able to attend the meeting. The Committee therefore **deferred** the proposal and is of the view that PP should submit the past production details duly authenticated by DMG for examining the proposal in light of Common Cause Judgment dated 2.08.2017 and S.O. 804(E) dated 14.03.2017.

2.2. Mining of Boulder, Gravel & Sand Minor Minerals at Rattewali Block/PKL B 10 over an area of 45.00 ha, with production capacity of 19, 00,000 TPA located at Village Rattewali, Tehsil- Barwala District- Panchkula, Haryana by M/s Tirupati Roadways [File No J-11015/75/2017-IA-II(M); Proposal No IA/HR/MIN/66257/2017, Consultant: Enkay Enviro]-EC Reconsideration

The proposal of M/s Tirupati Roadways is for production of 19, 00,000 TPA of Boulder, gravel and sand (minor mineral) from Rattewali Block/PKL B 10 in Dudgarh River Bed having mining lease area of 45.0 Ha located at Village- Rattewali, Tehsil- Barwala District- Panchkula, Haryana. The mine lease area falls in the Survey of India Topo-Sheet No. H43K14 & H43L2. The latitudes and longitudes of the Mine lease fall between Latitude: - N 30° 38' 33" to N 30° 39' 24.6 " and Longitude: - E 76° 59' 17.50" to E 76° 50'00". As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category —B1 project as the mining lease area is less than 100 Ha. Further, as per EIA notification, 2006, "Any project or activity specified in Category 'B' is treated as Category 'A', if located in whole or in part within 5 km from the boundary of (i) Protected Areas notified under the Wild Life (Protection) Act, 1972, (ii) Critically Polluted areas as notified by the Central Pollution Control Board from time to time, (iii) Notified Eco-sensitive areas, (iv) inter-State boundaries and international boundaries". In the instant case the

Khol Hai Raitan Wildlife Sanctuary is within 1.98 km from the mine lease boundary and thus the project was considered as Category 'A' project in the Ministry. Further, as per S.O.3977 (E) dated 14.08.2018 the general condition is not applicable for B1 category project in cluster. The SEIAA Haryana was not functional at the time of application for grant of EC and due to this the proposal was considered in the Ministry.

2. The Project Proponent applied online vide proposal no IA/HR/MIN/66257/2017 on 18.07.2017 for prescribing Term of Reference (ToR) and submitted Form-1 and Pre-Feasibility report. The proposal was considered & recommended for prescribing Term of Reference (ToR) in EAC Meeting held on 29-30 August, 2017 and ToR was issued on 14.09.2017. The Project Proponent applied vide proposal No. IA/HR/MIN/66257/2017 for grant of EC online on 27.04.2018 and submitted EIA Report after conducting the Public Hearing. The proposal was placed in EAC Meeting held on 14-15 May, 2018, wherein, the Committee returned the proposal in present form due to shortcomings. The PP applied online in Form-II vide proposal no. IA/HR/MIN/66257/2017 dated 30.11.2018 for grant of EC and the proposal was placed in the EAC meeting held during 22-23, January 2019 wherein the EAC deferred the proposal for want of requisite information. The PP submitted the requisite information on 3.08.2019 and the proposal is now placed in EAC meeting held on 27-28 August, 2019.
3. The proponent mentioned that the LOI over an area of 45.0 ha of Mining lease has been granted by the Director General, Department of Mines & Geology, Haryana vide memo no.- DMG/ HY/ Cont/ Rattewali Block/ PKL B 10/ 2017/ 2658 dated 16.06.2017 for a period of 7 years. The lease area lies on riverbed of Dudgarh in District Panchkula (Haryana).
4. The PP submitted that Mining Plan and Progressive Mine Closure Plan of this proposed mining lease area is approved by Director General of Mines and Geology Department vide memo no. DMG/HY/MP/Rattewali Block/PKL/B-10/2017/405 on dated 24/01/2018 with production capacity of 19, 00,000 Tonne and thereafter as per direction of EAC, PP prepared Modified Mining Plan including Progressive Mine Closure Plan for 19,00,000 TPA and get it approved by the Office of State Mining Engineer, Director Mines & Geology, Haryana vide Memo no. DMG/ HY/ MP/ Rattewali Block/ PKL B – 10/ 3989 – 92 dated 07.08.2018.

5. The proponent mentioned that the mining activity will be carried out by open cast semi-mechanized method without drilling and blasting. Mining is proposed up to a depth of 3.0 m in river bed. River bed mining is for extracting Boulder, Gravel and Sand from River bed. Light weight excavators will be used for digging and loading of mineral in tippers. No OB/ waste material will be produced. PP submitted that sand shall be excavated by deploying 5 numbers JCB/excavator of capacity 0.9 m³ and transported through 25 Nos. Trucks/Tippers/tractor of maximum 25 tones capacity. PP submitted that 5 numbers of water tanker of 5000 liters is proposed for proper dust suppression. The PP previously submitted that total geological reserve is 27, 00,000 and Mineable Reserve is 22, 95,000 Tonnes. The PP re-calculated the geological reserves using datamine software and submitted that the total geological reserve is 35,10,000 Tonnes out of which mineable reserve is 23,73,356 Tonnes.

The EAC in its meeting held during 22-23 January, 2019 inter alia mentioned that *"The PP should confirm the capacity of the tippers to be used. In case it is different from what mentioned in mining plan and EIA Report then PP needs submit the number of trips, traffic study, emission rate and air quality modeling for the same."*

The PP in its reply submitted on 3.08.2019 mentioned that the capacity of tipper considered in Mining Plan and EIA report is 25 Tonnes. In addition to this, PP submitted that considering the maximum production capacity from the mining leases in cluster the maximum tippers/Hour will be 108 trips. Separate transportation route is proposed from different mines in cluster. In order to minimize the dust pollution due to transportation, PP has proposed transportation away from the habitation. In the EMP budget is earmarked for the dust suppression and haul road maintenance. The State Government vide its letter No 11926 dated 28.06.2019, has informed this ministry that air quality in the region is fine.

6. PP submitted that the maximum working depth of mining will be 3 m bgl in river bed whereas the groundwater table exists at an average depth of 8-10 m bgl, so mining depth will not intersect the ground water table. PP submitted that the water will be taken from existing water sources from nearby villages by tanker supplier. PP has submitted that an application regarding ground water

extraction has been submitted to CGWA on dated 24.04.2018. The PP submitted that total water requirement was previously 120 KLD which is now reduced to 30 KLD (20 KLD for dust suppression, 2.5 KLD for Domestic use, 7.0 KLD for plantation).

The Committee observed that in pursuant to Ministry 's O.M No 21-103/2015-IA.III dated 2.11.2018, PP has already applied on 24.4.2018 for obtaining permission from CGWA for extraction of ground water. Further, as per the above said O.M. a specific condition viz. "Approval/permission of CGWA/SGWA shall be obtained before drawing ground water for the project activities. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission" needs to be mentioned in EC letter.

The EAC in its meeting held on January 22-23, 2019 inter-alia mentioned that the *"PP has proposed that use of atomizer water tanker will reduce the water consumption by 50% but the same is not mentioned in the list of mining machinery. Thus, PP should provide the number of water tanker having mist generator cannon for this project and accordingly revise the EMP cost"*. The PP has now revised the EMP wherein provision of two water tanker having mist generator cannon facility is proposed. The budget proposed for the same is Rs 50 Lakh.

7. The PP previously revised the plantation plan wherein 31455 saplings will be planted on 20.97 Ha area covering 7 villages [Rattewali (7290 saplings), Ganeshpur (2475 saplings), Bharoli (1875 saplings), Amrala (2805 saplings), Alipur (2325 saplings), Parwala (4680 saplings), Kambala (3180 saplings), Taparian (4545 saplings), and Kanauli (2280 saplings)]. Inside the villages plantation will be carried out on Village Road (Panchayat Bhawan, Community Center, School and Public Health Centre.

The Committee in its meeting held on January 22-23, 2019 observed that PP has selected large area for plantation but in order to monitor the same the PP should submit the detailed plantation plan which clearly mention the name, address, geo-location and photograph of school, Panchayat Bhawan, Community Center and Public Health Centre where plantation shall be carried out. In addition to this PP should submit the length & geo-locations of roads along which plantation will be carried out. The PP should clearly bring out the number of

saplings, area to be covered under plantation in each of these locations. The Committee also suggested that PP should carry out plantation of vetiver grass in 7.5 meter of the safety zone around the lease boundary to protect the banks of the river. The budget for plantation shall be included in the EMP.

The PP now submitted the photograph of school, Panchayat Bhawan, Community Center, Public Health Centre approach road with their geo-locations where plantation will be carried out. In addition to this in order to address the point raised during PH, the PP has also proposed plantation on 7.5-meter width of lease boundary covering 2.437 ha area (1st year 1593 saplings will be planted on 1.062 ha area & 2nd Year 2064 saplings will be planted on 1.3757 ha area). The details of plantation on other area are as follows:

Year	Village	Location	Area (in Ha)	No of Saplings	Location	
					X	Y
1st	Rattewali	Approach Road	1.5	2250	76.98391	30.63561
		Government School	0.84	1260	76.98258	30.63679
		Public Health Centre (PHC)	0.84	1260	76.98176	30.63702
		Panchayat Bhawan	0.84	1260	76.98512	30.63629
		Community Centre	0.84	1260		
	Ganeshpur	Approach Road	0.65	975	77.00233	30.65658
		Government School	0.25	375	77.00228	30.6568
		PHC	0.25	375	77.00237	30.65711
		Panchayat Bhawan	0.25	375	77.00228	30.65680
		Community Centre	0.25	375	77.00355	30.65904
2nd	Bharoli	Approach Road	0.25	375	77.04174	77.04174
		Government School	0.25	375	77.04297	30.63481
		PHC	0.25	375	77.0427	30.63552
		Panchayat Bhawan	0.25	375	77.0426	30.63405
		Community Centre	0.25	375	77.04229	30.63385
	Amrala	Approach Road	0.87	1305	76.99356	30.6123
		Government School	0.25	375	76.99089	30.61195
		PHC	0.25	375	76.99048	30.61152
		Panchayat Bhawan	0.25	375	76.99326	30.61237
		Community Centre	0.25	375	76.99058	30.61189
3rd	Alipur	Approach Road	0.55	825	76.95624	30.60063
		Government School	0.25	375	76.95591	30.60059
		PHC	0.25	375	76.95581	30.59993
		Panchayat Bhawan	0.25	375	76.95636	30.60022

		Community Centre	0.25	375	76.95626	30.60006
4th	Parwala	Approach Road	0.72	1080	77.0157	30.6352
		Government School	0.6	900	77.01609	30.63533
		PHC	0.6	900	77.01009	0.63414
		Panchayat Bhawan	0.6	900	7.01539	30.63501
		Community Centre	0.6	900	77.01226	30.63481
5th	Kambala	Approach Road	1	1500	77.03075	30.64322
		Government School	0.28	420	77.03161	30.64459
		Public Health Centre (PHC)	0.28	420	77.03094	30.64341
		Panchayat Bhawan	0.28	420	77.03006	30.64516
		Community Centre	0.28	420	77.03111	30.6443
6th	Taparian	Approach Road	1.03	1545	77.01798	30.64602
		Government School	0.5	750	77.01727	30.64541
		PHC	0.5	750	77.02194	30.64917
		Panchayat Bhawan	0.5	750	77.01879	30.64603
		Community Centre	0.5	750	77.01892	30.6462
7th	Kanauli	Approach Road	0.52	780	76.96097	30.6316
		Government School	0.25	375	76.960394	30.63178
		PHC	0.25	375	76.96416	30.63194
		Panchayat Bhawan	0.25	375	76.96206	30.63194
		Community Centre	0.25	375	76.9646	30.63174
Total			20.97	31455		

The Committee observed that PP has committed to plant atleast 5000 trees /year and in seven years around 35000 trees to be planted. The PP has already proposed to plant 35112 saplings (31455 saplings outside lease area and 3657 saplings within mining lease). The Committee is of the view that plantation should be carried out in consultation with expert agencies/forest department and PP shall ensure achieving the target of 35000 by end of the mine lease period.

8. The Project Proponent reported that there is no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, and Tiger/Elephant Reserves/ Critically Polluted areas/Aravali located within the radius of 10 km of the mine lease area. However, Khol Hai Raitan Wildlife Sanctuary lies at the distance of 1.98 Km in N direction. PP submitted that there is no forest land in the mine lease area. In this regard the proponent submitted LR No. 5113 dated 19.09.2017 received under RTI Act, 2005 from Forest Department, Haryana.

9. PP submitted LR No. 5113 dated 19.09.2017 received under RTI Act, 2005 from Forest Department, Haryana. In the same letter the list of flora and fauna is also provided. The PP submitted that there are three Schedule-1 species in the study area viz. Leopard, Indian Peafowl and Indian Python and their conservation plan (Rs. 15 Lakhs) which includes i) Rs 5.0 Lakh for Planting of trees groves in surrounding area and Promotion of agro forest in villages planting fruits trees, ii) Rs 5.0 Lakh for artificial nests, feeding and watering arrangement for animals, iii) Rs 2.0 Lakh for Workshops, Training and awareness programs, iv) Rs 2.0 Lakh for Water supply and v) Rs 1.0 Lakh for Contingency has been prepared and submitted to APCCF Panchkula Haryana for their approval on 22.12.2017. The PCCF (Wildlife), Panchkula, Haryana has approved the conservation plan (total amount ₹ 15 Lakh) vide LR No 1912 dated 30.08.2018. There is one more Schedule-1 species Pangolin (*Manis crassicauda*) for which conservation plan has been submitted via email for approval of Chief Wildlife Warden on 19.11.2018. The PP has revised the budget of Conservation plan for all the Schedule-1 species to 23.60 Lakh.

The EAC in its meeting held on 22-23, January 2019 asked that *"The Wildlife Conservation Plan has already been approved and PP should confirm whether the amount already approved has been deposited in the Government account. In addition to this of approval of revised conservation plan also need to be submitted."*

The PP during the meeting submitted that the conservation plan for Indian Peafowl, Python, Leopard has been approved and the conservation plan for Pangolin is still under approval process. PP also submitted that the request for deposition of amount towards approved Conservation Plan has already been sent to the concerned department to raise demand and the same is awaited. The Committee is of the view that a specific condition may be stipulated in the EC letter in this regard.

The Committee also observed that during the presentation the Ecology & Biodiversity Expert (Shri Dinesh Bohra) of consultant Enkay Enviro Services Pvt Ltd is not able to explain the distance of mining lease from the protected area, this the casual approach & un-preparedness of the consultant is taken seriously by the Committee. The Committee is of the view that already NABET has issued show cause notice to the consultant but still consultant is not providing the quality output as desirable for

apprising the projects. The Committee is of the view that Ministry may write to QCI-NABET to take action on the Functional Area Expert associated with this project.

10. PP submitted the District Survey Report for Sustainable Sand Mining for Districts Panchkula.
11. The Primary baseline data for specific micro-meteorology data, ambient air quality, waste quality, noise level, soil and flora & fauna has been collected during Post Monsoon season i.e. October to December, 2017. The monitoring results of ambient air, surface water, soil, ambient noise and ground water for the month of October 2017-December 2017 have been reported and no major divergence was observed with respect to concentration values of various parameters of collected samples. However, the concentration of PM10 and PM2.5 is slightly more than NAAQS at location number 5 (Rajpur Rani) and values at other location are less than NAAQS limits.

The EAC in its meeting held on 22-23, January 2019 asked the PP "to verify the wind rose diagram but it has observed that the same has not been verified and changed. The Committee also observed that although PP has not submitted the Cluster Certificate but there are other mining leases within 500 meters of this mining lease. Thus, air quality modeling (worst & control case) and traffic study needs to be done considering the maximum production capacity of all other mining leases in the cluster and impact and mitigative measures needs to be suggested. The PP should submit the EMP for entire cluster, so that Committee can decide on the quantity of the material that can be permitted for this mining lease. The line source model should be run to show the impact zone of the both side of the road and mitigative measures to be adopted by the PP. "

The PP in its reply submitted to Ministry mentioned that the wind rose generated at site is part of baseline data generation, which was generated by former ACO as stated. The cluster certificate with regards to other mining leases within a distance of 500m has been obtained from the Office of Assistant Mining Engineer, Mines and Geology Department, Panchkula vide letter no. 336 dated 20.05.2019 as per which there are other three mining leases within 500 meters of this mining lease i.e. Shamtoo – 1 Block/ PKL B-11 (46.50 Ha) and Shamtoo – 2 Block/ PKL B-12 (45.0 HA) and Sukhdarshanpur Block/ PKL B-13 (37.38 Ha). The PP also submitted the air quality modeling in control case scenario and worst case scenario taking the production of this

mine and also mines in the cluster. The modeling results for the same are as follows:

Scenerio-1: Only Rattewali Block/PKL B 10 is operational:

Location	Ground Level Concentrations of PM ₁₀ in µg/m ³ (Without EMP)			
	Predicted	Background (Max.)	Total Expected	CPCB Standard
Mine Site	14.763	98.3	113.1	100*
Rattewali	4.92	96.1	101	100
Parwala	1.64	91.7	93.3	100
Raipura PF near Bharoli	0.5	88.3	88.8	100
Raipur Rani	0.3	103.8	104.1	100
Alipur	0.2	98.2	98.4	100
Khatauli	0.1	97.2	97.3	100
	Ground Level Concentrations of PM ₁₀ in µg/m ³ (With EMP)			
Mine Site	6.42	98.3	104.7	100*
Rattewali	2.14	96.1	98.2	100
Parwala	0.71	91.7	92.4	100
Raipura PF near Bharoli	0.2	88.3	88.5	100
Raipur Rani	0.1	103.8	103.9	100
Alipur	<0.1	98.2	98.2	100
Khatauli	<0.1	97.2	97.2	100

Location	Ground Level Concentrations - PM _{2.5} (µg/m ³) (Without EMP)			
	Predicted	Background (Max.)	Total Expected	CPCB Standard
Mine Site	4.43	59.2	63.63	60*
Rattewali	2.94	55.5	58.4	60
Parwala	0.98	50.7	51.7	60
Raipura PF near Bharoli	0.2	50.3	50.5	60
Raipur Rani	0.1	64.1	64.2	60
Alipur	<0.1	53.5	53.5	60
Khatauli	<0.1	57.3	57.3	60
	Ground Level Concentrations of PM 2.5 in µg/m ³ (With EMP)			
Mine Site	1.93	59.2	61.1	60*
Rattewali	0.85	55.5	56.4	60

Parwala	0.4	50.7	51.1	60
Raipura PF near Bharoli	<0.1	50.3	50.3	60
Raipur Rani	<0.1	64.1	64.1	60
Alipur	<0.1	53.5	53.5	60
Khatauli	<0.1	57.3	57.3	60

Scenerio-2: Mines is clusters are operational:

Location	Ground Level Concentrations of PM10 in µg/m3 (Without EMP)			
	Predicted	Background (Max.)	Total Expected	CPCB Standard
Mine Site	20.974	98.3	119.274	100*
Rattewali	4.92	96.1	101	100
Parwala	2.3	91.7	94	100
Raipura PF near Bharoli	0.5	88.3	88.8	100
Raipur Rani	0.3	103.8	104.1	100
Alipur	0.2	98.2	98.4	100
Khatauli	0.1	97.2	97.3	100
Ground Level Concentrations of PM10 in µg/m3 (With EMP)				
Mine Site	7.217	98.3	105.517	100*
Rattewali	2.41	96.1	98.5	100
Parwala	0.8	91.7	92.5	100
Raipura PF near Bharoli	0.2	88.3	88.5	100
Raipur Rani	0.1	103.8	103.9	100
Alipur	<0.1	98.2	98.2	100
Khatauli	<0.1	97.2	97.2	100

Location	Ground Level Concentrations of PM2.5 in µg/m3 (Without EMP)			
	Predicted	Background (Max.)	Total Expected	CPCB Standard
Mine Site	2.2	59.2	65.5	60*
Rattewali	0.97	55.5	58.4	60
Parwala	0.48	50.7	52.1	60
Raipura PF near Bharoli	<0.1	50.3	50.5	60
Raipur Rani	<0.1	64.1	64.2	60

Alipur	<0.1	53.5	53.5	60
Khatauli	<0.1	57.3	57.3	60
Ground Level Concentrations of PM 2.5 in µg/m ³ (With EMP)				
Mine Site	1.93	59.2	61.1	60*
Rattewali	0.85	55.5	56.4	60
Parwala	0.4	50.7	51.1	60
Raipura PF near Bharoli	<0.1	50.3	50.3	60
Raipur Rani	<0.1	64.1	64.1	60
Alipur	<0.1	53.5	53.5	60
Khatauli	<0.1	57.3	57.3	60

In order to control the impact of cluster mining on air quality the consultant suggested that cumulative avenue plantation on all the haul roads and paved road to be undertaken massively. Alternatively, it is suggested that the transportation road should be 500m away from village periphery and may be dedicated for the leases.

The Committee observed that background values of PM₁₀ & PM_{2.5} values are high at Rattewali village and Raipur Rani Village. These villages are away from the mine site and the background values are high. The reason as reported are local activity but transportation of mined minerals from habituated locality will further increase the values. Therefore, the transportation of mined minerals as proposed to be made through alternate route (other than the habitation) is acceptable. The background observation of PM₁₀ and PM_{2.5} within mine site is well within the air quality standard applicable in mine area, but PP has been reported high in comparison to NAAQS. The Committee is of the view that in order to control the impact on air quality, mitigative measures such as i) transportation of the mineral from the mining leases should be distributed on both exit routes and should be avoided to the extent possible through habitational area of villages (Rattewali, Shamtoo, Tonka, Raipur Rani and other villages in the vicinity of the mining lease) and manage so as to avoid traffic congestion, ii) plantation should be carried out on the haul roads jointly by the different mining lease holders, iii) water spraying needs to be carried out by sharing the resources so as to optimize the water requirement and to ensure effective dust suppression, iv) traffic management needs to be done jointly, v) movement of tippers should be away from the habitation and dedicated roads may be constructed for this purpose, vi) tippers transporting the mineral should be covered and spillage of the mineral should be avoided vii)

maintenance of the roads needs to be carried out on regular interval , and viii) crop conditions on both side of the roads needs to be monitored regularly so as to avoid any damage to crop production. These mitigative measures may be informed to SEIAA-Haryana for enforcing similar conditions to other nearby mining lease holders as well as other activities in the area.

12. The Project Proponent reported that public hearing for the proposed project of —Rattewali Block PKL / B-10 of M/s Tirupati Roadways was held under Chairmanship of Mr. Mukulkumar HCS, Additional Deputy Magistrate, Panchkula at the mine site, on 17.04.2018 at 3:00 PM as per the EIA Notification dated 14th September 2006, as amended by the Ministry of environment and Forest, New Delhi. The advertisement for public hearing was published in "The Tribune" & "Amar Ujala" on 14.03. 2018. The issues raised during public hearing were also deliberated during the meeting which includes provision of alternate road for transportation of mineral, provision for dust suppression, employment, social welfare, compensation to affected land owners, installation of crusher, and maintenance of roads. The financial commitments made by PP to address the issues raised during PH by the PP is Rs 21 Lakh/annum under CSR, Rs 30.50 Lakh under EMP which include Rs 18 Lakh (Capital Cost) for construction of roads and Rs 4 Lakh/annum for maintenance of roads. Further, PP committed that preference will be given to local in employment and around 400-500 person will get direct and indirect employment from the projects, motarable road shall be constructed. Tree guards will be erected around the sampling / plants for their protection and survival. Watering of sampling/plant will be done regularly by the gardeners, and compensation to affected land owner on mutually agreeable rates. PP reported that there is no court case/ litigation pending against the project.

The EAC meeting held during 22-23 January, 2019 observed that *"PP has increased the number of saplings to be planted, proposed to engage separate manpower for implementation of EMP, the PP has proposed for atomized water spraying, thus budget for all these activities to be the same needs to be included in EMP. The Committee also observed that major issue raised by local public is construction of roads and dust suppression. Thus PP should revise the EMP considering all these factors."* The Committee also observed that *"amount proposed by PP for construction of class room is just Rs 90,000 which is not a feasible estimate. Thus budget under CER& EMP needs to be revised considering the issues raised during public hearing."*

The PP submitted that to address the issues raised during public hearing the budget for EMP is now revised to Rs 151.05 Lakh (Capital) & Rs 69.47 Lakh (recurring) and budget of CER is revised to Rs 67.29 lakh (Capital) & Rs 21.0 Lakh (recurring).

13. PP initially submitted budget under Environment Social Commitment (now CER) as Rs 21.0 Lakhs/annum. The same was revised to Rs. 45.0 Lakh (Capital Cost) & Rs 21.0 Lakh (Recurring) during the EAC meeting held on 22-23, January 2019.

The EAC in its meeting held during 22-23 January, 2019 observed that *“the amount proposed by PP for construction of class in room is just Rs 90,000 which is not a feasible estimate. Thus budget under CER needs to be revised.”*

The PP now submitted the revised budget of CER as Rs 67.29 lakh (Capital) & Rs 21.0 Lakh (recurring) which includes the following:

Activity-1: Infrastructure work for education

(All the activity implements are proposed four villages viz. (i) Rajkiya Vidhyalya, Tibbi. Distance 1.60 Km, NNW, (ii) Rajkiya Vidhyalya, Rattewali. Distance 0.6 Km, SSW, (iii) Rajkiya Vidhyalya, Parwala. Distance 1.97 Km, SE (iv) Rajkiya Vidhyalya, Shamtu. Distance 2.05 Km, SSW)

a) New classroom construction proposed for Government School. (Total No. of New Classroom – 8 (2nos in each school); Construction cost for New Classroom in each school @ Rs. 5,00,000/-)

Total Capital Investment Year wise (Rs. In Lakh) as follows & recurring cost /annum is 7 Lakh.

Activity/Year	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	Total
Activity(1a)	10	Nil	10	Nil	10	Nil	10	40.0

b) Construction of new Toilet for students in Government primary and secondary school, (Total No. of New Toilet – 16 (8 male & 8 females; cost Rs. 17,500/- per toilet)

Capital Investment Year wise (Rs. In Lacs) as follows & recurring cost /annum is 1.5 Lakh.

Activity	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	Total
Activity(1b)	1.4	1.4	Nil	Nil	Nil	Nil	Nil	2.8

c) Toilet Repair in nearby villages other than new construction including septic tank and soak pit (Total No. of Toilet repair –16; @Rs. 17,500/-)

Capital Investment Year wise (Rs. In Lacs) as follows & recurring cost /annum is 2.5 Lakh.

Activity	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	Total
Activity(1c)	0.53	0.53	0.35	0.35	0.35	0.35	0.35	2.8

d) Renovation of computer lab in 4 secondary Government school (6 computers with table will be installed in each school @ Rs 30,000/ each)

Capital Investment Year wise (Rs. In Lacs) as follows & recurring cost /annum is 4 Lakh

Activity	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	Total
Activity(1c)	1.8	Nil	1.8	Nil	1.8	Nil	1.8	7.2

Activity-2: Infrastructure work for Drinking Water/ Sanitation

a) Drinking water R.O. installation in at Public Health Centre and Bus Stand of village Rattewali, Shamtu, Parwala, and Tibbi. Total No. of water ATM Machine to be installed @98,000/- each

Capital Investment Year wise (Rs. In Lacs) as follows & recurring cost /annum is 4 Lakh.

Activity	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	Total
Activity(1c)	3.92	3.92	Nil	Nil	Nil	Nil	Nil	7.84

Activity-3: Infrastructure work for Drinking Water/ Sanitation

a) Organize Health check-up camps and Medicine distribution programme Malnutrition checkup and free diagnostic Treatment Programmes to the nearest habitation of village Rattewali, Shamtu, Parwala, Tibbi and Amrala. (Health check-up camp in each village @ 75,000/- village 5 x Rs. 75,000/-)

Capital Investment Year wise (Rs. In Lacs) as follows & recurring cost /annum is 1 Lakh.

Activity	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	Total
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Activity(1c)	0.75	0.75	0.75	0.75	0.75	Nil	Nil	3.75
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b) Awareness through distribution of Sanitary napkin made by S.H.G. (Women's Empowerment & Health & hygiene). Awareness on Personal Hygiene. Cost of 1 Packet : 40/- INR Estimated Beneficiaries : Approx. between 3,500 - 6,000/- Total : 6,000 Beneficiaries.

Capital Investment Year wise (Rs. In Lakh) as follows & recurring cost /annum is 1 Lakh.

Activity	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	Total
Activity(1c)	1.1	Nil	0.6	Nil	0.6	Nil	0.6	2.9

The Committee observed that PP has proposed Rs 67.29 Lakh (Capital) and Rs 21 Lakh (recurring) [147 Lakh recurring over the life of mine 7 years]. The Committee is of the view although PP has addressed most of the relevant issue but some of the activities are capital in nature wherein the PP has proposed recurring expenditure also. Thus, keeping the total amount under CER same the Committee suggested that budget earmarked under CER should be used as **i)** Rs 40 Lakh (Capital) for Construction cost for New Classroom (2 nos @ 5.0 Lakh/each in each Government School, timeline: 1st, 3rd, 5th & 7th year) of village Rattewali, Shamtu, Parwala, and Tibbi; **ii)** Rs 2.8 Lakh (Capital) for Construction of new Toilet for students in Government primary and secondary school, (Total No. of New Toilet – 16 (8 male & 8 females; cost Rs. 17,500/- per toilet, timeline: in first 2 years); **iii)** Rs 2.8 Lakh (Capital) & Rs 2.5 (Recurring) for Toilet Repair in nearby villages other than new construction including septic tank and soak pit (Total No. of Toilet repair –16; @Rs. 17,500/-) (time line 6 in first 2 years and thereafter 2 each year); **iv)** Rs 7.2 Lakh (Capital) for Renovation of computer lab in 4 secondary Government school (6 computers with table will be installed in each school @ Rs 30,000/ each ; timeline: 1st, 3rd, 5th & 7th year); **v)** Rs 7.84 Lakh (Capital) & Rs 4 Lakh (recurring) for Drinking water R.O. installation in at Public Health Centre and Bus Stand of village Rattewali, Shamtu, Parwala, and Tibbi. Total No. of water ATM Machine to be installed @98,000/- each (timeline: 1st & 2nd year); **vi)** Rs 3.75 Lakh (Capital) & Rs 1 Lakh (recurring) to Organize Health check-up camps and Medicine distribution programme Malnutrition checkup and free diagnostic Treatment Programmes to the nearest habitation of village Rattewali, Shamtu, Parwala, Tibbi and Amrala. (Health check-up camp in each village @ 75,000/- village 5 x Rs. 75,000/-, timeline: every year for consecutive 5 years); **vii)** Rs 2.9 Lakh (Capital) & 1 Lakh (Recurring) for awareness through distribution of Sanitary napkin made by S.H.G. (Women's Empowerment & Health & hygiene). Awareness on Personal

Hygiene. Cost of 1 Packet: 40/- INR Estimated Beneficiaries: Approx. between 3,500 - 6,000/- Total: 6,000 Beneficiaries, timeline: 1st, 3rd, 5th & 7th year. The remaining recurring expenditure ₹12.5 Lakh/annum shall be used for supporting the education of children 's of poor family (5 family/village), providing assistance for medical treatment of critically ill persons (2 person/village), and providing assistance for higher education of meritorious youth of the village (5 youth/village). The amount shall be kept in a separate bank account which is to be audited annually. The Proponent should annually (before 1st June of every year for the compliance of proceeding years) submit the detailed report to Regional Office, MoEF&CC on implementation of the activities proposed in CER along with audited report of expenditure incurred; purchase documents, photographs in support of implementation of activities, etc. At the 7th year if any amount left in this budget head then the same shall be utilized for the social welfare / health care / infrastructural development of the four villages in consultation with local administration.

14. The PP submitted that the no R & R is involved in this project.
15. The Project Proponent previously submitted that the budget earmarked for Environmental Management Plan (EMP) shall be ₹44 Lakh (Capital) & ₹ 30.5 Lakh (recurring/annum).

The EAC meeting held during 22-23 January, 2019 observed that" *The PP has proposed to increase the number of plants to be planted from 22300 to 31455 and amount previously proposed for plantation was Rs 27.0 Lakh @ Rs 121/sapling. The revised budget proposed under plantation is Rs 38.05 Lakh (Capital) & 9.51 Lakh (25% recurring). But the plantation cost in EMP is mentioned as Rs 2 Lakh (Capital) & Rs 5 Lakh (recurring). Further, the PP has reduced the water consumption by atomized water spraying but did not provide the budget for Water tanker having mist generator canon attachment. Thus, the EMP cost needs to be revised by including plantation cost ₹ 38.05 Lakh (Capital) & ₹ 9.51 Lakh (25% recurring)., cost of one water taker having mist generator canon attachment 25 Lakh, and cost of manpower for implementation of EMP. Thus, the total cost of EMP works out to be 105.05 Lakh (Capital) & ₹ 44.73 Lakh (recurring/annum).*" The Committee also asked PP to submit "***The Budget of EMP needs to be revised after including the cost of plantation, manpower used for implementation of EMP, cost of water tanker having mist generator cannon attachment to be used for dust suppression.***"

The PP now submitted that budget of EMP is now revised to Rs 151.05 Lakh (Capital) & Rs 69.47 Lakh (recurring) which includes i) Pollution monitoring [Rs 8 Lakh (recurring)], ii) Dust Suppression [Rs 50 Lakh (Capital), Rs 12 Lakh (recurring)], iii) Plantation [Rs 42.49 Lakh (Capital), Rs 9.51 Lakh (recurring)], iv) Rainwater Harvesting [Rs 3.0 Lakh (Capital), Rs 2.0 Lakh (recurring)], v) Haul Road & Other road repair [Rs 40 Lakh (Capital), Rs 8.0 Lakh (recurring)], vi) Pre-Monsoon & Post Monsoon Survey [Rs 15.56 Lakh (Capital), Rs 20 Lakh (recurring)], and vii) manpower for implementation of EMP [Rs 9.96 Lakh (recurring) for Manager (EHS-@ Rs 25000/month), Asst. Manager (EHS-@ Rs 20000/month), Environmental Engineer (EHS-@ Rs 20000/month), Horticulture (@ Rs 10000/month), and supervisor (@ Rs 8000/Month)]. The budget earmarked throughout the life of mine towards EMP is Rs 637.34 Lakh.

The Committee noted that in public hearing PP has proposed i) to construct and maintain the roads and proposed a budget of Rs 18 Lakh but now PP has revised the same to Rs 40 Lakh (Capital), Rs 8.0 Lakh (recurring); ii) during PH a budget of Rs. 30.50 Lakhs/yr was proposed for environment protection measures in the surrounding area out of which Rs. 6.00 Lakhs/yr was earmarked for dust suppression and Rs. 25.00 Lakhs for 7 years was proposed for Plantation but now the same has been revised to Rs 151.05 Lakh (Capital) & Rs 69.47 Lakh (recurring) which include Rs 50 Lakh (Capital), Rs 12 Lakh (recurring) for dust suppression and Rs 42.49 Lakh (Capital), Rs 9.51 Lakh (recurring) for plantation.

16. PP submitted that the budget for Occupational Health and Safety shall be ₹ 10.0 Lakhs/annum out of which ₹1 Lakh shall be used for Measures to Prevent Accidents during mineral Loading, ₹1 Lakh for measures to Prevent Accidents during minerals Transportation, ₹1 Lakh for measures to Prevent Accidents due to Trucks/ Dumpers etc., ₹2 Lakh for measures to Prevent Dangerous Incidents during Inundation/Flooding, ₹2 Lakh for education awareness and first aid kit, ₹3 Lakh for medical Examination Schedule.
17. In the EAC meeting held during 22-23, January 2019 the Committee asked PP to submit the "Actual Replenishment Study based on pre-monsoon and post monsoon data needs to be submitted within 15 days".

The PP submitted replenishment study report wherein the pre-monsoon study was conducted by Hydro Geo Solutions, Jodhpur. Later, on PP conducted the post monsoon survey through UAV and based on both these surveys the erosion and deposition of material was calculated. It is submitted in the replenishment study report that "The calculation of volume of deposits was based on the conservative estimate arising out of different scenario and standard calculation methods pf Cross-sectional area method and difference between Digital Elevation Model (DEM). The total material deposited based on pre-monsoon and post monsoon survey in the entire mining lease area is 4,49,355 m3. Further, based on the deposition observed in the study, three mineable blocks namely B-1 (11.33 ha), B-2 (4.5 ha) & B-3 (8.3 ha) has been identified. Considering the applicable mining regulatory provisions such as statutory barrier zone from the lease boundary, lean flow channel, etc. the average deposition has been calculated in each block with varying deposit scenario and average deposition depth has been observed to be 1.33 meters for the safe extractable material from each block. The brief of the calculation for each block are as below:

Block-ID	Area (m ²)	Depth (m)	Volume (m ³)	Tonnage (MT) (Sp Gr. = 2.6)	Lakh (MT)
B-1	113,355.94	1.33	150763.4	391984.8	3.919848
B-2	45,242.81	1.33	60172.93	156449.6	1.564496
B-3	83,934.20	1.33	111632.5	290244.5	2.902445
Total	242532.95	1.33	322568.8	838678.9	8.386789

The Committee after examination of the study report, discussion on the procedures followed for survey, software validation and inclusion of regulatory provision in the study for developing scenarios, observed that the safe extractable material based on the replenishment observed is about 8.38 Lakh Metric Ton and corresponding maximum permissible depth of mining shall not be in excess of 1.33 meters. It was also observed by the committee that the buffer zone/no-mining zone of 40 m inside from the boundary of lease area (bank of the river) as well as 7.5-meter buffer with adequate distance for stability and safety of the edges of wet perimeter during lean flow season has been appropriately considered while defining the mineable area.

Further, the Committee observed that the proposal of production of 19 LTPA is not in agreement with the replenishment observed and therefore the production capacity shall be restricted to 8.38 Lakh ton for the current year from the identified mineable

area (B1, B2 and B3). Considering the dynamic nature of deposition/replenishment, the committee recommends that the mineable material quantity shall be approved based on replenishment study for next 3 years, till a scientifically satisfactory trend can be observed and accordingly, further production permission shall be granted till the lease period.

The Committee also observed that PP has applied for boulder, gravel and sand but sieve analysis of the mineable material from the lease area suggests that 60% (D_{60}) of the samples has average diameter less than 3.14 mm. As per Indian Soil Classification, bulk quantity of material comes under category of sand. However, 40% is more than size of sand and therefore, the grant of EC may be considered for River Bed Material (Boulder, Gravel and Sand).

The deposition of such materials is not uniform every year and is dependent on many factors including the upstream sediment carrying capacity, flow, and river bed character of the stretch. Therefore, the grain size including the deposition quantity will vary on yearly basis. In absence of any past data on replenishment / deposit on annual basis, the committee felt necessary that the replenishment study of the mine lease area shall be conducted every year, so that deposition trend can be estimated based on deposition rate of atleast 2-3 year. Based on trend of replenishment /deposit, a scientifically derived minable quantity can be estimated and accordingly, EC for permissible minable quantity can be fixed for rest of the lease period.

The Committee recommends mining of River Bed Material (Boulder, Gravel and Sand) from cumulative area of 24.25 ha as identified in replenishment study vide block namely B-1 (11.33 ha), B-2 (4.5 ha) & B-3 (8.3 ha) (details given in table above) for maximum permitted quantity of 8.38 Lakh MT for first year with maximum permissible depth of 1.33 meter from the original ground level. The Committee also recommends that for the first year PP should use only scraper loader as the depth of mining is less and in order to create a uniform pit for next replenishment study. The allowed mineable quantity of 8.38 lakh Metric ton will be valid for one year from the date of issuance of EC, and further quantity will be subjected to the finding of replenishment study (pre and post monsoon) and appraisal by EAC. PP should conduct annual replenishment study (pre and post monsoon period) each year for next 3 years and apply to MoEF&CC for amendment in EC for permitting mineable quantity based on respective study.

18. In the EAC meeting held during 22-23, January 2019 committee asked that "A Sub-Divisional Committee comprising of Sub-Divisional Magistrate, Officers from Irrigation department, State Pollution Control Board or Committee, Forest department, Geology or mining officer , revenue department shall visit the site and make recommendation on suitability of site for mining or prohibition thereof after (a) identification of the areas of aggradations or deposition where mining can be allowed; (b) identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited; (c) verify the mining lease boundary; (d) verify the area of the mining lease; (e) suggest the route for transportation of the mineral so that to cause minimum impact on the nearby habitation & agricultural fields; (f) identify the safety zone/restricted area and the area that can be consider for mining after excluding the area as per recommendation of EAC , after considering the other restrictions mentioned in the Sustainable Sand Mining Management Guidelines 2016, S.O. 141(E) dated 15.01.2016, Letter of Intent & District Survey Report; (g) finalize the specific gravity of the material to be mined by the mining lease holders; (h) proposed location for the installation weigh bridge; (i) verification of the initial level of the mining lease already collected by the PP; (j) verification of the baseline air quantity data collected by the PP and any other point to be considered for the protection environment and health of the nearby habitation. Recommendation of the Committee needs to be annexed as addendum to EIA/EMP Report."

The PP submitted that the recommendations of the Committee with respect to joint inspection with Sub-Divisional Magistrate, Officers from Irrigation Department, State Pollution Control Board or Committee, Forest Department, Geology of Mining Officer, Revenue Department has been obtained from the Office of Dy. Commissioner, Panchkula vide letter no. 11926/ MA/MC 4 dated 28.06.2019. Wherein inter-alia it has mentioned that i) there is no building, bridge, habitation and religious places within 200 meters of the said mining lease, ii) there are two routes to exits from the mining lease, iii) the safety zone, restricted zone and mining zone is already mentioned in the approved mining plan, iv) specific gravity of the mineral is 2.6, v) the weigh bridges can be installed on the exit routes from mines, vi) the maximum and minimum MSL of the mining lease as verified by the irrigation department in 378 and 355 respectively, vi) the air quality of the area as reported by Haryana Pollution Control Board is fine.

The Committee observed that necessary information required on alternate exit road, weighing system and other facilities including the RL of the area has been verified and provided by Dy. Commissioner, Panchkula as required. The cumulative production from this mining lease and other nearby mining lease in the cluster should be limited based on replenishment study and should not be as per the Lol. The predictive environmental parameter based on Lol production capacity for all lease exceeds the applicable Air quality standard at some habitation, and therefore as a precautionary measure (mitigative measures) as suggested by the committee (para 11 above), shall be adopted by all mining lease holders in the area including limiting the production capacity based on replenishment study and other governing factors. SIEAA-Haryana may be informed by Ministry for its compliance accordingly.

19. In the EAC meeting held during 22-23, January 2019 the Committee asked that *"PP needs to submit an undertaking by the way of an affidavit to comply with the Common Cause Order and other statutory requirements in pursuant to O.M. dated 03.05.2018."*

The PP submitted an undertaking for compliance of Common Cause Order and other statutory requirements vide affidavit number C 895272 dated 27.08.2018 on Rs. 50/- Non-Judicial stamp duly notarized. In addition to this PP submitted an undertaking dated 27.08.2019 that all the data and information given in the application, enclosures, and other documents are true to the best of my knowledge and belief and he is aware that if any part of the data and information submitted is found to be false or misleading at any stage the project will be rejected and clearance given if any to the project will be revoked at our risk and cost. The Consultant Enkay Enviro Services Pvt Ltd also submitted an undertaking vide letter dated 27.08.2019 that the EIA/EMP report of the said project has been redrafted and all the data and other documents are factually correct to the extent of knowledge based on technical submission of consultant. The PP also submitted an undertaking on Rs. 50/- Non-Judicial stamp duly notarized bearing certificate no C-895212 dated 27.08.2018 by the Project Proponent to the effect that each year after the replenishment study, the plan & section will be submitted to the Office of State Mining Engineer, DMG, Haryana for verification and official record.

The consultant *'Hydro Geo Solutions'* which has conducted theoretical replenishment study and pre-monsoon survey submitted an undertaking dated

28.08.2019 wherein it has mentioned that the pre-monsoon survey and data is generated in June 2018 for replenishment study for the proposed project and all the survey and data along with other statistical parameters in the report is my responsibility.

The consultant '*Himalayan Surveying Services Pvt Ltd*' which has collected the post monsoon data submitted an undertaking that the post-monsoon survey and data is generated in January 2019 for replenishment study for the proposed project and all the survey and data along with other statistical parameters in the report is my responsibility.

The consultant '*Mining 360 services*' submitted that, based on the pre-monsoon and post monsoon data submitted by '*Hydro Geo Solutions*' and '*Himalayan Surveying Services Pvt Ltd*' respectively, the erosion, deposition and safe extractable volume is ascertained in the Replenishment Study Report. The data/information along with other statistical & volumetric calculation provided in the report is my responsibility.

The Consultant submitted the NABET Accreditation Certificate of previous ACO '*Vardan Environet*' which was valid from 12.07.2017 to 9.11.2019. In addition to this PP submitted the NABET Accreditation Certificate of current consultant Enkay Enviro Services Pvt Ltd which is valid from 6.09.2017 to 15.11.2019, v) The PP submitted the accreditation certificate of the laboratory (Vardan Environet) from which samples were analyzed.

20. Previously the Project Proponent submitted that the total project cost shall be ₹7.0 Crore and shall give direct employment to 69 persons. PP now submitted that the Project Cost shall be read as Rs 9.2 Crores and 73 people shall be employed.
21. Based on the discussion held and document submitted the EAC in its meeting held on 27-28 Aug, 2019 **recommends** the proposal of M/s Tirupati Roadways for mining of 19.0 LTPA of River Bed Material (Boulder, Gravel & Sand) from Rattewali Block/PKL B 10 (ML Area 45.00 ha) located at Village Rattewali, Tehsil- Barwala District- Panchkula, Haryana for grant of Environmental condition for the period of 7 years from date of issuance of EC, with Standard EC Conditions as per Ministry's O.M. No. 22-34/2018- IA.III, dated 08.01.2019,

applicable provisions of Sustainable Sand Mining Management Guidelines 2016 and following specific conditions as given below :

A. Specific Conditions

1. Permissible Mining of River Bed Material (Boulder, Gravel and Sand) shall be limited to 8.39 LTPA instead of requested 19 LTPA, from an effective mineable area of 24.25 ha [B-1 (11.33 ha), B-2 (4.5 ha) & B-3 (8.3 ha)], with a maximum minable depth of 1.33 meter from the original ground level as reported in the replenishment study. The permissible minable material of 8.39 Lakh Ton will be valid till one year from the day of issuance of consent to Operate by HSPCB.
2. For subsequent period, PP shall submit fresh annual replenishment study to MoEF&CC for amendment in EC for mineable quantity and maximum permission depth for mining based on the scientific findings of replenishment study. Such study shall be placed before EAC for appraisal for next three years to assess rate of deposition and accordingly, minable production capacity and depth can be prescribed based on trends analysis, provided it is found scientifically satisfactory by the EAC. The placing of the study report before EAC is mandatory for initial three years.
3. The proposed Occupational Health and Safety Plan (OH&SP) shall be implemented with budgetary expenditure of ₹ 10.0 Lakhs/annum out of which ₹1 Lakh shall be used for Measures to Prevent Accidents during mineral loading, ₹ 1 Lakh for measures to Prevent Accidents during minerals Transportation, ₹ 1 Lakh for measures to Prevent Accidents due to Trucks/ Dumpers etc., ₹ 2 Lakh for measures to Prevent Dangerous Incidents during Inundation/Flooding, ₹ 2 Lakh for education awareness and first aid kit, ₹ 3 Lakh for medical Examination Schedule. The amount proposed in the Occupational Health and Safety Plan shall be kept in separate bank account and same needs to be audited annually. The Proponent should annually (before 1st June of every year for proceeding year) submit the detailed report to Regional Office, MoEF&CC on implementation of OH&SP along with audited report of expenditure incurred; purchase documents, photographs in support of implementation of activities, details of persons engaged for the implementation of OH&SP etc.

4. The proposed Environmental Management Plan (EMP) shall be implemented having budgetary provision of Rs 151.05 Lakh (Capital) & Rs 69.47 Lakh (recurring) which includes i) Pollution monitoring [Rs 8 Lakh (recurring)], ii) Dust Suppression [Rs 50 Lakh (Capital), Rs 12 Lakh (recurring)], iii) Plantation [Rs 42.49 Lakh (Capital), Rs 9.51 Lakh (recurring)], iv) Rainwater Harvesting [Rs 3.0 Lakh (Capital), Rs 2.0 Lakh (recurring)], v) Haul Road & Other road repair [Rs 40 Lakh (Capital), Rs 8.0 Lakh (recurring)], vi) Pre-Monsoon & Post Monsoon Survey [Rs 15.56 Lakh (Capital), Rs 20 Lakh (recurring)], and vii) manpower for implementation of EMP [Rs 9.96 Lakh (recurring with 10% annual increment) for Manager (EHS-@ Rs 25000/month), Asst. Manager (EHS-@ Rs 20000/month), Environmental Engineer (EHS-@ Rs 20000/month), Horticulture (@ Rs 10000/month), and supervisor (@ Rs 8000/Month)]. The budget earmarked throughout the life of mine towards EMP is Rs 637.34 Lakh. The amount proposed in the EMP shall be kept in separate bank account and same needs to be audited annually. The Proponent should annually (before 1st June of every year for proceeding year) submit the detailed report to Regional Office, MoEF&CC on implementation of EMP along with audited report of expenditure incurred; purchase documents, photographs in support of implementation of activities, Geo-location of the monitoring stations, plantation sites, details of persons engaged for the implementation of EMP etc.

5. The proposed afforestation plan as a part of EMP shall be implemented with budgetary support of Rs 42.49 Lakh (Capital) & Rs 9.51 Lakh (recurring). The proposal includes 31455 saplings to be planted on 20.97 Ha area covering 7 villages [Rattewali (7290 saplings), Ganeshpur (2475 saplings), Bharoli (1875 saplings), Amrala (2805 saplings), Alipur(2325 saplings), Parwala (4680 saplings), Kambala (3180 saplings), Taparian (4545 saplings), and Kanauli (2280 saplings)]. Effort should be made to increase the number of 35000 in 7 year period by villages plantation on Village Road, Panchayat Bhawan, Community Center, School and Public Health Centre. In addition, 3545 sapling in 7.5 meter safety zone of mining lease boundary. The PP should engage experts (or in consultation with forest department) to decide on the sapling to be planted. The Proponent should annually (before 1st June of every year for proceeding year) submit the detailed report to Regional Office, MoEF&CC on implementation of plantation activity (as a part of EMP) along with audited report of expenditure incurred; purchase documents, photographs in support of implementation of activities, Geo-location of the plantation sites, details of persons/expert engaged for the implementation of plantation activity etc.

6. The proposed Corporate Environment Responsibility (CER) shall be implemented with budgetary support of Rs 67.29 Lakh (Capital) and Rs 21.0 Lakh (recurring) [Rs 147 Lakh recurring over the life of mine 7 years] which includes **i)** Rs 40 Lakh (Capital) for Construction cost for New Classroom (2 nos @ 5.0 Lakh/each in each Government School, timeline: 1st, 3rd, 5th & 7th year) of village Rattewali, Shamtu, Parwala, and Tibbi; **ii)** Rs 2.8 Lakh (Capital) for Construction of new Toilet for students in Government primary and secondary school, (Total No. of New Toilet – 16 (8 male & 8 females; cost Rs. 17,500/- per toilet, timeline: in first 2 years); **iii)** Rs 2.8 Lakh (Capital) & Rs 2.5 (Recurring) for Toilet Repair in nearby villages other than new construction including septic tank and soak pit (Total No. of Toilet repair –16; @Rs. 17,500/-) (time line 6 in first 2 years and thereafter 2 each year); **iv)** Rs 7.2 Lakh (Capital) for Renovation of computer lab in 4 secondary Government school (6 computers with table will be installed in each school @ Rs 30,000/ each; timeline: 1st, 3rd, 5th & 7th year); **v)** Rs 7.84 Lakh (Capital) & Rs 4 Lakh (recurring) for Drinking water R.O. installation in at Public Health Centre and Bus Stand of village Rattewali, Shamtu, Parwala, and Tibbi. Total No. of water ATM Machine to be installed @98,000/- each (timeline: 1st & 2nd year); **vi)** Rs 3.75 Lakh (Capital) & Rs 1 Lakh (recurring) to Organize Health check-up camps and Medicine distribution programme Malnutrition checkup and free diagnostic Treatment Programmes to the nearest habitation of village Rattewali, Shamtu, Parwala, and Tibbi. (Health check-up camp in each village @ 75,000/- village 5 x Rs. 75,000/-, timeline: every year for consecutive 5 years); **vii)** Rs 2.9 Lakh (Capital) & 1 Lakh (Recurring) for awareness through distribution of Sanitary napkin made by S.H.G. (Women's Empowerment & Health & hygiene). Awareness on Personal Hygiene. Cost of 1 Packet: 40/- INR Estimated Beneficiaries: Approx. between 3,500 - 6,000/- Total: 6,000 Beneficiaries, timeline: 1st, 3rd, 5th & 7th year. The remaining recurring expenditure ₹ 12.5 Lakh/annum shall be used for supporting the education of children's of poor family (5 family/village), providing assistance for medical treatment of critically ill persons (2 person/village), and providing assistance for higher education of meritorious youth of the village (5 youth/village). The amount proposed under CER shall be kept in a separate bank account which is to be audited annually. The Proponent should annually (before 1st June of every year for the compliance of proceeding years) submit the detailed report to Regional Office, MoEF&CC on implementation of the activities proposed in CER along with audited report of expenditure incurred; purchase documents, photographs in support of

implementation of activities, etc. At the 7th year if any amount left in this budget head then the same shall be utilized for the infrastructural development of the four villages in consultation with local administration.

7. The budget support earmarked for the Wildlife Conservation Plan (WCP) for 4 Schedule-1 species viz. Leopard, Indian Peafowl and Indian Python & Pangolin is Rs 23.60 Lakh should be provided for implementation of the plan. The PCCF (Wildlife), Panchkula, Haryana has approved the conservation plan (total amount ₹ 15 Lakh) vide LR No 1912 dated 30.08.2018 for the three schedule-1 species. The PP should deposit the amount proposed for WCP in government account. The PP within 6 months of the issuance of EC submits the approved conservation plan for the Pangolin to MoEF&CC.
8. Approval/permission of CGWA/SGWA shall be obtained before drawing ground water for the project activities. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission in pursuant to Ministry's O.M. No. 21-103/2015-IA.III dated 2.11.2018. **This Environmental Clearance is subject to obtaining permission from CGWA for withdrawal of ground water.**
9. The Project Proponent shall take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.
10. The High Powered Committee (HPW) was constituted under the orders of Hon'ble NGT, headed by Secretary, MOEF&CC, which has given its report dated September, 2016. The PP shall comply with recommendation of (HPW) as applicable for the project proponent and other applicable provisions of Sustainable Sand Mining and Management Guidelines, 2016 issued by MoEF&CC and as amended from time to time
11. The Hon'ble NGT recently in its order dated 4.09.2018 inter-alia directed that *"One of the conditions of every lease of mine or minerals would be that there will be independent environmental audit at least once in a year by reputed third party entity and report of such audit be placed in public domain. In the course of such environmental audit, a three-member committee of the local inhabitants will also be associated. Composition of three members committee may preferably include ex-servicemen, former teacher and former civil servant. The Committee will be nominated by the District Magistrate."* Thus, PP and State

Government should comply with the order of Hon'ble NGT and submit an annual environmental audit report to the Ministry and keep the same in public domain as proposed above.

12. The proponent shall construct 2 dedicated roads for the transportation of the mineral from mining lease to nearest tar road. The number of trucks/tippers shall not exceed the estimated quantity of 56 trucks/tippers per day from each road. The transport of mineral will not be done through villages / habitations for which dedicated roads needs to be provided so that the impact of sound, dust and accidents could be mitigated. The PP shall engage sufficient staff for traffic management and keep proper record of trucks passing through each road. The PP shall deploy the machine for excavation as approved by EAC during appraisal process.
13. Project Proponent shall ensure proper maintenance of transportation roads for transport of minerals as per the IRC Guidelines (traffic congestion and density). The PP shall ensure regular cleaning & grading of the roads used for transportation for smooth traffic movement.
14. Demarcation of mining area with pillars and geo-referencing should be done prior to start of mining. The area should be properly surveyed and mapped with the help of DGPS to assign geo-coordinates and accordingly erect boundary pillars so as to avoid illegal and unscientific mining. Permanent pillars have to be constructed to demarcate width of extraction of RBM leaving 40 meter inside buffer distance from lease boundary and 7.5 meter from the bank of wetted perimeter of lean channel.
15. The profile of river has been considered as per latest satellite image and in case river changes its course during the contract period (7 years) and goes outside the mining lease then mining should be stopped immediately and can be resumed only after obtaining permission from MoEF&CC. The maximum minable depth shall be **as per para 1 of specific conditions** or water level of river bed, whichever is achieved early, and the production thereafter shall be based on the actual replenishment study report as approved by EAC.
16. PP shall comply with the other combined conditions prescribed by concerned regulatory authority arising out of mines in the same cluster but including i) transportation of the mineral from the mining leases should be diverted so as

to avoid traffic congestion, ii) plantation should be carried out on the haul roads jointly by the different mining lease holders, iii) water spraying needs to be carried out by sharing the resources so as to optimize the water requirement and to ensure effective dust suppression, iv) traffic management needs to be done jointly, v) movement of tippers should be away from the habitation and dedicated roads may be constructed for this purpose, vi) maintenance of the roads needs to be carried out on regular interval , vii) tippers to be covered with tarpaulin & spillage of the mineral to be avoided and viii) crop conditions on both side of the roads needs to be monitored regularly so as to avoid any damage to crop production.

2.3. Mining of River Sand (Minor Mineral) in u/s and d/s of kattalai Bed Regulator in Cauvery River with production capacity of 15,01,247m3 over an extension of 196.25ha by Public Works department, State Government of Tamil Nadu, located at village Sriramasamudram/Silaipilayaputhur, Tehsil Thottiyam, District-Trichy, Tamil Nadu(196.25ha) [File No J-11015/343/2013-IA. II (M); Proposal No. IA/TN/MIN/20350/2013]-EC Amendment

The proposal of M/s Public Works Department, State Government of Tamil Nadu is for extension of validity of the EC granted vides Lr No. J-11015/343/2013-IA.II(M) dated 14th May, 2015 to M/s Public Works Department, State Government of Tamil Nadu for Quarrying River sand in u/s and d/s of Kattalai Bed Regulator in Cauvery River with production capacity of 15,01,247 m3 over and extent of 196.25 ha located at Village Sriramasamuthiram /Silaipillayaputtur, Tehsil- Thottiyam, District- Trichy, Tamil Nadu.

2. The PP submitted that no forest land is involved. There is no wild life sanctuary within 10Km. radius from the project site area. The quarry is located around 200 km away from Bay of Bengal. There is no litigation pending against this project. Mining is by open cast semi mechanized, shallow mining on sand shoals above the River bed. There is no permanent or temporary change in land use.
3. PP submitted that existing EC granted vide Lr. No. J-11015/343/2013-IA. II(M) dated 14th May, 2015 at para 3 mentioned that life of mine is 3 years. The PP has mentioned that quantity of sand could not get exhausted due to flow in the river and storage of water in the newly constructed barrage. Due to this reason the project was not completed in 3 years. The PP applied on 8.02.2019 for

extension of validity of EC for 3 more years. Accordingly, the proposal was placed in EAC Meeting held during January 22-23, 2019 wherein the Committee deferred the proposal as PP did not attend the meeting. The proposal was then placed in EAC Meeting held on 26.03.2019 wherein the Committee deferred the proposal as PP was not able to submit any documents regarding application for extension of validity. The PP submitted the information sought by EAC and the proposal was placed in EAC meeting held on 30-31 July, 2019 wherein the Committee deferred the proposal as PP did not attend the meeting. The PP vide its email dated 1.08.2019 requested for placing the proposal in next EAC meeting. The proposal is now placed in EAC meeting held on 27-28 August, 2019. The PP submitted a letter no EC/PD/ SQQ/Quarry related/2018 dated 2.04.2018 vide which PP has informed Ministry that mining operation commenced on 1.01.2016 and requested for clarification of validity period on ground of whether the validity of EC is 3 years from the date of issuance of EC (i.e.,14.05.2015) or from date of commencement of mining operation (i.e., 01.01.2016). The Ministry did not provide any written clarification to PP. PP further submitted that in absence of any response, it was preferred to consider the validity of the EC from date of operation of mines. The Committee is of the view generally validity of EC is considered from the date of issuance of EC letter but PP has approached the Ministry well within the validity of EC i.e. before 13.05.2018 for clarification. In absence of any response from Ministry (MoEF&CC), did not apply for amendment and has made the application thereafter on 08.02.2019. As informed by PP, non-responsiveness from Ministry has culminated in delay in application for extension and the Committee may consider the case in this background. The project is a government project and help in augmentation of water holding capacity in a water scare area of Tamil Nadu.

The committee deliberated on the submission made by PP and **recommends** for grant of extension in EC for 3 years from the date of issuance of the Extension letter, subjected to administrative acceptance of application for extension of validity of EC by Ministry. Ministry has to decide on the date of validity of the exiting EC and consequential acceptance of the application of extension in validity. The committee prescribes same conditions as applicable in EC dt. 14.05.2015.

2.4. Quarrying River Sand in U/s and D/s of kattalai Bed Regulator in Cauvery River with production capacity of 15,18,958m³ over an extent of 256.06ha by M/s Public Works Department, State Government of Tamilnadu, located at Village Mayanur Tehsil-Krishnarayapuram, District-Karur, Tamilnadu Proposal No. IA/TN/MIN/23694/2013; File no. J-11015/64/2014-IA-II(M) – For extension of EC

The proposal of M/s Public Works Department, State Government of Tamil Nadu is for extension of validity of the EC granted vide Lr No. J-11015/64/2014-IAII(M) dated 14th May, 2015 to M/s Public Works Department, State Government of Tamil Nadu for Quarrying River sand in u/s and d/s of Kattalai Bed Regulator in Cauvery River with production capacity of 15,18,958 m³ over and extent of 256.06 ha located at Village Mayanur Tehsil – Krishnarayapuram, District- Karur, Tamil Nadu.

2. The PP submitted that no forest land is involved in the mining lease area. There is no wild life sanctuary within 10Km radius from the project site area. The quarry is located around 200 km away from Bay of Bengal. There is no litigation pending against this project. Mining is by open cast semi mechanized, shallow mining on sand shoals above the River bed. There is no permanent or temporary change in land use. The Project land site is classified as Govt. River Poramboke land.
3. PP submitted that existing EC granted vide Lr. No. J-11015/64/2014-IAII(M) dated 14th May, 2015 at para 3 mentioned that life of mine is 3 years. The PP has mentioned that quantity of sand could not get exhausted due to flow in the river and storage of water in the newly constructed barrage. Due to this reason the project was not completed in 3 years. The PP applied on 8.02.2019 for extension of validity of EC for 3 more years. Accordingly, the proposal was placed in EAC Meeting held during January 22-23, 2019 wherein the Committee deferred the proposal as PP did not attend the meeting. The proposal was then placed in EAC Meeting held on 26.03.2019 wherein the Committee deferred the proposal as PP was not able to submit any documents regarding application for extension of validity. The PP submitted the information sought by EAC and the proposal was placed in EAC meeting held on 30-31 July, 2019 wherein the Committee deferred the proposal as PP did not attend the meeting. The PP vide

its email dated 1.08.2019 requested for placing the proposal in next EAC meeting. The proposal is now placed in EAC meeting held on 27-28 August, 2019. The PP submitted a letter no EC/PD/ SQO/Quarry related/2018 dated 2.04.2018 vide which PP has informed Ministry that mining operation commenced on 1.01.2016 and requested for clarification of validity period on ground of whether the validity of EC is 3 years from the date of issuance of EC (i.e.,14.05.2015) or from date of commencement of mining operation (i.e., 01.01.2016). The Ministry did not provide any written clarification to PP. PP further submitted that in absence of any response, it was preferred to consider the validity of the EC from date of operation of mines. The Committee is of the view generally validity of EC is considered from the date of issuance of EC letter but PP has approached the Ministry well within the validity of EC i.e. before 13.05.2018 for clarification. In absence of any response from Ministry (MoEF&CC), did not apply for amendment and has made the application thereafter on 08.02.2019. As informed by PP, non-responsiveness from Ministry has culminated in delay in application for extension and the Committee may consider the case in this background. The project is a government project and help in augmentation of water holding capacity in a water scare area of Tamil Nadu.

4. The committee deliberated on the submission made by PP and **recommends** for grant of extension in EC for 3 years from the date of issuance of the Extension letter, subjected to administrative acceptance of application for extension of validity of EC by Ministry. Ministry has to decide on the date of validity of the exiting EC and consequential acceptance of the application of extension in validity. The committee prescribes same conditions as applicable in EC dt. 14.05.2015.

2.5. Chhotedongar Iron Ore Mine of M/s Jayaswal Neco Industries Limited with enhancement in iron Ore production from 0.05 MTPA to 2.95 MTPA, installation of crushing and screening facility along with installation of beneficiation unit of 1.0 MTPA capacity within mining lease area of 192.95 ha located at Chhotedongar Village, Tehsil and District Narayanpur, Chhattisgarh - Consideration of TOR.

(File No: IA-J-11015/62/2019-IA-II(M); Proposal No: IA/CG/MIN/108636/2019; Consultant: Srushti Seva Private Limited)

The proposal of M/s Jayaswal Neco Industries Limited is for Chhotedongar Iron Ore Mine with enhancement in production of iron ore from 0.05 MTPA to 2.95 MTPA, with installation of crushing and screening facility along with installation of beneficiation plant of 1.0 MTPA capacity in the mine lease area (MLA) of 192.95 ha. The MLA is located at Chhotedongar Village, Tehsil and District Narayanpur, Chhattisgarh. The MLA is bounded by Latitudes of 19° 25' 40.356" N to 19° 27' 09.423" N and the Longitudes of 81°15' 37.175" E to 81° 17' 34.507" E and falls under the Survey of India Toposheet No.65 E/7. The area falls under the South Bastar region of Chhattisgarh.

Project proponent (PP) submitted that the Environment Clearance was granted by the Ministry vide Letter No. J-11015/152/2005-IA.II(M) dated 05.02.2007 to M/s Jayaswal Neco Limited for iron ore mining with production capacity of 50000 tonnes per annum (0.05 MTPA). PP submitted that at the para 3 of above referred EC letter inter-alia mentioned that the proposal was received prior to EIA Notification of 14th September, 2006 and was considered for grant of environmental clearance as per procedure in EIA Notification, 1994 in terms of provisions of Para 12 of EIA Notification, 2006 dated 14.09.2006 read with Para 2.0 (2.1(2.1.1) of Circular dated 13.10.2006. Furthermore, PP presented that the para 4 of EC letter mentioned that the Ministry of Environment and Forests hereby accords environmental clearance for the above project under the provisions of EIA Notification dated 14th September, 2006. The Committee deliberated the same.

PP further submitted that the application of TOR was made for expansion in production capacity of Iron ore from 0.05 MTPA to 2.95 MTPA with crushing and screening on 14 October 2017 vide proposal no. IA/CG/MIN/70103/201 and file no.J-11015/152/2005-IA-II (M). The proposal was considered in the 30th EAC meeting held during April 26-24, 2018 wherein the Committee deferred the proposal and is of the view that State Government of Chhattisgarh may be requested to provide the status of revised mining lease, if any, and status of NPV paid for balance area for further necessary action.

PP mentioned that the total mine lease area is 192.95 ha, which is a forest land. PP further mentioned that the Stage I FC was granted for 91 ha area by the Ministry vide letter no 8-31/99-FC date 11.08.2004, however, the final FC was granted for 35.74 ha area by the Ministry vide letter No.8-31/99-FC dated 18.01.2007. Furthermore, PP submitted that all the activities are restricted to 35.74 ha only and

the proposed activity will be in 35.74 ha till PP gets the FC for remaining lease area. The Committee deliberated the same and discussed on the violation of EC with respect to amendment in existing EC to the lease area for which PP has FC. PP replied to the Committee that as mentioned before, the expansion proposal was submitted and considered in the EAC meeting held during April 26-24, 2018 wherein the Committee deferred the proposal and is of the view that State Government of Chhattisgarh may be requested to provide the status of revised mining lease, if any, and NPV for balance area for further necessary action. Furthermore, the PP replied to the present Committee that the NPV for complete lease area (i.e. 192.95 ha, forest land) was submitted vide letter dated 03.05.2019 and mining activity was performed in the year of 2016 only due to the law and order / Naxalite problem in Baster area and other insurgency issues.

PP further submitted the authenticated production details vide letter dated 28.03.2018 for the year of 2015-16 and 2016-17 which was found within the EC capacity. Furthermore, PP submitted that the zero production for the year of 2017-18, 2017-18 and 2019-20 (Upto May 2019) vide letter dated 22.06.2019 due to the Naxalite problem and other law and order issues.

PP submitted the affidavit dated 16.07.2019 as per Ministry's O.M No 3-50/2017 -IA. II(M) dated 30.05.2018 and mentioned that the company will comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. The affidavit also mentioned the environmental clearance will not be operational till such time that the company complies with all statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors as applicable.

PP mentioned that the company name has been changed from M/s Jayaswal Neco Limited to M/s Jayaswal Neco Industries Limited on 05/11/2007. Furthermore, initially, the lease was granted to M/s Jayaswal Neco Limited and executed on 21.06.2005 for 30 years (i.e. 20.06.2035). PP further submitted that the Mineral Resource Department, Government of Chhattisgarh vide letter dated 19.05.2015 communicated to all District Collector that the changed provision of MMDR 1956 for extension of lease period to end on the 50th year from the first date of execution. Subsequently, the District Collector vide letter dated 27.06.2016 communicated the decision and invited for execution of the amendment in lease agreement for a period

of 50 years. Followed by, the amendment agreement for the period of 21.06.2035 to 20.06.2055 was executed in the name of M/s Jayaswal Neco Industries Limited.

PP submitted that the proposed production will be carried out in the 35.74 ha area only. Out of 35.74 ha, 27.65 ha is for mining and other purposes and 8.09 ha is for approach road & infrastructures, respectively. The mining will be carried out by mechanized opencast method which involves drilling, blasting, crushing and screening, washing, loading, and transportation. PP submitted that daily 54 holes will be drilled for blasting, the requirement of explosives is 1051 kg/day (1946 kg x 54) and the NONEL (non electric delay detonators) shall be used for blasting. PP further submitted that the total water requirement will be 330 KL per day ((150 for mines and 180 for Beneficiation plant) which will be sourced from nearby river/nalla/villages.

PP submitted that there is no litigation against this mine lease area and/or project. The total cost of the project for enhancement of the production capacity will be Rs. 62.72 Crores. PP further submitted that 221 people (161 people for Mine operation & 60 people for Beneficiation plant) will get employment in the mines.

Based on the presentation made by PP and the discussion held, the following observation was made by the Committee:

- (i) The Ministry granted EC to M/s Jayaswal Neco Limited for iron ore mining with production capacity of 50000 tonnes per annum (0.05 MTPA) vide Letter No.J-11015/152/2005-IA.II(M) dated 05.02.2007. The para 3 of EC letter mentioned that the proposal was received prior to EIA Notification of 14th September, 2006 and was considered for grant of environmental clearance as per procedure in EIA Notification, 1994 in terms of provisions of Para 12 of EIA Notification, 2006 dated 14.09.2006 read with Para 2.0 (2.1(2.1.1) of Circular dated 13.10.2006. Furthermore, the para 4 of EC letter mentioned that the Ministry of Environment and Forests hereby accords environmental clearance for the above project under the provisions of EIA Notification dated 14th September, 2006.
- (ii) The existing EC dated 05.02.2007 was granted to M/s Jayaswal Neco Limited. Furthermore, on 05.11.2007 the company name has changed from M/s Jayaswal Neco Limited to M/s Jayaswal Neco Industries Limited. The lease has been executed in the name of M/s Jayaswal Neco Industries Limited. However,

the PP has not transferred the earlier EC. Thus, the Committee is of the view that the PP has to transfer the existing EC.

- (iii) PP submitted all the activities are running in the 35.74 ha only and it will be in 35.74 ha for future also until the PP gets the FC for remaining lease area.

In view of above, the Committee **recommends for prescribing the standard TOR** along with **additional ToR** and **subjected to confirm** and **perform** the following:

- a. Compliance to the decision on validity of existing EC on ground of para 12 of EIA notification, 2006. Input from IA-Policy decision may be taken in this regard.
- b. Transfer the existing EC as per provision of Para 11 of EIA Notification 2006 from M/s Jayaswal Neco Limited to M/s Jayaswal Neco Industries Limited. Accordingly, application provision of Forest clearance in this regard may also be obtained by the PP, as applicable.
- c. Total excavation details including OB/IB/SB and other waste materials generation shall be submitted in the EIA/EMP report.
- d. The EIA/EMP report shall bring out the scheme in case the FC is not obtained for remaining area.

Committee advised Ministry to bring together the information of earlier EC granted vide file no. J-11015/152/2005-IA-II(M) and J-11015/62/2019-IA-II(M) so that the continuity and traceability is available for comprehensive appraisal of the proposal.

Additional TOR:

- (i). Provide in the EIA Report details of all the statutory clearances, permissions, No objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after grant of EC.
- (ii). Submit the revenue plan for mining lease, revenue plan should be superimposed on the satellite imaginary clearly demarcate the Govt. land, private land, agricultural land etc.

- (iii). Submit the real-time aerial footage & video of the mining lease area and of the transportation route.
- (iv). Submit the detailed plan in tabular format (year-wise for life of mine) for afforestation and green belt development in and around the mining lease. The PP should submit the number of saplings to be planted, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. In addition to this PP should show on a surface plan (5 year interval for life of mine) of suitable scale the area to be covered under afforestation & green belt clearly mentioning the latitude and longitude of the area to be covered during each 5 years. The capital and recurring expenditure to be incurred needs to be submitted.
- (v). The PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged for implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.
- (vi). The PP should submit the year-wise, activity wise and time bound budget earmarked for EMP, occupational health surveillance & Corporate Environmental Responsibility needs to be submitted. The capital and recurring expenditure to be incurred needs to be submitted.
- (vii). PP should submit the measures/technology to be adopted for prevention of illegal mining and pilferage of mineral.
- (viii). PP should submit the detailed mineralogical and chemical composition of the mineral and percentage of free silica from a NABL/MoEF&CC accredited laboratory.
- (ix). PP should clearly show the transport route of the mineral and protection and mitigative measure to be adopted while transportation of the mineral. The impact from the center line of the road on either side should be clearly brought out supported with the line source modeling and isopleth. Further, frequency of testing of Poly Achromatic Hydrocarbon needs to be submitted along with budget. Based on the above study the compensation to be paid in

the event of damage to the crop and land on the either side of the road needs to be mentioned. The PP should provide the source of equations used and complete calculations for computing the emission rate from the various sources.

- (x). PP should clearly bring out that what is the specific diesel consumption and steps to be taken for reduction of the same. Year-wise target for reduction in the specific diesel consumption needs to be submitted.
- (xi). PP should bring out the awareness campaign to be carried out on various environmental issues, practical training facility to be provided to the environmental engineers/diploma holders, mining engineers/diploma holders, geologists, and other trades related to mining operations. Target for the same needs to be submitted.
- (xii). The budget to be earmarked for the various activities shall be decided after perusal of the Standard EC Conditions published by the Ministry.
- (xiii). The PP should ensure that only NABET accredited consultant shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that accreditation of consultant shall be valid during the collection of baseline data, preparation of EIA/EMP report and during the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and PP and consultant are fully accountable for the same.
- (xiv). The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.
- (xv). All the certificates viz. Involvement of Forest land, distance from protected area, list of flora & fauna should be duly authenticated by Chief Wildlife Warden & Forest Department. The Certificate should bear the name, designation, official seal of the person signing the certificate and letter number.

- (xvi). The PP should clearly bring out the protective and mitigative measures to be taken for the nearby habitation and religious structures in line with the Ministry's O.M. No. Z-11013/57/2014- IA. II (M) dated 29.10.2014.

2.6. Coromandel Limestone Mine (Captive Limestone Mine), Chilamkur Unit of the India Cements Limited – Increase of Limestone Production from 2.0 to 5.5 Million Tonnes Per Annum (Total Excavation at 5.8 MTPA Limestone (Limestone: 5.5 MTPA + Top Soil: 0.35 MTPA) located at Chilamkur Village in Yerraguntla Mandal, Y.S.R. Kadapa District of Andhra Pradesh.

[File No J-11015/513/2007-IA II (I); Proposal No. IA/AP/MIN/112409/2019;]-ToR Regarding

The Proposal of M/s India Cements Ltd for increase in Production Capacity from 2.0 to 5.5 MTPA (Total Excavation at 5.5 MTPA Limestone production is 5.85 MTPA (Limestone: 5.5 MTPA + Top Soil: 0.35 MTPA) of Coromandel Limestone Mines (ML 602.137 Ha) located at Chilamkur Village in Yerraguntla Mandal, Y.S.R. Kadapa District of Andhra Pradesh. The mining lease falls between Latitude 14° 38' 51.0"N - 14° 40' 31.1"N, and longitude 78° 27' 55.4"E- 78° 29' 40.4"E, with an average altitude of 175 m above msl. The area is covered in the Survey of India Topo-sheet nos. 57 J/6. Mine area is located in seismic zone – III/ which is seismically least active zone.

2. The PP applied online for grant of ToR under Category A: 1(a) on 28.09.2018 and submitted Form-1 and Pre-Feasibility Report. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category "A", Project or Activity 1(a) as the mining lease area is more than 100 Ha. The PP did not propose any beneficiation activity thus application under category 2(b) is not applicable in this case. The proposal was accepted by Member Secretary on 9.10.2018 and the proposal was placed in EAC meeting held on 24.10.2018 wherein the Committee returned the proposal in present form due to shortcoming in the document submitted by the PP. Committee also asked the Ministry to ask the State Government to initiate action under section 19 of EPA, 1986, as the PP has carried out mining activity for the period 01.02.2009 to 14.05.2017 without obtaining NBWL Clearance. The PP now applied afresh vide proposal No IA/AP/MIN/112409/2019 on 26.07.2019 and submitted the Form-1 & PFR.

3. The PP submitted that the mining lease was initially granted vide G.O.Ms.no. 326 dated 22.05.1981, to Coromandel Fertilizers Ltd for a period of 20 years and was later transferred to The India Cements Ltd (ICL) vide G.O.Ms.no.482 dated 06.12.1990. Vide G.O.Ms.no. 539 dated 29.10.2001; this ML was 'renewed' for another period of 20 years, valid up to 17.11.2021 and now as per new MMDR Act 2015, the lease period is extended up to 2031 vide G.O. Ms. No. 61 dated 26.04.2018.
4. The PP submitted that the mine was opened on 1.10.1982 and first Environmental clearance was obtained vide letter No J-11015/47/2003/IA II (M) dated 7.07.2004 for 1.422 to 1.8 MTPA and then vide letter No. J-11015/513/2007-IA II (I) (Integrated Clearance) dated 30.11.2007 for 1.8 to 2.0 MTPA. The PP also submitted Annexure-III for examining the proposal in light of Common Cause Judgment dated 02.08.2017 and S.O. 804(E) dated 14.03.2017.

The Committee observed that as per Annexure-III, there is no violation of excess production (S.O. 804(E) dated 14.03.2017).

5. The PP submitted that mining is being carried out through opencast mechanized mining method with deep hole drilling & blasting. Limestone deposit in the mine is concealed under an average 3.0 m thick soil layer. This soil layer is excavated by deploying of Shovel Dumper combination and either dumped in the same in excavated pits for reclamation or over non-mineralized area. Development bench is sufficiently advanced with respect to limestone benches to prevent soil/clay contamination with production benches, especially during and after rainy season. Limestone is excavated by deep-hole drilling & blasting and the blasted limestone is loaded by Hydraulic excavators into dumper/trucks/tippers. Limestone material is presently transported to a 500 TPH capacity crusher located within the plant premises at a distance of about 3.0 kms from the mines. Bench width of at least 20 m is maintained between two successive advancing production faces. In the expansion phase, two crushers of 1000 TPH will be installed within the ML Area. One crusher will be located in South Block and other will be located in the North Block. A total quantity of 10.3 million cum of top soil is estimated to be generated from the mining activity for the life of the mine which will be used for afforestation. The mineral reserves and resources are estimated as 276.06 million tonnes and life of the mine @5.5MTPA production will be another 50 years.

6. The PP submitted that the total mining lease area of 602.137 Ha is private own land of ICL. Land use at the end of lease period will be 193.76 Ha under excavation pit, 67.52 Ha under Soil storage (Temporary), 0.16 Ha under Infrastructure, 8.0 Ha under Roads (Mines), 12.10 Ha under barrier Zone (7.50 mts inside with respect to MLB), 68.28 Ha under Safety Zone for Railway Line (105 mts buffer either side), 16.05 under Safety Zone for Roads, 54.53 Ha under Non Mineral Zone and 181.737 Ha Undisturbed area. The PP also submitted that at the end of Mine Lease period (lease period up to 17.11.2031), about 193.76 Ha will be mined-out area. Part of the mined out area will be backfilled and some part will be developed as Water Reservoir. An area of 146.25 Ha will be developed under greenbelt for the lease period and 182.95 Ha for the life of mine which includes 7.5 m safety barrier zone and non - mineral bearing zone, safety zone for different features and backfilled parts of the mine.
7. The PP submitted that no overburden will be generated during mining operation. Total quantity of 10.30 million cum of top soil is estimated to be generated at the end of mine life, (3.31 million cum of top soil is estimated to be generated at the end of Lease Period) from the mining activity which will be used for afforestation and part backfilling mined out pit. The waste oil/Used Lead Acid Batteries are considered as Hazardous waste. The same are stored in the designated storage area in plant and is disposed as per rules. Municipal waste gets generated in the colony and is disposed from there.
8. PP submitted that an area of 146.25 Ha will be developed under greenbelt for the lease period and 182.95 Ha for the life of mine which includes 7.5 m safety barrier zone and non - mineral bearing zone, safety zone for different features and backfilled parts of the mine.
9. The PP submitted that the total requirement of water at enhanced production of 5.5 MTPA is 180 m³/day. The water requirement is met from the mine pit and water will not be sourced from underground and surface water bodies. The mining operation will not intersect ground water table.
10. The PP submitted that the proposal does not involve approval/clearance under the Forest (Conservation) Act, 1980, wildlife (Protection) Act, 1972 and C.R.Z notification, 2011. PP submitted that the Rajiv Gandhi National Park is located at a distance of 9.03 KM from the mining lease area.

The Committee observed that the Eco-Sensitive Zone has already been notified around the Rajiv Gandhi National Park vide S.O. 1563(E) dated 15.05.2017. As per this notification the extent of ESZ is 500 meters around the protected area. Thus, the project is not falling in the ESZ. The Committee also observed that as per Ministry's O.M No F.No. 22-43/2018-IA.III dated 8th August, 2019 *"Proposals involving developmental activity/project **located outside the stipulated boundary limit of notified ESZ and located within 10 km of National Park/Wildlife Sanctuary, prior clearance from Standing Committee of the National Board for Wildlife (SCNBWL) may not be applicable.** However, such proposals from environmental angle including impact of developmental activity/project on the wildlife habitat, if any, would be examined by the sector specific Expert Appraisal Committee and appropriate conservation measures in the form of recommendations shall be made. These recommendations shall be explicitly mentioned in the environmental clearance letter and shall be ensured by the member secretary concerned."*

In the instant case, mining lease is outside the ESZ but within 10 KM of the protected area thus additional ToR conditions will be considered for protection of protected area and wildlife habitat. The Committee also observed that action has already been initiated on the PP for not obtaining clearance from Standing Committee of NBWL during the period 01.02.2009 to 14.05.2017. PP reported that creditable action has already been initiated by State Government and case no 250/2019 is pending in the 1st class Magistrate Court, Kamalapuram, YSR Kadapa District. A.P.

11. PP submitted that the present manpower is 73 persons to carry out the mining operations. Additionally, 20 persons will be employed for expansion. Existing fleet of mining machinery will be upgraded for higher production capability. The Capital Cost of expansion is estimated at Rs. 50 crores.
12. Based on the discussion held and documents submitted, the Committee **recommend** the proposal of M/s India Cements Ltd for increase in Production Capacity from 2.0 to 5.5 MTPA with total excavation 5.85 MTPA (Limestone: 5.5 MTPA + Top Soil: 0.35 MTPA) of Coromandal Limestone Mines (ML 602.137 Ha) located at Chilamkur Village in Yerraguntla Mandal, Y.S.R. Kadapa District of Andhra Pradesh **for grant of Standard Term of Reference** as per Annexure-1

along with following **additional ToR** for this project for preparation of EIA/EMP Report:

A. Additional ToR:

- i. PP should submit an undertaking by way of affidavit as required as per Ministry's O.M No 3-50/2017 -IA. II(M) dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- ii. PP should provide in the EIA Report details of all the statutory clearances, permissions, No objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after grant of EC.
- iii. PP should submit the revenue plan for mining lease, revenue plan should be superimposed on the satellite imaginary clearly demarcate the Govt. land, private land, agricultural land etc.
- iv. PP should submit the real-time aerial footage & video of the mining lease area and of the transportation route.
- v. PP should submit the detailed plan in tabular format (year-wise for life of mine) for afforestation and green belt development in and around the mining lease. The PP should submit the number of saplings to be planted, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. In addition to this PP should show on a surface plan (5-year interval for life of mine) of suitable scale the area to be covered under afforestation & green belt clearly mentioning the latitude and longitude of the area to be covered during each 5 years. The capital and recurring expenditure to be incurred needs to be submitted. Presently in India there are many agencies which are developing forest in short interval of time. Thus, for the plantation activities details of the experts/agencies to be engaged needs to be provided with budgetary provisions.

- vi. PP should submit the quantity of surface or ground water to be used for this project. The complete water balance cycle need to be submitted. In addition to this PP should submit a detailed plan for rain water harvesting measures to be taken. PP should submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted.
- vii. PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged for implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.
- viii. PP should submit the year-wise, activity wise and time bound budget earmarked for EMP, occupational health surveillance & Corporate Environmental Responsibility. The capital and recurring expenditure to be incurred needs to be submitted.
- ix. PP should submit the measures/technology to be adopted for prevention of illegal mining and pilferage of mineral. PP should submit the detailed mineralogical and chemical composition of the mineral and percentage of free silica from a NABL/MoEF&CC accredited laboratory.
- x. PP should clearly show the transport route of the mineral and protection and mitigative measure to be adopted while transportation of the mineral. The impact from the center line of the road on either side should be clearly brought out supported with the line source modelling and isopleth. Further, frequency of testing of Poly Achromatic Hydrocarbon needs to be submitted along with budget. Based on the above study the compensation to be paid in the event of damage to the crop and land on the either side of the road needs to be mentioned. The PP should provide the source of equations used and complete calculations for computing the emission rate from the various sources.

- xi. PP should clearly bring out that what is the specific diesel consumption and steps to be taken for reduction of the same. Year-wise target for reduction in the specific diesel consumption needs to be submitted.
- xii. PP should bring out the awareness campaign to be carried out on various environmental issues, practical training facility to be provided to the environmental engineer/diploma holders, mining engineer/diploma holders, geologists, and other trades related to mining operations. Target for the same needs to be submitted.
- xiii. The budget to be earmarked for the various activities shall be decided after perusal of the Standard EC Conditions published by the Ministry. After perusal of Standard EC conditions if agreed PP should also submit an undertaking by the way of affidavit for Compliance of Standard EC conditions already prescribed by the Ministry vide O.M. No and Specific condition if prescribed by the EAC/MoEF&CC.
- xiv. The PP should ensure that only NABET accredited consultant shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that accreditation of consultant shall be valid during the collection of baseline data, preparation of EIA/EMP report and during the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and PP and consultant are fully accountable for the same.
- xv. The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.
- xvi. All the certificates viz. Involvement of Forest land, distance from protected area, list of flora & fauna should be duly authenticated by Chief Wildlife Warden & Forest Department. The Certificate should bear the name, designation, official seal of the person signing the certificate and letter number. \The EIA/EMP report should cover the cumulative

impacts of own cement plant, other cement plant and mines in the study area.

- xvii. Protection for the Pedda Vanka which is located at a distance of 0.1 km in SSE direction needs to be provided. As the protected area is within 10 KM of the mine lease area EIA/EMP report should clearly bring out the impact of proposed expansion on protected area and measures to be taken for the protection of protected area and wildlife habitat.

2.7. Vyasanakere Iron Ore Mine of M/s. MSPL Ltd., with production capacity of 2.5 MTPA over an area of 354.71 ha (ML No: 2416) located at Village Vyasanakere, Taluka-Hosapete, Dist-Ballari, Karnataka - Consideration of TOR

(File No: J-11015/308/2005-IA.II (M); Proposal No: IA/KA/MIN/104298/2019; Consultant: Srushti Seva Private Limited)

The proposal of M/s. MSPL Ltd. Is for Vyasanakere Iron Ore Mine with production capacity of 2.5 MTPA iron ore in the mine lease area of 354.71 ha (ML No: 2416) located at Village Vyasanakere, Taluka-Hosapete, Dist-Ballari, Karnataka.

Project proponent (PP) submitted that the Ministry has granted to EC to M/s. MSPL Ltd. vide letter no. J-11015/308/2005-IA.II (M) dated 07 April 2006 for enhancement of production of iron ore from 1.98 MTPA to 2.5 MTPA in the mine lease area of 347.22 ha under the provision of EIA Notification, 1994. PP submitted that this is the proposal for regularization of EC under EIA notification 2006 within the provision of Ministry's Notification dated 06.04.2018.

The Committee discussed the issues and informed PP that window for submission of application under Ministry's Notification dated 06.04.2018 is closed, so, the present application may not consider under the window of above said notification.

In response, the PP made representation that the online application was made on 04.06.2018 for regularization of EC under amendment in EC (Proposal No: IA/KA/MIN/11345/2005). Subsequently, the Ministry has raised an EDS and asked the PP to apply for TOR not for amendment in EC. So, the PP withdrawn the application No. IA/KA/MIN/11345/2005 and made new online application for TOR on 11.07.2018 (Proposal No: IA/KA/MIN/75775/2018). Subsequently, the EDS have risen by the

Ministry and the PP submitted all documents on 05.02.2019 for the proposal no. IA/KA/MIN/75775/2018. PP further submitted that this proposal has been deleted from the PARIVESH Portal, due to this PP made this instant proposal (Proposal No: IA/KA/MIN/104298/2019) for TOR. So, the PP claimed that application was made well within the window of Ministry's Notification dated 06.04.2018 for regularization of EC.

The Committee deliberated on PP's claims and **deferred the proposal** and **referred the matter to Ministry** for verification on PP's claims for further consideration of proposal.

2.8. Bailadila Iron Ore Mine, Deposit-11 Mining Lease of by M/s NMDC Limited with production capacity of 11.30 Million tons per annum ROM Iron Ore, located at Village Kirandul, Tehsil Dantewada, South Bastar Dantewada District of Chhattisgarh (874.924 ha)-Reconsideration of TOR

(File No: J-11015/70/2018-IA-II(M); Proposal No: IA/CG/MIN/75153/2018)

The proposal of M/s NMDC Limited is for Bailadila Iron Ore Deposit-11 (Deposit 11A, 11B and 11C) mining Lease with production capacity of 11.30 million tonnes per annum (ROM) of Iron ore in the mine lease area of 874.924 ha. The mine lease area is located at Village Kirandul, Tehsil Dantewada, South Bastar Dantewada District, Chhattisgarh. The Deposit 11 M.L is located between Latitude 18°37'34.6066" to 18° 41'26.1792" N and Longitude 81° 13' 07.0266" to 81°15'18.0396" E and falls in Survey of India Toposheet E44J2 & J6 (New).

Project proponent (PP) submitted that the total mine lease area is 874.924 ha. The entire mine lease area is forest land and it is in the forest compartment numbers 1842, 1844, 1845, 1846, 1849 and 1852 to 1854 of Bailadila Reserve Forest. The topography of the lease area is hilly terrain. PP reported that the forest clearance for diversion of 874.924 ha forest land is also obtained from MoEFCC vide letter no: 9-98/97-FC dated 22/12/1999. PP further submitted that no additional land acquisition is involved.

PP reported that initially the mining lease of Bailadila Deposit-11 was granted to M/s NMDC Limited on 12.9.1967 for a period of 30 years which was valid upto 11.9.1997. The 1st renewal of mining lease was obtained and executed on 17/10/2005 for a period of 20 years from 12.09.1997 to 11.09.2017. PP further submitted that the Mineral Resource Department, Government of Chhattisgarh vide letter dated

19.05.2015 extended the validity of mining lease from 12.09.1997 to 31.03.2020 as per MMDR Amendment Act, 2015. PP further submitted that as per rule 3(3) of Mineral (Mining by Government Company) Rules 2015, the lease period was further renewed for period of 20 years from 11.09.2017 to 10.09.2037 by Mineral Resource Department, Government of Chhattisgarh, Raipur vide letter no: 4-55/2017/XII dated 03.5.2018. So, the lease is valid up to 10.9.2037 and the same has been executed on 14.12.18.

The proposal was considered in the EAC meeting held during July 19-20, 2018. PP submitted that Ministry has accorded environmental clearances for Bailadila Deposit-11A, 11B and 11C under EIA 1994/2006 notification. The EC for Deposit-11A was obtained vide letter no: J-11015/83/2011-IA.II(M), dated 31.10.2011 under EIA Notification 2006 for 2.8 MTPA ROM Iron ore capacity in 233.509 ha area with the EC validity up to 09.09.2017 and was followed by an amendment vide letter no: J-11015/83/2011-IA.II(M), dated 07.02.2013.

The EC for Bailadila Deposit-11B was obtained vide letter no: J-11015/416/2005-IA.II (M) dated 11/09/2006 under EIA Notification 1994 for 7.0 MTPA ROM iron ore capacity in 535.003 ha area.

The EC for Deposit-11C (1.5 MTPA) was obtained as part of Integrated EC of Bailadila Deposit-14/11C Project (12 MTPA), vide letter no: J-11015/483/2007-IA.II(M) dated 11.9.2007 under EIA notification 2006. Thus, the total EC capacity available for Bailadila Deposit-11 ML for Deposit-11A, 11B and 11C mines is 11.30 MTPA of ROM for Iron ore.

PP further submitted that EC for Deposit-11 B was granted under EIA, Notification, 1994 which is part of Deposit-11 ML which comprises other namely Deposit-11A and 11B. So in order to regularize EC of Deposit-11B, within the provision of Ministry's Notification dated 06.04.2018, PP submitted TOR application for complete Deposit-11 ML [Deposit-11A (233.509ha), 11B (535.003 ha) and 11C (106.412 ha) = 874.924 ha].

The Committee deliberated the PP submission and past production details of the existing EC. The Committee observed from the past production details provided by the Mining Officer, State Government that the PP has enhanced the production capacity in 2008-09 (1.614 MTPA), 2014-15 (1.619 MTPA) & 2015-16 (1.682 MTPA)

with respect to Deposit-11 C after grant of EC. Hence, the Committee deferred the proposal and mentioned that it is a violation case w.r.t. Deposit 11C.

The Committee decision was communicated to PP vide letter dated 08 September 2018. PP submitted the response vide letter no: NMDC/EC/DEP-11/KDL/2018/1456 dated 03.10.2018 with past production details. The proposal was again considered in the EAC meeting held during April 23-24, 2019. PP presented that the EC for Deposit-11C was obtained as part of Integrated E.C of Bailadila Deposit-14/11C Project, vide letter no: J-11015/483/2007-IA.II(M) dated 11.9.2007 under EIA notification 2006. PP further submitted that the EC letter dated 11.9.2007 mentioned that the proposal for expansion of open cast mechanized iron ore mining at Deposit-14 for 5 MTPA and Deposit-11 C for 7 MTPA. PP mentioned that in earlier EAC meeting, we presented that the EC capacity of Deposit-11 C as 1.5 MTPA. Therefore, the interpretation by EAC in last meeting based on EC capacity for Deposit-11 C as 1.5 MTPA, accordingly observation as violation of excess production in the year of 2008-09 (1.614 MTPA), 2014-15 (1.619 MTPA) & 2015-16 (1.682 MTPA) needs to be re-examined as the granted production capacity for Deposit-11 C was for 7 MTPA (as per the EC letter dated 11.09.2007). Therefore, PP claimed that the total capacity of the Deposit-11C is 7 MTPA, so, the past production details is well within the EC capacity of Deposit-11 C and there is no violation on the production.

The Committee deliberated the response and the past production details. The Committee observed that the past production details are different than the production details which was submitted during earlier EAC meeting. Based on the presentation made by PP and the discussions held, the Committee deferred the project proposal and suggested the Ministry to ascertain again on the violation; and also sought certain requisite information/clarification from PP for further consideration.

The Ministry communicated the Committee decision to PP vide letter dated 16 May 2019. PP submitted the response vide letter no. NMDC/DEP-11/EC/2019/1572 dated 28.06.2019. Accordingly, the proposal was considered in this EAC meeting and PP presented the response.

PP submitted the affidavit dated 16.04.2019 as per Ministry's O.M No 3-50/2017 -IA. II(M) dated 30.05.2018 and mentioned that the company will comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common

Cause versus Union of India and Ors. The Committee deliberated the PP response and observed the following:

- (i). The EC for Deposit-11 C is granted as integrated EC with Deposit 14 vide letter no. J-11015/483/2007-IA.II(M) dated 11.9.2007 for Deposit 14 and 11C in the mine lease area of 935.522 ha {Deposit-11(106.412 ha) + Deposit-14 NMZ (506.742 ha) + Depsoit-14 (322.368 ha)} with the production of iron ore from Deposit- 14 is 5 MTPA and Deposit-11C is 7 MTPA (Total : 12 MTPA). Based on the EC document, the Committee reiterated that 7 MTPA from Deposit-11C. The Committee had a discussion on the submitted past production details vide letter no. Khanij/Dantewada/NMDC/Prod/2019 dated 02.06.2019 from Mining Officer, State Government. Especially, the earlier EAC observation on excess production in the year of 2008-09, 2014-15 & 2015-16. PP produced 1.614 MTPA (2008-09), 1.515 MTPA (2014-15) & 1.681 MTPA (2015-16) from Deposit 11 C which is lower than the EC production capacity (7 MTPA). Therefore, as per the EC document and past production details, the Committee mentioned that there is no violation with respect to the production permission granted vide EC dated 11.9.2007.

The Committee observed that the part of Deposit-11 ML (i.e. Deposit-11C) is granted EC with Deposit-14. The Committee is of the view that Ministry may consider grant of TOR for Deposit-11 ML (including 11A, 11B and 11C) with the condition that PP shall undertake requisite amendment in the existing EC letter dated 11.9.2007. This will enable the PP to carryout EIA study for entire deposit of ML-11 (including 11A, 11B and 11C) and simultaneously PP retain the option of continuing the operation of Deposit 11 C under the provision of EC dt. 11.09.2007. PP shall make application for grant of EC for ML – 11 (including 11A, 11B and 11C) based on the ToR. This will enable release of Deposit-11C area from earlier EC.

- (ii). PP submitted that the Deposit-11A obtained EC vide letter no: J-11015/83/2011-IA.II(M), dated 31.10.2011 under EIA Notification 2006 for 2.8 MTPA ROM Iron ore capacity in 233.509 ha area with the validity up to 09.09.2017. PP mentioned that the production has stopped since year 2012-2013 and would like to start the production in Deposit-11 A. The Committee reiterated that the EC is valid for 09.09.2017 only. PP responded that at the time of issue of EC, the validity period of mining lease was up to 09.09.2017, so the EC letter mentioned that EC is valid up to 09.09.2017. PP further mentioned

that as per the Ministry's Notification dated 04.04.2011, "prior environmental clearance is as well required at the stage of renewal of mine lease for which application should be made up to one year prior to date of renewal". Subsequently, the Ministry issued a notification dated 13.03.2013 mentioned that "no fresh environment clearance shall be required for a mining project or activity at the time of renewal of mining lease, which has already obtained environmental clearance under this notification". PP further submitted that Ministry's OM dated 20.03.2015, mentioned that "it is clarified that the project proponent which has a valid and subsisting EC for their mining project either under EIA Notification 1994 or EIA Notification, 2006, will not be required to obtain fresh EC at the time of renewal of the lease. This is subject to the maximum period of validity of the EC being for mining lease for 30 years". So, PP claimed that the EC dated 31.10.2011 under EIA Notification 2006 remain valid EC for Deposit-11A. PP further submitted that, in view of this, the Ministry vide letter no. J-11015/506/2008-IA-II (M) dated 19th February 2014 granted amendment to Bailadila iron ore project Deposit 10/11A for expansion from 5 MTPA to 7 MTPA and 2.0 MTPA pellet plant. The Committee deliberated the same and reiterated that this amendment to specific condition 4 A (i) of the EC letter no. J-11015/506/2008-IA-II (M) dated 13.10.2011 which specifies that "the environmental clearance will be coterminous with the mine lease period". So, the Committee further mentioned that the EC for Deposit-11A may be remain valid EC as per the above mentioned Ministry's Notification dated 13.03.2013 and the OM dated 20.03.2015. However, the request pertains to administrative interpretation of OMs and Ministry shall take decision in this regard. This is not part of agenda item, so PP may take this issue with Ministry separately, and pursue as per decision of Ministry in this regard.

- (iii). PP submitted the past production details in annexure III format with the copy of CTO. The information suggests that there is excess production with regard to CTO capacity for the year of 1993-94 and 1994-1995. Ministry may take appropriate action in this regard as per the applicable provision of the OMs and E(P) Act, 1986
- (iv). PP submitted that the total excavation of project proposal is 14 MTPA {11.30 MTPA ROM production (11A-2.8 MTPA+11B-7 MTPA+11C-1.5 MTPA = 11.30 MTPA) and 2.70 MTPA waste excavation}. The Committee informed PP that EIA study should be carried for total excavation quantity of ML 11.

In view of the above discussions, Committee **recommends** ministry to consider grant of TOR for total excavation from combined ML- 11 (i.e 11A, 11B and 11C) i.e. 14

MTPA {11.30 MTPA ROM production (11A-2.8 MTPA+11B-7 MTPA+11C-1.5 MTPA = 11.30 MTPA) and 2.70 MTPA waste excavation} with standard TOR and specific conditions as given below:

1. PP shall continue with mining in ML-11C as per the provision of EC dt. 11.09.2007 and PP shall get the existing EC amended for exclusion of 11C deposit before operationalisation of the EC granted for ML 11 under this TOR.
2. PP shall make necessary amendment in integrated EC dt 11.09.2007 for exclusion of deposit 11C before grant of EC for combined ML- 11 (ie 11A, 11B and 11C)
3. PP shall include total excavation proposed from combined ML- 11 (ie 11A, 11B and 11C) i.e. 14 MTPA {11.30 MTPA ROM production (11A-2.8 MTPA+11B-7 MTPA+11C-1.5 MTPA = 11.30 MTPA) and 2.70 MTPA waste excavation} in the EIA study.
4. PP should submit a detailed plan for rain water harvesting with year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted.
5. PP needs to provide in the EIA Report details of all the statutory clearances, permissions, No objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after grant of EC.
6. PP needs to submit the revenue plan for mining lease, revenue plan should be superimposed on the satellite imagery clearly demarcate the Govt. land, private land, agricultural land etc.
7. PP needs to submit the real-time aerial footage & video of the mining lease area and of the transportation route.
8. PP needs to submit the detailed plan in tabular format (year-wise for life of mine) for afforestation and green belt development in and around the mining lease. The PP should submit the number of saplings to be planted, area to be covered under afforestation & green belt, location of plantation, target for

survival rate and budget earmarked for the afforestation & green belt development. In addition to this PP should show on a surface plan (5 year interval for life of mine) of suitable scale the area to be covered under afforestation & green belt clearly mentioning the latitude and longitude of the area to be covered during each 5 years. The capital and recurring expenditure to be incurred needs to be submitted.

9. The PP shall clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged for implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted
10. The PP shall submit the year-wise, activity wise and time bound budget earmarked for EMP, occupational health surveillance & Corporate Environmental Responsibility needs to be submitted. The capital and recurring expenditure to be incurred needs to be submitted.
11. PP shall submit the measures/technology to be adopted for prevention of illegal mining and pilferage of mineral.
12. PP shall clearly bring out the transport route of mineral, protection and mitigative measure to be adopted while transportation of the mineral. The impact from the center line of the road on either side should be clearly brought out supported with the line source modeling and isopleth. Further, frequency of testing of Poly Aromatic Hydrocarbon needs to be submitted along with budget. Based on the above study the compensation to be paid in the event of damage to the crop and land on the either side of the road needs to be mentioned. The PP should provide the source of equations used and complete calculations for computing the emission rate from the various sources.
13. PP shall clearly bring out the specific diesel consumption and steps to be taken for reduction of the same. Year-wise target for reduction in the specific diesel consumption needs to be submitted.
14. PP shall bring out the awareness campaign to be carried out on various environmental issues, practical training facility to be provided to the

environmental engineers/diploma holders, mining engineers/diploma holders, geologists, and other trades related to mining operations. Target for the same needs to be submitted.

15. The budget to be earmarked for the various activities shall be decided after perusal of the Standard EC Conditions published by the Ministry.
16. The PP shall ensure that only NABET accredited consultant shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that accreditation of consultant shall be valid during the collection of baseline data, preparation of EIA/EMP report and during the appraisal process. The PP and consultant PP should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and PP and consultant are fully accountable for the same.
17. PP shall submit the detailed Hydro geological study to assess the impact on ground water and its percolation effects on adjacent area/ River/Streams.
18. PP needs to submit a detailed cost benefit analysis (loss of agriculture land Vs benefits from the mineral production) for the life period of mine including the direct financial implication to the affected families.
19. Revised R&R plan for the affected families in the mine lease area.
20. Detailed conceptual plan along with the Map for proposed mining with reclamation plan and also measures for protection the river, nalla in and habitats from the vicinity of the mine lease area.
21. PP need to submit proposal with budgetary provision for construction of diversion road maintaining proper gradient and providing tar on the surface before start of the mining operations.
22. PP shall submit all undertaking prescribed by Ministry through OM from time to time along with EIA/EMP report including production details as per Annexure III

2.9. GOP-1 Limestone Mining Project of M/s Shree Digvijay cement Co. Ltd for production of 0.22 MTPA in the mine lease area of 218.53 ha located at villages Gop/Zinavari, Taluk Jamjodhpur, District Jamnagar, Gujarat. Consideration of Proposal under EIA notification 2006 and Ministry's Notification vide S.O. (E) 1530, dated 06.04.2018 - Re-Consideration of TOR.

File No: IA-J-11015/157/2018-IA-II(M); Proposal No: IA/GJ/MIN/81502/2018; Consultant: Grass Roots Research and Creation India (P) Ltd)

The proposal of M/s Shree Digvijay Cement Co. Ltd is for Gop-1 Limestone Mine with production of 0.22 MTPA of limestone in the mine lease area of 218.53 ha. The mine lease area is located at Village- Gop & Zinavari, Taluk - Jamjodhpur, District- Jamnagar, and Gujarat. The mine lease area falls between the Latitude: 22° 03'14.7"N to 22° 01'54.4"N and the Longitude: 69°54'54.3"E to 69°55'56.8"E.

PP submitted that the Ministry has granted EC to Gop (composite) Captive Limestone mine of M/s. Shree Digvijay Cement Co. Ltd vide letter no. J-11015/47/2005-IA.II (M) dated 7th October 2005 for production limestone at an annual targeted capacity of 25000 tonnes per annum TPA (0.25 MTPA) in the mine lease area of 277.215 ha under the provisions of EIA Notification, 1994.

PP submitted the proposal for regularization of this EC under the Ministry's notification dated 06.04.2018. PP submitted the proposal for 218.53 ha (Gop 1 Mine) with the limestone production of 0.22 MTPA. The proposal was considered in the 38th EAC meeting held during November 15-16, 2018. However, the PP did not attend the meeting; thus, the Committee deferred the project proposal.

The proposal considered again in this EAC meeting and PP presented the project with their requirements. PP submitted that the earlier EC was granted for two leases together (218.53 ha +58.68 ha = 277.215 ha) with the production of 0.25 MTPA under EIA Notification, 1994. However, the current proposal is for Gop-1 limestone mine with production of 0.22 MTPA in the mine lease area of 218.53 ha. The remaining area 58.68 ha is of Gop-2 Limestone mine and the proposal for consideration of environmental clearance is submitted to SEIAA, Gujarat as per the Notification dated 14.08.2018 which is under consideration with SEIAA.

PP submitted that the total mine lease area of 218.53 ha is government waste land. PP further submitted that the original lease was granted on 01.06.1958 for the period of 20 years, valid up to 31.05.1978. Subsequently, the Government of Gujarat renewed the lease vide order no. MCR-1577 (D-56)-6858 CHH dated 05.10.1978 for the periods of 20 years from 01.06.1978 to 31.05.1998 and executed on 31.03.1979. PP submitted that the second renewal of lease was deemed from 01.06.1998 to 31.05.2018 and submitted the application for second renewal on 25.04.1997 in Form-D and the application was pending with the State Government. PP further submitted that the lease is being operated up to 11.01.2015 under deemed renewal as per Rule 24A of the Mineral Concession Rules, 1960. Since 12.01.2015, the lease period has been extended up to 31.03.2030 as per section 8A (5) of MMDR Amendment Act, 2015, regarding this letter has been issued by Industries and Mines Department, Government of Gujarat vide letter No. MCR-1577-(D-56)-6858-Chh1 dated 15.06.2017.

The Committee had a detailed deliberation and mentioned that **PP has not submitted any valid lease renewal document from the State Government for the period of 01.06.1998 to 31.05.2018 and PP is carrying out the mining during this period. Furthermore, PP submitted the lease is being operated up to 11.01.2015 under deemed renewal as per Rule 24A of the Mineral Concession Rules. So, the Committee reiterated that second deemed renewal is illegal in the light of the Hon'ble Supreme Court Judgement dated 21.04.2014 in the Writ Petition (Civil) No. 435 of 2012 in the matter of Goa Foundation Vs Union of India & Ors.** Furthermore, the Committee has deliberated on the Government of Gujarat letter dated 15.06.2017 for extension of lease up to 31.03.2030. The order letter mentioned that "the State Government has sanctioned mining lease for Limestone to Shree Digvijay Cement Co. Ltd for 20 years vide this Department order of even number dated 05.10.1978. As per the section 8 (A) (6) of the MMDR Amendment Act, 2015, the Commissioner, Geology and Mining has made a proposal dated 16.11.2016 to extend the lease period of Shree Digvijay Cement Co. Ltd at Gop-1, Taluka Jamjodhpur, Dist-Jamnagar, Survey No. 50, Area 218.53.00 ha. The matter was under consideration of the State Government and it has decided to extend the lease period up to 31.03.2030."

The Committee reiterated that this letter did not mention about the application submitted for second renewal of the lease period and also the validity period of 01.06.1998 to 31.05.2018. Therefore, this instant case may fall under violation for carrying out mining activity without valid lease document.

However, the clarification from the concerned department is necessary, before a conclusion is made.

PP presented the past production details and mentioned that the production figures are within the EC capacity. PP further submitted the affidavit dated 24.07.2019 as per Ministry's O.M No 3-50/2017 -IA. II(M) dated 30.05.2018 and mentioned that the company will comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

The Committee deliberated the PP submission. PP submitted authenticated past production details for Gop-1 limestone mine only from the Office of the Collector (Mining Department), Geology and Mining Department, Government of Gujarat vide letter no. GJ/AKAD-ML-JN/19/1517 dated 03.07.2019. In annexure III format, PP gave production details for Gop-2; which are not authenticated by the State Government and also PP has not submitted all CTO copy since inception for both Gop-1 and Gop-2 Limestone mine.

Furthermore, the EC was granted for composite leases (Gop-1 and Gop-2, 277.215 ha). Therefore, **the Committee reiterated that the violation on existing EC capacity production with respect to common cause judgment cannot be determined without CTO copy (both Gop-1 and Gop-2) and the authenticated production figure for Gop-2 limestone mine.**

In view of the above, the Committee **deferred** the proposal and requested PP to submit requisite information on the followings to ascertain the violation on production based on existing EC in reference to Common Cause Judgment as well as to have better clarity on the proposal.

- (i). PP submitted that the proposed production is 0.22 MTPA limestone, the Committee asked about total excavation details and PP was unable to explain. So, the Committee asked the PP to submit the total excavation details including OB/IB/SB and other waste materials generation.
- (ii). PP submitted that this proposal for Gop-1 Limestone only, and not mentioned about Gop-2 with respect to the distance. The Committee asked the PP to submit the distance between the Gop-1 and Gop-2 limestone mine, and details of any other leases if present around this mine (Gop-1).

- (iii). PP submitted the different plans (Conceptual plan, Surface plan, Geological Plan & Sections, Environmental Plan and Reclamation plan); the Committee observed that the presentation is not clear with respect to Gop-1 and Gop-2 and PP is unable to explain the same. PP needs to submit the same with clear visibility.

2.10. Proposal of M/s. RCCPL Private Limited for total excavation of 3.03 MTPA with production capacity of 0.85 MTPA Limestone, 1.74 MTPA of waste/reject, 0.44 MTPA of Top Soil/Alluvium from mine lease area of 184.149 ha located at Dithora, SannehiSingti and Karaundi villages, Amarpatan Tehsil, Satna District, Madhya Pradesh - Consideration of TOR

Proposal no: IA/MP/MIN/100548/2019; File no: IA-J-11015/34/2019-IAII(M). Consultant-Vimta Labs Limited.

The proposal of M/s. RCCPL Private Limited is for total excavation of 3.03MTPA for production capacity of 0.85 MTPA Limestone, Waste/reject-1.74MTPA, Top Soil/Alluvium-0.44MTPA from the mine lease area of 184.149 ha. The mine lease area is located at Dithora, SannehiSingti and Karaundi villages, Amarpatan Tehsil, Satna District, Madhya Pradesh. The mine lease area is covered in Survey of India Toposheet No.G44V3 (63H/3), G44V2 (63H/2) & G44V7 (63H/7). The PP presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS. The Mine lease area is covered under Seismic Zone II. The mine lease area is bounded by Latitude and Longitude as following:

S.no	Latitude	Longitude
1	24 ⁰ 24'46.30"N	81 ⁰ 11'27.13"E
2	24 ⁰ 24'46.11"N	81 ⁰ 12'06.24"E
3	24 ⁰ 24'24.76"N	81 ⁰ 11'57.36"E
4	24 ⁰ 24'02.62"N	81 ⁰ 11'50.58"E
5	24 ⁰ 23'59.59"N	81 ⁰ 11'22.80"E
6	24 ⁰ 24'04.27"N	81 ⁰ 10'52.80"E

7	24 ⁰ 24'05.47"N	81 ⁰ 10'34.46"E
8	24 ⁰ 24'26.30"N	81 ⁰ 10'43.95"E
9	24 ⁰ 24'37.86"N	81 ⁰ 10'56.57"E

The proposal was considered in the 4th EAC Meeting held during April 23-24, 2019 wherein based on the presentation made by PP and the discussion held, the Committee **deferred** the proposal. The committee highlighted the casual approach taken by PP by limiting the scope of PFR, presenting unclear proposal of road diversion, conceptual mining and reclamation plan. Accordingly, the Committee asked the PP to submit the following information for further consideration of the proposal:

1. The total mine lease area is 184.149 ha out of which 14.409 ha is Government land and 169.740 ha is private agriculture land. Hence, the committee is of the view that PP needs to submit the regional crop patterns including area getting affected by the project.
2. A village road is passing through the Lease area, therefore, PP need to show protection measurement and/or alternative road for diversion from existing village road passing through the mining Lease area.
3. A High tension power line is passing through the mining lease area, and information on proposed necessary measures in this regard to be submitted.
4. Hydro geological study to assessment the impact on ground water and its percolation effects on adjacent area.
5. PP needs to submit R&R plan for Project Affected Areas.
6. A proper conceptual plan for proposed mining with reclamation plan and also measures for protection the river, nallain the vicinity of the mine lease area.
7. Top soil management plan However, the committee express displeasure on pre-feasibility report and proposal detail prepared and submitted by the consultant M/s Vimta Labs Limited, Hyderabad. The consultant was cautioned and advised to ensure that such deviation in future will call for appropriate action by MoEF&CC.

PP vide letter no Ref No: RCCPL/Bigodi_MP/MoEF&CC/02 dated 29th July, 2019 has submitted the following information:

1. PP submitted that the total mine lease area is 184.149ha out of which 14.409 ha is govt. land, 169.740ha is Private Agriculture land among which 134.111ha is Double Crop land and 16.428 ha is Single crop land as per the Cropping pattern data for the year 2018–19 pertaining to Bigodi ML area, Amarpatan Tehsil and Satna District. The information were obtained through Village Revenue Officer from the Madhya Pradesh Govt web site named: http://164.100.196.130/girdavari_live/web/.
2. PP submitted that about 400 meter road is passing through the villages from Sannehi Bara Tola Village to SannehiSingti village the same is to be diverted to the adjacent non-mining area and 512 m road is passing through the villages i.e. from SannehiSingti to Dithoura village is to be diverted and 623 m of road length is proposed to be diverted in the back filled area after mining, the diverted road will be 753 m. The proposed diversion road will be constructed after maintaining proper gradient and providing tar on the surface. PP also proposed that the thick plantation is proposed on the both sides of road to act as barrier, which would cover around 6.816 ha and around 17040 no of trees would be planted in the road barrier.
3. A 400 KVA HT line with the length of 1930m passes through the lease area in East-West direction and submitted that HT line towers are located with the width of 12 m. PP submitted that for the safety 50m barrier will be kept as a safety barrier around the tower and thick plantation will be developed with 2500 trees per ha total no of trees will be around 47, 100 in such safety barrier.
4. Geological & Hydro-Geology in 10 km radius area report has been submitted.
5. PP submitted that there are no homesteads within the Mine lease and land owners is 306 and for the same detailed R&R studies will be carried out and incorporate in the Final EIA/EMP report.
6. PP reported that Bihar nadi flows around 50 meters away from the lease boundary towards SE direction and three seasonal nallahs flow inside mine lease area towards East, West and South eastside and in order to protect river/water

streams, PP proposed 50 m safety barrier from the water streams with plantation, the safety barrier will be having 2500 trees per ha total no of trees will be around 27,425nos. Also proposed to have embankment of two meters above the existing ground RL so as to arrest flooding.

7. The topsoil will be stacked separately with the 10m height with the slope of 28°. The dump will be covered with the temporary shrub. The soil will be utilized for plantation purpose and spreading over the backfilled area which will be on an average 2.31m thick layer.

Based on the presentation made by PP and the discussion held, the Committee **recommend** the proposal for prescribing the **standard TOR as per annexure-I of the MoM** along with following additional term of reference.

1. PP should submit a detailed plan for rain water harvesting with year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted.
2. PP needs to provide in the EIA Report details of all the statutory clearances, permissions, No objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after grant of EC.
3. PP needs to submit the revenue plan for mining lease, revenue plan should be superimposed on the satellite imaginary clearly demarcate the Govt. land, private land, agricultural land etc.
4. PP needs to submit the real-time aerial footage & video of the mining lease area and of the transportation route.
5. PP needs to submit the detailed plan in tabular format (year-wise for life of mine) for afforestation and green belt development in and around the mining lease. The PP should submit the number of saplings to be planted, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. In addition to this PP should show on a surface plan (5 year interval for life of mine) of suitable scale the area to be covered under

afforestation & green belt clearly mentioning the latitude and longitude of the area to be covered during each 5 years. The capital and recurring expenditure to be incurred needs to be submitted.

6. The PP shall clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged for implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted
7. The PP shall submit the year-wise, activity wise and time bound budget earmarked for EMP, occupational health surveillance & Corporate Environmental Responsibility needs to be submitted. The capital and recurring expenditure to be incurred needs to be submitted.
8. PP shall submit the measures/technology to be adopted for prevention of illegal mining and pilferage of mineral.
9. PP shall clearly bring out the transport route of mineral, protection and mitigative measure to be adopted while transportation of the mineral. The impact from the center line of the road on either side should be clearly brought out supported with the line source modeling and isopleth. Further, frequency of testing of Poly Achromatic Hydrocarbon needs to be submitted along with budget. Based on the above study the compensation to be paid in the event of damage to the crop and land on the either side of the road needs to be mentioned. The PP should provide the source of equations used and complete calculations for computing the emission rate from the various sources.
10. PP shall clearly bring out the specific diesel consumption and steps to be taken for reduction of the same. Year-wise target for reduction in the specific diesel consumption needs to be submitted.
11. PP shall bring out the awareness campaign to be carried out on various environmental issues, practical training facility to be provided to the environmental engineers/diploma holders, mining engineers/diploma holders, geologists, and other trades related to mining operations. Target for the same needs to be submitted.

12. The budget to be earmarked for the various activities shall be decided after perusal of the Standard EC Conditions published by the Ministry.
13. The PP shall ensure that only NABET accredited consultant shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that accreditation of consultant shall be valid during the collection of baseline data, preparation of EIA/EMP report and during the appraisal process. The PP and consultant PP should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and PP and consultant are fully accountable for the same.
14. PP shall submit the detailed Hydro geological study to assess the impact on ground water and its percolation effects on adjacent area/ River/Streams.
15. PP needs to submit a detailed cost benefit analysis (loss of agriculture land Vs benefits from the mineral production) for the life period of mine including the direct financial implication to the affected families.
16. Revised R&R plan for the affected families in the mine lease area.
17. Detailed conceptual plan along with the Map for proposed mining with reclamation plan and also measures for protection the river, nalla in and habitats from the vicinity of the mine lease area.
18. PP need to submit proposal with budgetary provision for construction of diversion road maintaining proper gradient and providing tar on the surface before start of the mining operations.

DAY 2: August 28, 2019 (Wednesday)

- 2.11: Bajri mine with production capacity of 22.5 Lakh TPA (ROM) by M/s. Ranveer Singh Rathore located at Tehsil – Sayla, District Jalore, Rajasthan. (3797.588 ha) [File No J-11015/339/2013-IA-II (M); Proposal No. IA/RJ/MIN/26612/2013]-**
- 2.12: Bajri Mine with production capacity of 75.9 Lakh TPA (ROM) by M/s. Mahendra Singh Ratnawat, located at Revenue villages of Tehsil –**

Udaipurwati, District- Jhunjhunu, Rajasthan (2932.924ha) [File No J-11015/386/2013-IA.II(M) ; Proposal No. IA/RJ/MIN/20345/2013]

- 2.13: River Bed Mining (Bajri) with production capacity of 3.39 million TPA by M/s Shri Mahendra Singh Rajawat, located at Tehsil–Kotri, District: Bhilwara (Rajasthan) (1191.37 ha) [File No. J-11015/414/2013-IA.II (M); Proposal No. IA/RJ/MIN/20593/2013]**
- 2.14: Minor Mineral Bajri Mine of (production capacity 0.504 million TPA) by M/s Mangal Singh Solanki, located at Vill-Jodhpur and others, Tehsil-Niwai, DisttTonk, Rajasthan (104.7775ha) [File No. J-11015/332/2013-IA.II (M); Proposal No. IA/RJ/MIN/19630/2013]**
- 2.15: Proposed River Bed Mining with production Capacity of 1.2 million TPA by M/s. Jaswant Singh located at Tehsil – Raipur, Distt.-Pali, Rajasthan (1667 ha)[File No. J-11015/270/2013-IA.II (M); Proposal No. IA/RJ/MIN/19346/2013]**
- 2.16: Mineral-Bajri mine with production capacity 32 Lakh TPA (ROM) by M/s. Satya Swaroop Singh Jadon, located at Revenue villages of Tehsil Jalore, District - Jalore, Rajasthan (5269 ha)[File No. J-11015/375/2013-IA.II (M); Proposal No. IA/RJ/MIN/26429/2013]**

For agenda item no. 2.11 – 2.16, Member Secretary informed the Committee that the above proposals were de-listed from list of agenda with the approval of Competent Authority and same will be considered after receiving all requisite information from PP and State Government. These proposals along with similar other proposal from the state of Rajasthan is pending for appraisal for want of Replenishment study as per the order of Hon'ble apex court. These proposals shall be considered in special EAC meeting for similar projects after receiving of information through Parivesh Portal for amendment in EC. Necessary follow-up actions in this regards have been initiated by Ministry in this regard. Committee agreed to the suggestion made by the Member Secretary.

- 2.17. Kesari Phansawde Iron Ore Mine of M/s Smt. Neela V. Dempo & Shri Shrinivas V. Dempo for production of Iron ore in the MLA of 386.99 ha located at villages: Kesari & Phansawde in Sawantwadi Taluk in**

Sindhudurg District in Maharashtra. [File No. J-11015/247/2007-IA-II (M); Proposal No. IA/MH/MIN/8105/2007]-EC Amendment

The project of M/s Smt Neela V Dempo and Shri Shrinivas V Dempo was granted Environmental Clearance (EC) vide letter No. J-11015/247/2007-IA-II (M) dt. 11th August 2008 read along with corrigendum dt.14th May 2009 for iron ore project, Kesari- Phansawade Iron Ore Mine over a Mine lease area of 386.99 ha and production capacity of 3.0 MTPA.

2. The PP had applied for Forest Clearance for the forest land involved within the mining lease which was pending. Subsequently, as per the guidelines issued by Forest Conservation Division, vide F.No.11/362/2012 FC dated 01.02.2013 which stipulates that project has to obtain approval for the entire forest land located within the mining lease or surrender such forest land for which approval is not obtained and execute the mining lease for the reduced area. Due to this PP surrendered 287.56 ha (forest land) and executed the mining lease for the reduced area of 99.43 Ha. PP then applied on 28.10.2016 for amendment in EC for changing the mining lease area from 386.99 Ha to 99.43 Ha. In addition to amendment in the mine lease area PP also requested for deletion of specific condition no (i) to (iv) mentioned in the EC letter granted on 11.08.2008.
3. The proposal was placed before EAC meeting held on 23-25 November, 2016, 22-23 March, 2018, 23-24 April, 2018 and 23-24 August, 2018 wherein the committee deferred the proposal for want of requisite information. The PP submitted the information on 28.02.2018, 05.04.2018, 31.07.2018 and 18.07.2019. The information provided till date by PP along with the observations of EAC is as below:
 - a) The PP submitted that the Government of Maharashtra issued LOI for grant of mining lease over an area of 386.99 ha located in Village Kesari & Phansawade to Smt Neela V. Dempo & Shri Shrinivas V. Dempo and as a compliance of the conditions of LOI, EC was obtained in 2008. Since the part of mining lease area was not available for mining on account of forest clearance, project proponents opted to surrender such area and requested the Maharashtra Government to grant the Mining Lease over an area of 99.43 ha, after reassessment and reconciliation of private areas and acquisition of such areas by executing the registered sale deeds. Accordingly, the application was submitted to the Govt. of

Maharashtra along with plan duly certified by Govt. of Maharashtra, showing the surrendered area, and the Govt. was requested to grant the mining lease over an area of 99.43Ha. The Govt. of Maharashtra recommended the proposal vide letter No. MMN1005/CR-926/Ind 9 dated 26th September, 2014 for prior consent of Central Govt. under section 5(1) of the MMRD Act 1957 to the Under Secretary Ministry of Mines, Govt. of India. The Central Government, conveyed its approval vide letter No.5/154/2006-M(IV) dated 24/12/2014 to reduce the area from 385.99 Ha to 99.43 Ha, for grant of Mining Lease to the project proponent and directed to ensure compliance of the amended provisions of the MMDR Act,1957 and Mineral Concession Rule 1960 and other applicable Acts and Rules including Forest (Conservation Act, 1980, Scheduled Tribes and other traditional forest Dwellers (Recognition of Forest Rights, Act 2006 and Environmental Impact Assessment Notification dated 14.09.2006 as issued and amended by the Ministry of Environment and Forest from time to time, before grant of Mining Lease. Pursuant to the aforesaid directions of the Central Government, the Department of industries, Energy and Labour, Govt. of Maharashtra, vide their Letter No. MMN1005/C.R.926/IND-9, dated 02/01/2015 advised Director, Geology and Mines, Nagpur to furnish the report on compliance on fulfillment of terms and conditions as mentioned in the central Government Letter No.5/154/2006-M(IV), dated 24/12/2014, by the applicant, before passing an order for grant of Mining Lease. The Director, Geology and Mines Nagpur, vide letter No. MLR-974/20151L36 dated 09.01.2015, ensured compliance of conditions stipulated as directed by department of industries, Energy and Labour, Govt. Of Maharashtra and submitted a detailed report to the Principal Secretary (industries), Government of Maharashtra. The Director, Geology and Mines, Nagpur, advised District Mining Officer, Sindhudurg vide letter No. MLR-974/16/587 dated 02.03.2015, to incorporate, all the conditions cited in the order, in the Mining Lease Deed. Further the Director, Geology and Mines, Nagpur, also advised to ensure the compliance of all conditions mentioned, before executing Mining Lease Deed. The Government of Maharashtra after ensuring the compliance of all the conditions stated in the LOI, passed the order vide No.MMN-1005/C.R. 926/IND-9 dated 15.01.2016 thereby granting the Mining Lease over an area admeasuring 99.43 Ha in village Phansawade, for a period of 50 years.

The Mining Lease Deed over an area of 99.43 Ha was executed on 22.03.2016 and registered on 31.03.2016. Details of Phanaswade Iron Ore Mining Lease Area as per Government of Maharashtra order No.MMN-1005/ C.R.926 / Ind-9 dated 15th January, 2015 are as follows:

District	Tehsil	Village	Survey No	Pvt Land (Ha)	Govt Land (Ha)	Total (Ha)	Remarks
Sindhudurg	Sawantwadi	Phanaswade	47/OA. 1a & 1b (Part)	15.73	0	15.73	Private area acquired by Sale Deed & Agreement
			48/1 to 7 (Part)	20.95	0	20.95	
			48/5	0	7.15	7.15	
			50/1	0	7.45	7.45	
			50/2 to 8	25.43	0	25.43	
			52/1	0	5.69	5.69	
			52/2 to 9 (part)	17.03	0	17.03	
			Total	79.14	20.29	99.43	

- b) PP submitted that mining plan for an area of 386.969 Ha was approved by Indian Bureau of Mines vide their letter No.MP/MECH-47(MAH)/GOA/2006-07 dated 30-05-2007. Due to non-availability of Forest Land for the project as proposed in approved Mine Plan, the PP re-submitted the modified proposal restricting activity in non-forest land. The modification in Mining plan was approved by Indian Bureau of Mines vide letter No.MP/SIND/GOA(MAH)/Fe-227-SZ/162 dated 16-01-2013 for lease area of 386.99 Ha. Lease deed of 99.43 Ha area was executed on 31-03-2016 for 50 years. Mining Plan for 99.43 Ha was approved by IBM vide letter No. MP/MECH96(MAH)/GOA/2016-17 dated 19.08.2016.

The Committee in its meeting held 23-24 April, 2018 observed that survey number 49 is not a part of mining lease and mining plan needs to be modified accordingly. The re-survey and demarcation of the area granted under the mining lease was carried out under arrangements by the State government and revised Geo-referenced cadastral map (after excluding Survey No. 49 from Mining Lease). The mining plan was modified accordingly after incorporating the above changes and approved by IBM, Goa vide its letter no. MP/MECH-96 (MAH)/GOA/2016-17 dated 26.06.2018. The PP submitted that the total estimated reserves/resource (proved reserve + mineral resource + reconnaissance) is about 52.62 million tons. The estimated life of the mine is about 20~25 years. However, anticipated life of the mine is expected to increase further once proposed exploration is undertaken.

- c) The Committee in its meeting held on 23-25 November, 2016 mentioned that the project proposal cannot be considered in its present form as the

Mine plan, EIA/EMP report, Form 1, PFR etc. have to revised as per the new reduced area. The Ministry vide letter no. J-11015/247/2007-IA-II(M) dated 23.01.2017 asked the proponent to submit the Mine plan, EIA/EMP report, Form 1, PFR for the reduced area. The PP submitted the same on 07.03.2018.

- d) The Committee in its meeting held on 23-25 November, 2016 observed that *the reduced mine lease area also had more than 70% canopy cover as displayed by the DSS and it was considered to be an inviolate area as mining activity has not yet been started. The committee needed clarification to be submitted on the 312.21 ha of private forest land mentioned in the EC dated 11th August 2008. The committee was of the opinion that the above mentioned points may be referred to the FC division for comments. The committee also noted that EC was granted on 11th August 2008 and the moratorium was imposed in the Sindhudurg on 16th August 2010. As the mining was yet to be commenced in a region where moratorium has been imposed, the committee was of the opinion to get the comments from the RE division. The committee was of the opinion that the PP may be informed that mining activities may not be undertaken until the above mentioned issued are addressed.*

The then Member Secretary in EAC meeting held on 22-23 March, 2018 informed the Committee that the Ministry has sought the comments of FC Division and FC Division vide its O.M No 11-393/2016-FC dated 22nd February, 2017 replied stating that out of 100 ha for which GPS coordinates provided by IA Division has been analysed through DSS and the forest density of the said mining lease area is 57 ha very moderately dense forest cover, 39 ha moderately dense forest cover, 1 ha open forest and 3 ha open non-forest land. FC Division also mentioned in the said O.M that "the State Government of Maharashtra was asked to submit the reason for forwarding the proposal for diversion of forest land in favour of Shrinivas V Dempo, whereas the matter for diversion of private forest land restored under section 22A of Maharashtra Private Forest Act 1975 for non-forest purpose was sub-judice. But the information from the State Government has not been received in the Ministry". The Member Secretary also informed the Committee that the Ministry also sought the comments of RE Division and RE Division in its reply mentioned that status of moratorium is "Status Quo". The Member Secretary informed the Committee that PP also submitted "Rapid Assessment of Floristic

Composition, Structure and Canopy cover of Forests (Vegetation) in area of Phanaswade Iron Ore Mine at Sindhudurg District of Maharashtra" prepared by Department of Silviculture & Agroforestry, College of Forestry, Sirsi, Uttarakhand as per which the average canopy cover is 48.8 %. The then Committee asked that the Ministry may take a view of FC Division on the report submitted by PP.

The Committee observed that the then EAC in its meeting held on 22-23 March, 2018 observed that "Government of Maharashtra vide order No. MMN-1005/C.R.926/IND-9 dated 15.01.2016 granted the mining lease over an area of 99.43 Ha. The total 99.43 ha land is the private land and no forest land is involved in the proposal. Thus, there is no requirement of Forest Clearance under Forest (Conservation) act 1980 for diversion of forest land for non-forest activity and the above mentioned specific condition is not applicable for this project. "

e) **Amendment of Specific EC Conditions:** As far as amendments in specific conditions are concerned the committee in its meeting held on 22-23 March, 2018 has the following views:-

(i) Environmental Clearance is subject to obtaining Forest Clearance (as applicable) under Forest (Conservation) act 1980 for diversion of forest land for non-forest activity.

The Committee observed that Government of Maharashtra vide order No. MMN-1005/C.R.926/IND-9 dated 15.01.2016 granted the mining lease over an area of 99.43 Ha. The total 99.43 ha land is the private land and no forest land is involved in the proposal. Thus, there is no requirement of Forest Clearance under Forest (Conservation) act 1980 for diversion of forest land for non-forest activity and the above mentioned specific condition is not applicable for this project.

(ii) Wildlife conservation plan shall be prepared in consultation with the Chief Wildlife Warden (CWLW) for implementation and progress of implementation shall be submitted to the Ministry and the Chief Wildlife Warden concerned within six months. Company shall earmark separate funds for this purpose and funds shall not be diverted for any other activity.

The Committee observed that as per the list of schedule-1 species provided by the proponent in the revised EIA Report there are three schedule-1 species in the buffer zone viz. Canis lupus (Wolf), Ardea Purpurea (Purple heron) and Manis crassicaudata (Indian Wild Boar). Thus this condition cannot be omitted from the EC and the PP is required to prepare a wildlife conservation plan for these three schedule-1 species in consultation with the Chief Wildlife Warden (CWLW).

The PP in EAC meeting held during 23-24 April, 2019 submitted that detailed Fauna & Flora conservation Plan along with activity wise budgetary allocation was submitted to the office of the Principal Chief Conservator of Forests Maharashtra state Nagpur, 'Vanbhavan', Ramgiri Road, Civil Nagpur 440001 and the same was approved by the Principal Chief Conservator of Forests (WL) vide his letter No. Desk-23(2)/Survey/case No.120/4502/2012-13 dated 27-02-2013. The budget earmarked for Fauna & Flora conservation Plan is Rs 890 Lakh for 10 years. A specific condition in this regard may be stipulated in EC Amendment letter.

(iii) Primary survey of flora and fauna shall be carried out and data submitted to the Ministry within six months.

The Committee observed that PP only surrendered the forest land and has non-forest land in the mining lease. The Committee found no valid reason to omit this condition and PP needs to submit the Primary survey of flora and fauna to the Ministry as stipulated in earlier EC Condition.

(iv) To ensure that any damage to the biodiversity is effectively contained, non-mineralized zone(s) between any two mine pits as also the area in which occurrence of minerals are thin shall be kept undisturbed.

The Committee observed that PP did not provide any valid reason for omitting the above specific condition and thus the condition cannot be omitted.

f) Comparative status of Land use & water requirement as compared to previous EC

SL No.	Description	EC (386.99 ha.)	For amendment (99.43 ha.)
1	Area under Excavation	12.07	11.47
2	Mineral Storage	1.82	0.9127
3	Infrastructure	0.76	0.3687
4	Roads	17.025	2.8068
5	Green Belt	*98.47	5
6	Tailing Pond	20	20.278
7	Mineral separation plant	2.43	2.147
8	Future Exploration	223.555	2.6164
9	Water Reservoir	10.86	8.1986
10	Backfilled & Rehabilitated mined out area	0	38.0065
11	Reclaimed and Rehabilitated overburden dump	0	7.6253
Total		386.99	99.43
*The area of 98.74 shown in the column of Sr. no 5 under heading Green Belt as per EC (386.99 Ha) comprises of i) Backfilled & Rehabilitated Mined out area of 76.42Ha and ii) Reclaimed and Rehabilitated Overburden dump area of 22.0500Ha.			

Justification for water requirement:

As per EC granted in 2008 water requirement was estimated at 6897 KLD (i.e. water requirement for sprinkling plantation and drinking: 180 KLD + 6717 KLD for Beneficiation of Ore) while as per application submitted for amendment in EC for 99.43 ha, it is mentioned as 8820 KLD (i.e. water requirement for sprinkling plantation and drinking: 180 KLD + 8540 KLD for Beneficiation of Ore). The EAC in its meeting held on 23-24 April, 2018 sought clarification on this issue. Later on EAC in its meeting held on 23-24 August, 2018 sought feasibility of beneficiation plant.

The PP in its reply dt. 18.07.2019 submitted the feasibility study conducted by M/s SIPC Services wherein inter-alia it has mentioned that total water requirement for the project shall be 6890 KLD (i.e. water requirement for sprinkling, plantation and drinking: 180 KLD + 6710 KLD. For Beneficiation of Ore for 1 MTPA Iron ore concentrate production the water requirement is as below:

Description	Factor	Per Day (KLD)
Feed to plant (in tonnes)		12000
Water requirement (in Cum)	2.4	28800
Water recovery through thickner @ 70% (in Cum)	0.7	20160
Water in circulation in process circuit (in Cum)		20160
Make up water requirement @ 30% (in Cum)	0.3	8640
Water recovery from Tailing (in Cum)	0.067	1930
Net Makeup Water (in Cum)		6710

Thus, the water requirement for beneficiation of ore is 8640 KLD (Peak water requirement). High rate Thickeners will be used for separation of solids from the tailings and also Press filters shall be installed to further reduce the moisture from the tailings. This in turn will assist in further recovery of processed water to the extent of approximately 6.5 ~ 7.0% from tailings which can be re-cycled into the process. Therefore, the net makeup water for the beneficiation plant will be about 6710 KLD. The area experiences good rainfall from June to December averaging 4000mm. Rain water will be harvested by constructing suitable water reservoir in the South-Eastern side of Phanaswade Mining lease occupying an area of 8.1986 Ha to meet the requirement of Beneficiation Plant.

g) In addition to above, EAC in its meeting held on 23-24 August, 2018 sought certain information. The information submitted by PP is as follows:

i) Conceptual Sections explicitly showing the bunds of the tailing pond and reservoir.

The PP reported that they have engaged M/s. SIPC Services for the designing of beneficiation plan, tailing pond and water reservoirs. The M/s SIPC Services explained the conceptual section and bunding design of the tailing pond and water reservoir to the Committee. The section capacity of proposed tailing disposal facility & water reservoir are as follows:

SL No.	Section	Area (m ²)	Influence (m)	Volume (m ³)
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1	N1200	11153	100	1,115,300
2	N1100	8950	100	895,000
3	N1000	9930	100	993,000
4	N900	7730	100	773,000
5	N800	5560	100	556,000
6	N700	2990	100	299,000
Total				4,631,300

Description	Area (m²)	Storage Height (m)	Volume (m³)
Basin Area	16510	27	445770
Bund Area	30886	13.5	416961
Total			862731
Statement Showing The Bund Volume			
Bund Section Area (m²)	Bund Length (m)		Section Volume (m³)
2430	476		1156680.00

ii) Conceptual Plan should be prepared showing the configuration of each benches & excess routes for the transportation.

PP submitted the conceptual plan showing the configuration of benches and transportation route.

iii) Feasibility of installation of beneficiation plant, reservoir & tailing pond needs to be submitted.

The PP submitted the Feasibility Report of Installation of Beneficiation Plant, Water Reservoir & Tailing Pond prepared by M/s SIPC Services, Secunderabad. In its report SPIC Service inter-alia mentioned that during the First Five Year of plan period, it is proposed to process about 7.6 million tonnes of ROM which is likely to generate about 5.32 million ton of tailings (70% of ROM) in form of solid/dry cake, The said tailings is likely to have about 08~10% (max.) moisture content. Considering bulk density of 1.6 -1.8 tonnes/m³, the volume of the solid cake to be accommodated in the proposed tailing disposal/storage site is 2.96-3.32 million m³. SIPC proposes to construct the tailing disposal/storage

facility on the eastern side of Phanaswade mining lease i.e. between section 500N to 1300N and co-ordinates 1950E to 2250E at a distance of approximately 300m from the location of beneficiation plant occupying an area of 20.278Ha. The said storage facility shall have the capacity to accommodate about 4.6313 million m³ of tailings. After utilizing the available space in the Tailing storage facility, during the First Five Year Plan Period, to the extent of 3.32 million Cum, the balance (4.6313 million Cum – 3.32 million Cum = 1.3113 million Cum), of 1.3113 Million Cum shall be utilized during subsequent plan period, and thereafter tailing shall be backfilled in the Mined out Area.

iv) Backfilling Plan & Sections needs to be submitted.

PP submitted the backfilling plan & sections prepared by M/s SIPC Services, Secunderabad.

4. PP informed that the project cost is estimated at Rs. 703 crores and will provide direct employment to 299 persons and in direct employment to 500 persons. PP in addition to above have submitted the revised EIA/EMP on 28.08.2019 and also provided the activity wise budget for proposed EMP, Occupational Health, Plantation, Wildlife Conservation Plan and CER, the details are as follows:
 - a) PP has proposed Rs 19.5 Lakh under occupational health which includes Rs 15.0 Lakh for health check-up, Rs 2.5 for protective equipments, Rs 1.0 Lakh for first aid facility and Rs 2.0 Lakh for training. In addition to this Rs 5 Lakh is also proposed for public health & safety.
 - b) PP has earmarked Rs 163.0 Lakh (Capital) and 67.4 lakh (Recurring) for EMP which include i) Rs 33.0 Lakh (Capital) and 6 lakh (Recurring) for Pollution Control by Water Sprinkling on haul road, mined out benches, transportation area up to crusher & stock yard, Storage area, Grizzly & Hopper, ii) Rs 20.0 Lakh (Capital) & Rs 6.0 Lakh (Recurring) for (Pollution Control Measures (Bag filter at crusher in beneficiation plant), iii) Rs 14.0 Lakh (Capital) & Rs 3.2 Lakh (Recurring) for Green Belt along the mine's Boundary & towards road side, iv) Rs 20.0 Lakh (Capital) & Rs 5.0 Lakh (Recurring) for Reclamation/Rehabilitation of mined out area by partly converting quarry in water recharge pit for water conservation & partly

backfilling & plantation, v) Rs 15.0 Lakh (Capital) & Rs 6.0 Lakh (Recurring) for Haul Road Maintenance within mining lease, vi) Rs 12.0 Lakh (Capital) & Rs 3.2 Lakh (Recurring) for Wire fencing and its maintenance, vii) Rs 10.0 Lakh (Capital) & Rs 2.0 Lakh (Recurring) for Maintenance of Retaining Wall around the dump area, viii) Rs 30.0 Lakh (Capital) & Rs 4.0 Lakh (Recurring) for Storm water management/ water reservoir, ix) Rs 20.0 Lakh (Recurring) for Management of Tailing Pond and x) Rs 9.0 Lakh (Capital) & Rs 2.0 Lakh (Recurring) for other expenditure.

- c) In order to implement the EMP, PP has proposed that 25 persons will be engaged in Environmental Management Cell. The total budget earmarked for environmental management cell is **Rs 52.2 Lakh** and 25 persons will be employed in this cell which includes Environment officer & staff (8 Nos, total budget Rs 16.20 Lakh) , Field Staff (10 Nos, total budget Rs 21.60 Lakh) and Laboratory Staff (7 Nos, total budget Rs 14.40 Lakh).
- d) PP has earmarked Rs 1003 Lakh for Corporate Environment Responsibility (CER) which includes,

Activtiy-1: Education (scholarship, material and academic support) and infrastructure management [providing scholarship to deserving and needy for underprivileged children of labour, drivers, vegetable vendors etc. with material support in the form of school uniform, school bag, shoes study material/stationary etc. also provision of improvement of infrastructure like playground, improvement in primary school, computer labs in high school, benches and desks in Govt. schools. This shall be done after due discussions with school principal and block development officer in six villages; villages covered: Kesari, Phanaswade, Satuli, Ovliye, Bavlat, Dhanoli; timeline: Rs 60 Lakh (1st -5th Year), Rs 50.0 Lakh (5th-10th Year), Rs 80 Lakh (10th -15th Year), Rs 80 Lakh (15th -20th Year)];

Activty-2: RO Treated Drinking water & sanitation [Provision of treated drinking water by providing 2 water filter coolers in 6 villages and in government school also provision of 2 toilets (Girls & Boys) in government school and 4 common community toilets in 6 villages and their maintenance; villages covered: Kesari, Phanaswade, Satuli, Ovliye, Bavlat, Dhanoli; timeline: Rs 30 Lakh (1st -5th Year), Rs 10.0 Lakh (5th-10th Year), Rs 8.0 Lakh (10th -15th Year), Rs 8.0 Lakh (15th -20th Year)];

Activity-3: Skill Development [Providing imparting capacity building training in stitching, computer based programmes, beautician courses, hospitality management courses etc. Especially among children, women, elderly and the differently abled; villages covered: Kesari, Phanaswade, Satuli, Ovliye, Bavlat, Dhanoli; timeline: Rs 70 Lakh (1st -5th Year), Rs 50.0 Lakh (5th-10th Year), Rs 40.0 Lakh (10th -15th Year), Rs 30.0 Lakh (15th -20th Year)];

Activity-4: Healthcare Support [providing health and hygiene awareness flight against critical health implications and provide free medicines, health check-up and awareness camps like maternity care, child development etc. in 6 villages; villages covered: Kesari, Phanaswade, Satuli, Ovliye, Bavlat, Dhanoli; timeline: Rs 80 Lakh (1st -5th Year), Rs 70.0 Lakh (5th-10th Year), Rs 50.0 Lakh (10th -15th Year), Rs 70.0 Lakh (15th -20th Year)];

Activity-5: Native Plantation & Horticulture [Roadside native plantation and green belt development within nearby villages; villages covered: Kesari, Phanaswade, Dhanoli; timeline: Rs 15 Lakh (1st -5th Year), Rs 10.0 Lakh (5th-10th Year), Rs 15.0 Lakh (10th -15th Year), Rs 10.0 Lakh (15th -20th Year)];

Activity-6: Renovation of Public Places/Infrastructures [Providing infrastructure support in villages involving construction and maintenance of roads, community center, boundary wall, repair of internal road, repair of Panchyat Ghar etc.; villages covered: Kesari, Phanaswade, Satuli, Ovliye, Bavlat, Dhanoli; timeline: Rs 25 Lakh (1st -5th Year), Rs 60.0 Lakh (5th-10th Year), Rs 37.0 Lakh (10th -15th Year), Rs 45.0 Lakh (15th -20th Year)].

The committee observed that project cost is Rs 703 crore, therefore as per MoEF&CC O.M. dated F.No.22-65/2017-IA.III dated 1st May, 2018 the CER cost of the proposed project is in compliance at 10.03 Crores (slots:- Rs 100 cr. will be 2% i.e., 2 crores, Rs 400 cr. will be 1.5% i.e., 6 crores and Rs 203 cr. will be 1% i.e., 2.03 crore).

5. The Member Secretary, informed the Committee that the said area is falling under Western Ghats and the Supreme Court vide order dated 02.11.2012 in an Interlocutory Application in Writ Petition No. 562/2009 and other connected matters directed that "**no mining operations of any kind in the Western Ghats is to be countenanced**". The same was reiterated in Press Information Bureau, Ministry of Mines, Govt. of India dated 23.07.2014. Further,

the Hon'ble NGT in its order dated 24.08.2018 inter-alia mentioned that "As already directed vide order dated 25-09-2014 referred to in para 5 above, no environmental clearance be granted and no activity adversely impacting eco-sensitive areas be permitted in the area covered by draft notification dated 27.02.2017 till the matter is finalized." In the instant the mining is not yet commenced also the said mining lease is falling in the area which is covered under draft notification 27.02.2017.

6. Based on available information, discussion held and document submitted, the Committee **recommends** for amendment in EC on technical appraisal for the proposed mining activity of M/s Smt. Neela V. Dempo & Shri Shrinivas V. Dempo for total excavation of 3.5 MTPA (iron ore production of 3.0 MTPA (ROM) + 0.5 MTPA Overburden) of Iron ore in the MLA of 99.43 ha located at villages Phansawde, Sawantwadi Taluk, Sindhudurg District in Maharashtra, subjected to :
- (a) Examination of the proposal by Ministry in light of directions/judgement of Hon'ble court/tribunal issued with respect to Western Ghats.
 - (b) Imposition of Standard EC conditions stipulated for mining project as per Ministry vide O.M. No. 22-34/2018- IA.III, dated 08.01.2019
 - (c) Specific EC conditions as following additional specific conditions may be prescribed.
 - (i) The beneficiation plant, tailing dam, reservoirs and backfilling should be done as per the design recommended by M/s SIPC Services, Secunderabad. In case any breach or discharge outside the mine lease area is observed from tailing ponds, PP should immediately stop the mining operation, take corrective measures and inform the incident to concerned authorities Viz. State Pollution Control Board, Mining Department, Districts Magistrate, Indian Bureau of Mines, Directorate of Mines & Safety, and MoEF&CC. A onsite- offsite disaster management plan with SOP shall be prepared in consultation with SPCB, local administration and other concerned state government departments.

(ii) PP shall implement the proposed **Environmental Management Plan (EMP)** with budgetary support of Rs 163.0 Lakh (Capital) and 67.4 lakh (Recurring) which include i) Rs 33.0 Lakh (Capital) and 6 lakh (Recurring) for Pollution Control by Water Sprinkling on haul road, mined out benches, transportation area up to crusher & stock yard, Storage area, Grizzly & Hopper, ii) Rs 20.0 Lakh (Capital) & Rs 6.0 Lakh (Recurring) for (Pollution Control Measures (Bag filter at crusher in beneficiation plant), iii) Rs 14.0 Lakh (Capital) & Rs 3.2 Lakh (Recurring) for Green Belt along the mine's Boundary & towards road side, iv) Rs 20.0 Lakh (Capital) & Rs 5.0 Lakh (Recurring) for Reclamation/Rehabilitation of mined out area by partly converting quarry in water recharge pit for water conservation & partly backfilling & plantation, v) Rs 15.0 Lakh (Capital) & Rs 6.0 Lakh (Recurring) for Haul Road Maintenance within mining lease, vi) Rs 12.0 Lakh (Capital) & Rs 3.2 Lakh (Recurring) for Wire fencing and its maintenance, vii) Rs 10.0 Lakh (Capital) & Rs 2.0 Lakh (Recurring) for Maintenance of Retaining Wall around the dump area, viii) Rs 30.0 Lakh (Capital) & Rs 4.0 Lakh (Recurring) for Storm water management/ water reservoir, ix) Rs 20.0 Lakh (Recurring) for Management of Tailing Pond and x) Rs 9.0 Lakh (Capital) & Rs 2.0 Lakh (Recurring) for other expenditure. The amount proposed in the EMP shall be kept in separate bank account and same needs to be audited annually. The Proponent should annually (before 1st June of every year for proceeding year) submit the detailed report to Regional Office, MoEF&CC on implementation of EMP along with audited report of expenditure incurred; purchase documents, photographs in support of implementation of activities, Geo-location of the monitoring stations, plantation sites, details of persons engaged for the implementation of EMP etc.

(iii) PP shall maintain the proposed **Environmental Management Cell** with budgetary support of **Rs 52.2 Lakh** and 25 persons which includes Environment officer & staff (8 Nos, total budget Rs 16.20 Lakh), Field Staff (10 Nos, total budget Rs 21.60 Lakh) and Laboratory Staff (7 Nos, total budget Rs 14.40 Lakh). The amount proposed in the EMC shall be kept in separate bank account and same needs to be audited annually. The Proponent should annually (before 1st June of every year for proceeding year) submit the detailed report to

Regional Office, MoEF&CC on establishment of EMC along with audited report of expenditure incurred and details of persons engaged in EMC for the implementation of EMP.

- (iv) PP shall undertake the proposed occupational health plan with the budgetary support of Rs 19.5 Lakh which includes Rs 15.0 Lakh for health check-up, Rs 2.5 for protective equipments, Rs 1.0 Lakh for first aid facility and Rs 2.0 Lakh for training. In addition to this Rs 5 Lakh is also proposed for public health & safety. The same shall be kept in a separate bank account and same needs to be audited annually. The Proponent should annually (before 1st June of every year for proceeding year) submit the detailed report to Regional Office, MoEF&CC on implementation of occupational health plan along with audited report of expenditure incurred.
- (v) PP shall implement the proposed Corporate Environment Responsibility (CER) work plan with budgetary support of Rs 1003 Lakh which includes, **Activiy-1: Education (scholarship, material and academic support) and infrastructure management** [providing scholarship to deserving and needy for underprivileged children of labour, drivers, vegetable vendors etc. with material support in the form of school uniform, school bag, shoes study material/stationary etc. also provision of improvement of infrastructure like playground, improvement in primary school, computer labs in high school, benches and desks in Govt. schools. This shall be done after due discussions with school principal and block development officer in six villages; villages covered: Kesari, Phanaswade, Satuli, Ovliye, Bavlat, Dhanoli; timeline: Rs 60 Lakh (1st - 5th Year), Rs 50.0 Lakh (5th-10th Year), Rs 80 Lakh (10th -15th Year), Rs 80 Lakh (15th -20th Year)]; **Activiy-2: RO Treated Drinking water & sanitation** [Provision of treated drinking water by providing 2 water filter coolers in 6 villages and in government school also provision of 2 toilets (Girls & Boys) in government school and 4 common community toilets in 6 villages and their maintenance; villages covered: Kesari, Phanaswade, Satuli, Ovliye, Bavlat, Dhanoli; timeline: Rs 30 Lakh (1st -5th Year), Rs 10.0 Lakh (5th-10th Year), Rs 8.0 Lakh (10th -15th Year), Rs 8.0 Lakh (15th -20th Year)]; **Activity-3: Skill Development** [Providing imparting capacity building training in

stitching, computer based programmes, beautician courses, hospitality management courses etc. Especially among children, women, elderly and the differently abled; villages covered: Kesari, Phanaswade, Satuli, Ovliye, Bavlat, Dhanoli; timeline: Rs 70 Lakh (1st - 5th Year), Rs 50.0 Lakh (5th-10th Year), Rs 40.0 Lakh (10th -15th Year), Rs 30.0 Lakh (15th -20th Year)]; **Activity-4: Healthcare Support** [providing health and hygiene awareness flight against critical health implications and provide free medicines, health check-up and awareness camps like maternity care, child development etc. in 6 villages; villages covered: Kesari, Phanaswade, Satuli, Ovliye, Bavlat, Dhanoli; timeline: Rs 80 Lakh (1st -5th Year), Rs 70.0 Lakh (5th-10th Year), Rs 50.0 Lakh (10th -15th Year), Rs 70.0 Lakh (15th -20th Year)]; **Activity-5: Native Plantation & Horticulture** [Roadside native plantation and green belt development within nearby villages; villages covered: Kesari, Phanaswade, Dhanoli; timeline: Rs 15 Lakh (1st -5th Year), Rs 10.0 Lakh (5th-10th Year), Rs 15.0 Lakh (10th -15th Year), Rs 10.0 Lakh (15th -20th Year)]; **Activity-6: Renovation of Public Places/Infrastructures** [Providing infrastructure support in villages involving construction and maintenance of roads, community center, boundary wall, repair of internal road, repair of Panchyat Ghar etc.; villages covered: Kesari, Phanaswade, Satuli, Ovliye, Bavlat, Dhanoli; timeline: Rs 25 Lakh (1st -5th Year), Rs 60.0 Lakh (5th-10th Year), Rs 37.0 Lakh (10th -15th Year), Rs 45.0 Lakh (15th -20th Year)]. The amount proposed in CER shall be kept in separate bank account which is to be audited annually. The Proponent should annually (before 1st June of every year for the compliance of proceeding years) submit detailed report to RO, MoEF&CC on implementation of activities proposed in CER along with audited report of expenditure incurred. At the 20th year if any amount left in this budget head then the same shall be utilized for the infrastructural development of the four villages in consultation with local administration.

- (vi) The Conservation Plan for fauna & flora should be implemented as approved by the Principal Chief Conservator of Forests (WL) vide his letter No. Desk-23(2)/Survey/case No.120/4502/2012-13 dated 27-02-2013. The budget earmarked of Rs 890 lakh for 10 years shall be deposited in the government account.

- 2.18. **Feldspar and Quartz Mining project (ML No. 57/03) of M/s. Sh Mohammed Tahir for production of 60000 Tonnes per annum and 40000 TPA in the mine lease area of 196.5 ha located at Village: DolaJi Ka Khera, Tehsil: Deogarh, District: Rajsamand, State: Rajasthan**

[File No. J-11015/403/2006-IA. II (M), Proposal No: IA/RJ/MIN/110276/2019] –Amendment in EC

The Proposal of M/s Mohammed Tahir is for amendment in the EC granted vide letter No -11015/403/2006-IA. II (M) dated 20.02.2009 for production of 60000 Tonnes per annum & 40000 TPA of Feldspar & Quartz respectively from ML No. 57/03 (196.5 ha) located at Village: DolaJi KaKhera, Tehsil: Deogarh, District: Rajsamand, State: Rajasthan. The PP sought amendment in EC due to change in the mining lease area from 196.50 Ha to 191.7346 Ha.

2. The Member Secretary informed the Committee that the PP vide its email dated 20.08.2019 has requested to consider the proposal in next EAC meeting. The Committee therefore **deferred** the proposal and is of the view that proposal may be placed in next EAC meeting.

2.19. Chorbedi 1 Limestone Mine for production of 0.716 MTPA in the mine lease area of Area: 254.89 Ha located at Village: Chorbedi, Taluka: Lalpur, District: Jamnagar, Gujarat of M/s Shree Digvijay Cement Co. Ltd. Consideration of Proposal under EIA notification 2006 and Ministry's Notification vide S.O. (E) 1530, dated 06.04.2018 - Reconsideration of TOR.

File No: J-11015/161/2018-IA-II(M); Proposal No: IA/GJ/MIN/81570/2018; Consultant: Grass Roots Research and Creation India (P) Ltd.

PP informed Ministry vide letter no. Comm/MoEF/EC/A/301 dated 26.08.2019 that they are **NOT** able to attend the meeting and requested to defer the proposal. Thus, the Committee **deferred** the proposal and the proposal may be placed in next EAC meeting after receiving the formal request from the PP.

2.20. Expansion of Mining Project of China Clay from 5000 TPA (ROM) to 17,58,163 TPA (ROM) and Quartz from 2000 TPA (ROM) to 10829 TPA (ROM) by M/s B.R. Minerals, located at Village-LohariKhurd (Deva KaKhera), Tehsil -Hindoli, District-Bundi, Rajasthan (Mine Lease Area 61.0Ha)

File no - J-11015/67/2018-IA-II(M); Proposal no - IA/RJ/MIN/75545/2018

The PP vide email dated 20.08.2019 requested to withdraw the proposal as the project is less than 100 Ha now. The Member Secretary informed the Committee that the proposal was earlier considered in EAC meeting held on July 19-20, 2018 wherein the Committee observed some non-compliance w.r.t to transfer of EC and also sought additional information for further appraisal of the proposal.

It was informed to the committee that as per the provision of Ministry's O.M No. J-11013/41/2006-IA.III dated 23.10.2017 para no 2(iii) "*In cases, the proposal is appraised by the EAC due to non-existence of SEIAA/SEAC, then irrespective of whether recommended, deferred or additional information sought, it will continue to be appraised and decided at the central level, even if the SEIAA/SEAC is constituted later on*".

In the instant case, the project was appraised by EAC and EAC deferred the proposal. Thus, as per the above O.M. dated 23.10.2017 the project needs to be

appraised by EAC only. The Member Secretary also informed the Committee that an email in this regard has already been sent to PP on 26.08.2019.

The Committee observed that PP did not attend the meeting and therefore **deferred** the proposal. The Committee is of the view that the Ministry may inform the PP to attend the next EAC meeting.

The meeting ended with thanks

Standard Terms of Reference (TOR) for Mining Project

- 1) Year-wise production details since 1993-94 should be given, clearly stating the highest production achieved in any one year prior to 1993-94. 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. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
- 2) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
- 4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 5) Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- 6) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- 7) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental

or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.

- 8) Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- 9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
- 12) A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.

- 13) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- 14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- 18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
- 19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court

- restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
- 20) Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
 - 21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
 - 22) One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM₁₀, particularly for free silica, should be given.

- 23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
- 24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- 25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
- 26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 27) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
- 28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
- 29) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
- 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) The activities and budget earmarked for Corporate Environmental Responsibility (CER) shall be as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 and the action plan on the activities proposed under CER shall be submitted at the time of appraisal of the project included in the EIA/EMP Report.
 - 45) The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
 - 46) Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgment of Hon'ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of

2014 in the matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.

- 47) 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.

Standard TOR for Beneficiation Projects

- 1) The alternate sites considered, the relative merits and demerits and the reasons for selecting the proposed site for the Beneficiation Plant should be indicated.
- 2) Details of the technology and process involved for beneficiation should be given.
- 3) Location of the proposed Plant w.r.t. the source of raw material and mode of transportations of the ore from mines to the beneficiation plant should be justified.
- 4) Treatment of run of mine (ROM) and or of the fines/waste dump should be spelt out.
- 5) Estimation of the fines going into the washings should be made and its management described.
- 6) Details of the equipment, settling pond etc. should be furnished.
- 7) Detailed material balance should be provided.
- 8) Sources of raw material and its transportation should be indicated. Steps proposed to be taken to protect the ore from getting air borne should be brought out.
- 9) Management and disposal of tailings and closure plan of the tailing pond, if any after the project is over, should be detailed in a quantified manner.
- 10) 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 also be indicated.
- 11) A copy of the document in support of the fact that the Proponent is the rightful lessee of the unit should be given.
- 12) All documents including EIA and public hearing should be compatible with one another in terms of the production levels, waste generation and its management and technology and should be in the name of the lessee.
- 13) All corner coordinates of the Unit, superimposed on a High Resolution Imagery/Toposheet should be provided. Such an Imagery of the proposed Unit should clearly show the land use and other ecological features of the study area (core and buffer zone).

- 14) It should be clearly indicated 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.
- 15) Issues relating to Safety should be detailed. The proposed safeguard measures in each case should also be provided. Disaster management plan shall be prepared and included in the EIA/EMP Report.
- 16) The study area will comprise of 10 km zone around the Plant.
- 17) Cumulative impact study of both Beneficiation Plant with suggested mitigation measures as per the study should be described.
- 18) Location of Railway siding with its handling capacity and safety measures should be indicated.
- 19) Option to provide only silo for storage of minerals instead of open stacking to avoid fugitive dust should be explored and arrangements finalized justified.
- 20) 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 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.
- 21) Details of the land for any Over Burden Dumps outside the lease, such as extent of land area, distance from lease, its land use, R&R issues, if any, should be given.
- 22) 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.

- 23) 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.
- 24) 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.
- 25) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 26) A study shall be got done to ascertain the impact of the 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.
- 27) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, 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.
- 28) 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.

- 29) Proximity to Areas declared as 'Critically Polluted' shall also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB/CPCB shall be secured and furnished to the effect that the proposed activities could be considered.
- 30) Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the unit w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- 31) 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 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.
- 32) 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 unit in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.

- 33) 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.
- 34) 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.
- 35) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be secured and copy furnished.
- 36) 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.
- 37) 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.
- 38) 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.
- 39) 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. 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 the pollution.

- 40) 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.
- 41) Details of the onsite shelter and facilities to be provided to the workers should be included in the EIA report.
- 42) 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 should be detailed.
- 43) 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.
- 44) 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.
- 45) Public hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- 46) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the project should be given.
- 47) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

- 48) A brief background of the Project, its financial position, Group Companies and legal issues etc should be provided with past and current important litigations if any.
- 49) Benefits of the Project, if the project is implemented should be outlined. The benefits of the projects shall clearly indicate environmental, social, economic, employment potential, etc.

Standard EC conditions as per Ministry's OM No. 22-34/2018-

IA.III,

dated 08.01.2019

I. Statutory compliance

- 1) This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- 2) The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors before commencing the mining operations.
- 3) The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors.
- 4) This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
- 5) This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.

- 6) Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board/Committee.
- 7) The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.
- 8) The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
- 9) The Project Proponent shall follow the mitigation measures provided in MoEFCC's 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".
- 10) The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
- 11) A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- 12) State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.

- 13) The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
- 14) The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

II. Air quality monitoring and preservation

- 15) The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
- 16) Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution

wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.

III. Water quality monitoring and preservation

- 1) In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
- 2) 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. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- 3) Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by

establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

- 4) The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data 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, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
- 5) Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project

site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.

- 6) Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.
- 7) Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
- 8) The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

IV. Noise and vibration monitoring and prevention

- 9) The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
- 10) 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 /night hours.

- 11) The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

V. Mining plan

- 12) The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.
- 13) The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent

authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change for record and verification.

- 14) The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.

VI. Land reclamation

- 15) The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
- 16) The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
- 17) The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.

- 18) The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
- 19) The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC.
- 20) Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
- 21) Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
- 22) The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height,

width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

VII. Transportation

- 23) No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. 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 Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.
- 24) The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid

generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

VIII. Green Belt

- 25) The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.
- 26) The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
- 27) The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.

- 28) The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.
- 29) And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

IX. Public hearing and human health issues

- 30) The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEFCC Regional Office and DGMS on half-yearly basis.
- 31) The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol

use. The Proponent shall carry out base line HRA for all the category of workers and thereafter every five years.

- 32) The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).
- 33) The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 - 24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1), Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other

joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEFCC annually along with details of the relief and compensation paid to workers having above indications.

- 34) The Project Proponent shall ensure that 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.
- 35) Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
- 36) The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

X. Corporate Environment Responsibility (CER)

- 37) The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.

- 38) Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEFCC and its concerned Regional Office.

XI. Miscellaneous

- 39) The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
- 40) 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.
- 41) The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
- 42) A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEFCC.
- 43) The concerned Regional Office of the MoEFCC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEFCC officer(s) by furnishing the requisite data / information / monitoring reports.

List of Expert Appraisal Committee (Non Coal Mining)

Sl. No	Name and Address	Designation	Signature 27.08.2019	Signature 28.08.2019
1	Dr. S.R. Wate, 148/149, Nagar Vikas Society, Narendra Nagar, Nagpur440015, Maharashtra	Chairman	Absent	Absent
2	Dr. Ajay Deshpande, Flat A-101, Pristine Privilege Apartments, Opposite Prism, Near RohanNilay, Behind Spicer College, Aundh, Pune-410007, Maharashtra	Member		
3	Shri G.P. Kundargi, Plot No. 32, MOIL Vatika, Chicholi Road, Fetri, Nagpur 441501, Maharashtra	Member		
4	Dr. A.K. Malhotra, C-6, SubhavnaNiketan, Road No. 41, Pitampura, Delhi- 110034	Member		
5	Dr. Gurdeep Singh, Department of Environmental Science & Engg. Indian Institute of Technology (Indian School of Mines), Dhanbad-826004	Member		
6	Shri B Ramesh Kumar, H.No. 6-1-134/6, Balram Compound, Padmarao Nagar, Secunderabad-500025, Andhra Pradesh	Member		
7	Dr. AshaRajvanshi, WII, P.B# 18, chandrabani, Dehradun-248001, Uttarakhand	Member	Absent	Absent
8	Prof. S. Ramakrishna Rao, D.No. 50-120-9/1, North Ext., Seethammadhara, Visakhapatnam-530013, Andhra Pradesh	Member		
9	ShriSantosh Gupta, Flat No. 405, Gaur Green Vista, NyayKhand-I, Indrapuram, Ghaziabad, UP-201014	Member		
10	Dr. Parimal Chandra Bhattacharjee, A/3 Asiyana Housing Complex Maligaon, Guwahati- 781011, Assam	Member		
11	Prof. MukeshKhare, Department of Civil Engineering, IIT, Delhi	Member	Absent	Absent
12	Representative of DGMS Head Office, Sardar Patel Nagar, Dhanbad, Jharkhand 826001 dg@dgms.gov.in	Member	- do -	- do -
13	ShriMantuBiswas, Controller of Mines, IBM Block D, Second Floor, Indira Bhavan, Civil Lines, Nagpur - 440001	Member	- do -	- do -
14	Shri V.K. Soni, Scientist 'E', IMD, New Delhi - 110 003	Member	- do -	- do -
15	Shri. Sundeep, Director IA-Division (Non-coal Mining sector) Agni-A106, Indira Paryavaran Bhawan, Ministry of Environment, Forest & Climate Change, Jorbagh Road, New Delhi- 110003	Member Secretary		