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

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#### SUMMARY RECORD OF 24<sup>th</sup> MEETING OF THE COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 24<sup>th</sup> EAC 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 9-10<sup>th</sup> December, 2020 through video conference. The list of participants is annexed herewith. After login of the Committee Members through video conference link provided by NIC, discussion on each of the Agenda Items was taken up ad-seriatim.

#### (1.1) Confirmation of the Minutes of the 23<sup>rd</sup> EAC Meeting held during 24-25 November, 2020

The minutes of 23<sup>rd</sup>EAC Meeting held during 24-25 November, 2020 was placed before the members of the Committee. The committee confirmed the minutes subject to the corrections in the Item No. 2.5 of the 23<sup>rd</sup> EAC meeting w.r.t. proposal for Amendment in ToR granted vide letter dated J-11015/162/2018- IA.II(M) dated 10.06.2020 to M/s Chowgule and Company Private Ltd. for Karadikola Iron Ore Mine, ML No. 2546 over an area of 459.73 Ha located at Bavihalli Village of Sandur Taluka, Bellary District, Karnataka regarding change in production from 0.38 MTPA to 0.50 MTPA and exemption from the requirement of Public Hearing/Public Consultation. [Proposal No. IA/KA/MIN/177696/2020, File No. J-11015/162/2018-IA.II(M)], as given below:

S. No	Typographical Error	May be read as
1	Item No. 2.5 of the 23 <sup>rd</sup> EAC	The committee observed that
	meeting:Page No. 23, 6th point,	the current capacity is still
	clause ii	below the proposed capacity of
	PP shall invite comments/	0.60 MTPA for which public
	objections on the EIA report and	hearing already carried out on
	other documents as per the EC 09.12.2003 and E	09.12.2003 and Environment
	regulations 2006 as a part of	Clearance granted was vide No.
	public consultation.	J-11015/138/2005-IA. II (M)
		dated17.02.2006 under EIA
		Notification 1994. Therefore,
		the committee recommended
		exemption from the Public
		Hearing; however, the PP shall

invite comments/ objections on the EIA report and other documents as per the EIA Notification, 2006 as
amended,as a part of public consultation.
consultation.

#### (1.2): Proposal for obtaining environmental clearance for Kolimigundla Limestone Mine (ML Area: 250.0 Ha) of M/s The Ramco Cements Limited for Limestone production of 0.6 MTPA located at Kolimigundla. Itikyala&Kalvatala villages, Kolimigundla Mandal, Kurnool Dist. Andhra Pradesh [Proposal no: IA/AP/MIN/69982/2017]- EC Reg.

The proposal of M/s Ramco Cements Limited is for mining of 0.6 MTPA of limestone from "Kolimigundla Limestone Mine" (ML Area 255.0 Ha) situated at, Kolimigundla Mandal, Kurnool District, Andhra Pradesh. The Mining lease fall under Survey of India Topo-Sheet No 57/I/4 and between Latitude 15°03'17.8" N - 15°04'17.6" N and longitude 78°06'18.1" E - 78°08'01.0" E

2. 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.

3. The PP applied online vide proposal no. IA/AP/MIN/69982/2017 for grant of ToR and submitted the Form I, Pre-feasibility Report. The project proposal was considered during the EAC meeting held during 23<sup>rd</sup>-24<sup>th</sup>October, 2017. The EAC recommended the proposal and prescribed the Standard ToR for undertaking detailed EIA study. The Terms of Reference was issued by MoEF&CC vide letter No J-11015/96/2017-IA.II (M) dated 07.11.2017. PP after conducting public hearing has applied for Environment Clearance on PARIVESH vide Proposal No. IA/AP/MIN/69982/2017 on 29.06.2020 and submitted the final EIA/EMP report after incorporating Public Hearing proceedings. The proposal was considered in the 19th EAC (Non-coal Mining) held during **22-24 July**, **2020**; wherein due to shortcoming the Committee returned the proposal in present form and was of the view that PP shall re-submit the Form-II with following information:

**Point-1:** The Committee asked the PP about the preparation of mining plan for 0.6 MTPA when the ToR was already granted for 1.0 MTPA. PP informed the Committee that production quantity was optimized by the IBM considering the requirement of Cement Plant and availability of minerals from the other mining leases. The Committee thus of the view that PP shall submit the justification for opening of mines, raw mix design,

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mineral availability considering the production from other mining leases, mineral conservation etc.

**Point – 2:** The Committee observed from the KML file that PP has shown safety area and mineable area, but it is not clear that what is effective area of mining, what is the area under safety zone, reserves available in the mining area, reserves blocked in the safetyzone.

**Point-3:** The stage wise mine development plan, clearly showing rivers, safety distances, villages, roads, mine lease, water bodies, embankments, OB dumps, plantations etc. showing critical distances has not available in the EIA/EMP for drawing the appropriate mitigation measures in terms of method mining, method of blasting, monitoring of PPV and AoP due to blast induced vibrations.

**Point – 4:** The Committee also observed that PP has mentioned that dumper will be used for transportation of the mineral but it is not clear that whether HEMM will be used or tippers will be deployed for transportation. Therefore, for better understanding of the project PP is required to submit the above mentioneddetails.

**Point – 5:** The PP submitted that permission obtained from Water Resources Department, Govt. of Andhra Pradesh for utilization of 2500 KLD of surface water from Owk Reservoir, vide Letter No. EE/SRBC Divn.No3/Owk/IWS/186 M dated 27/05/2019. The Committee is of the view that PP should submit the timeline by which mine will become self-sufficient/water positive for requirement of water.

**Point–6:** The Committee observed that plantation plan needs to be revised as F.Y 2018-19 &2019-20 is already over. PP needs to show the area on map where plantation will bedone.

**Point – 7:** The PP reported that the proposed mining lease area is255.0 ha, out of which 238.19 Ha patta lands and 16.81 Ha of Govt. land. No rehabilitation or resettlement is proposed. RCL has purchased 156.5 Ha of patta land paying suitable compensation by the year 2006 – 2007. RCL has paid additional amount of Rs. 0.75 lakh per acre for all the lands purchased before 2008, through District Collector, Kurnool. The Committee is of the view that still 81.69 Ha of land is remaining. Therefore, PP needs to confirm the status of the same, whether PP is planned to purchase the same or not. What about the R&R plan for thesame.

**Point – 8:** The Project Proponent submitted Capital cost of Environmental Management Plan is estimated to be about Rs. 88.5 Lakhs and recurring cost is about Rs. 3842.6 Lakhs for 170 years. This include:

- 1) Air pollution control measures Rs. 35 Lakhs (Capital) and Rs. 10 Lakhs(Recurring),
- 2) Occupational health measures– Rs. 6 Lakhs (Capital) and Rs. 1.2 Lakhs(Recurring),
- 3) Environmental Monitoring Rs. 9.5 Lakhs(Recurring),
- 4) Greenbelt Rs. 32.5 Lakhs (Capital) and Rs. 1.2 Lakhs (Recurring),
- 5) Rainwater Harvesting Rs. 5 Lakhs (Capital) and Rs. 1 Lakhs (Recurring) and
- 6) Wildlife Conservation Rs. 10 Lakhs(Capital).

The Committee is of the view that PP has taken the cost for170 years but the lease is granted for the less period. Therefore, all the estimation needs to be done for the lease period only. In addition to this PP also provide the details of the Environmental Management Cell, frequency of monitoring for air, water, noise and soil quality, number and tentative location of the monitoring station to be set up.

**Point-9:** The PP submitted that Corporate Environment Responsibility (CER) budget as per MoEFCC's office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018 for Rs 10.833 crores capital cost of subject mine is estimated to be about Rs. 22 Lakhs. This willinclude

1) Construction of DiningHallinZPHighSchool, Kolimigundla – Rs. 18 Lakhs to bespent in 2 years and

2) ConstructionofToiletsatKolimigundla,ItikyalaSchools- Rs. 4 Lakhs to be spent in 2 years. Additionally, RCL had allocated about Rs. 70 lakhs for providing the infrastructure facilities at the Belum caves, as a part of RCL Plant Corporate Environmental Responsibility. The Committee observed that project cost should also include the cost of land and based on which CER needs to be defined, the Committee is also not agreed with the activities proposed in the CER and is of the view that PP should revise thesame.

**Point-10:** The Committee is of the air quality modelling needs to be revised considering theimpact of activities in the vicinity of the mining lease and details such as pre-dominate wind direction etc. should be clearly mentioned in thereport.

**Point-11:**The Committee observed that issue raised during PH refer to Lord Shree Narshimha Swamy Temple, regular health camps, adoption of mirzapur village, damage to agricultural crops, additional compensation, dairy industry, Belum Caves which is 3 KM away etc. Therefore, PP needs to submit the action plan for the same addressing all the issue raised during PH.

**Point-11:**The Committee also observed that EIA/EMP report uploaded online and submitted to the Ministry is not the same and some pages are missing in the online

report. The Committee warned the consultant to ensure that document submitted online should be complete and correct in all respect.

The same was informed to the PP vide letter no. J-11015/96/2017-IA.II (M) dated 13.08.2020.

PP submitted the proposal vide letter no. RCL/KG/MINE/EC/MoEFCC/RFEIA/2020 dated 21.10.2020 along with revised EIA report incorporating the details sought by EAC in its meeting held during 22-24 July, 2020 and the proposal was again placed in the EAC meeting held during 9<sup>th</sup> -11<sup>th</sup> December, 2020.

4. Issues raised by EACduring the meeting held during 22-24 July, 2020 and information submitted by PP are as follows:

Point-1: The Committee asked the PP about the preparation of mining plan for 0.6 MTPA when the ToR was already granted for 1.0 MTPA. PP informed the Committee that production quantity was optimized by the IBM considering the requirement of Cement Plant and availability of minerals from the other mining leases. The Committee thus of the view that PP shall submit the justification for opening of mines, raw mix design, mineral availability considering the production from other mining leases, mineral conservation etc.

**Reply:** PP submitted that RCOM, IBM, Hyderabad has issued scrutiny comments while approving the Mining Plan vide letter No:AP/KNL/MP/Lst-52/Hyd dt.17.05.2018 stating that for EC approved clinkerisation capacity of 3.15 MTPA, the limestone requirement is 4.41 MTPA with Limestone Conversion Factor of 1.4 tons of limestone required for 1 ton of Clinker manufacturing as per NCCBM Norms. Considering 10% tolerance/Margin, IBM has permitted and also restricted RCL to propose within the rated capacityof4.80 MTPA from all of 4 nos. of feeding mines as detailed below:

S. No	Name of Mine	Capacity proposed by IBM in MTPA	TOR granted capacity in MTPA	Remarks
1	Chintalayapalle Mine	4.00	4.00	IBM has approved for 4.0 MTPA production capacity
2	Kolimigundla Mine	0.60	1.00	IBM has approved for 0.60 MTPA only considering rated capacity
3	Kanakadripallemine	0.10	0.10 (after amendment)	Originally TOR granted for1.0 MTPA. As suggested by IBM, TOR has got amended to 0.1 MTPA

4	Nayanapallemine	0.10	1.50	Proposed to apply for Amendment c		
				TOR for the proposed capacityof		
				2.70 MTPA considering the proposal fo		
				expansion of clinkerisation capacity		
				4.485 MTPA as per board resolution		
				dated		
				22.05.2019		
Total		4.80				

#### Raw Mix Design:

The raw mix design of the proposed clinker manufacturing are as given below:

Description	High Grade LST	Cement grade LST	Low Grade LST	Laterite	Low Grade Iron Ore	Flaggy LST	RAWMEAL REQUIREMNT
In Percentage	55.7	20	10	3	3.3	8	
SiO2	9.88	12.79	16.26	21.92	21.19	33.99	13.76
AI2O3	0.89	0.95	1.94	35.1	16.67	4.97	2.88
Fe2O3	0.50	0.54	1.17	18.34	46.36	2.58	2.79
CaO	48.12	46.36	43.11	0.16	0.12	29.62	42.76
MgO	0.61	0.68	0.96	0.01	0.08	0.50	0.61
K2O	0.32	0.33	0.38	0.1	0.07	0.29	0.31
Na2O	0.12	0.11	0.12	0.03	0.04	0.05	0.11
So3	0.14	0.19	0.19	0.02	0.14	0.19	0.16
TiO2	0.12	0.16	0.16	4.98	2.36	0.16	0.35
LOI	38.66	37.39	35.32	18.9	11.5	27.00	35.65
SUM	99.36	99.50	99.61	99.56	98.53	99.35	99.39
LSF	165.61	124.28	88.67	0.14	0.11	28.81	97.62
SM	7.11	8.58	5.23	0.41	0.34	4.50	2.43
AM	1.78	1.76	1.66	1.91	0.36	1.93	1.03

#### RAW MIX DESIGN OF THE PROPOSED CLINKER MANUFACTURING

- The above raw mix has been projected and arrived at based on the geological exploration results viz., Lithological characteristics of limestone deposits, Chemical composition and estimated quantity limestone reserves with its quality variancesetc.,
- ii) 8% of Limestone will be taken from Kolimigundla Mine
- iii) The above tentative raw mix will vary depends on the changes in various processparameters.

#### MINERAL AVAILABILITY

Name of Mine	Minable Reserves (in Mill.Tons)
Chintalayapalle mine	166.654
Kolimigundla mine	*102.204
Kanakadripalle mine	74.055
Nayanapalle mine	222.425

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Total		565.338
<b>T</b> ( )		F.C.F. 2.2.0

**Note:**\*102.204milliontonsoflimestoneincludesMinableReservesand Resources. **Mineral Conservation:** 

In order to utilize the available Siliceous and Flaggy Limestonegrades of limestone in all the feeding mines judiciously and optimally, a suitable blending proportions has been evaluated and thus resulted in utilizing and consuming the siliceous and flaggy limestone which are above the threshold limits prescribed by the Indian Bureau of Mines. Hence, substantial quantity of siliceous and flaggy limestone available in the two nos. of the mining leases, out of the total 4 no. of feedingmines.

Name of Mine	Minable	Low Grade, Siliceous and Flaggy Limestone					
	Reserves	Reserves present out of total Minable reserve					
	(in Mill.Tons)	Low Grade	Siliceous and Flaggy				
		Limestone	Limestone				
		(inMill.Tons)	(in Mill.Tons)				
Chintalayapalle mine	166.654	1.746	0.671				
Kolimigundla mine	*102.204	2.173	7.213				
Kanakadripalle mine	74.055	3.006	2.569				
Nayanapalle mine	222.425	29.424	21.383				
Total	565.338	36.349	31.836				

#### **RESERVES IN THE MINES**

Note: \*102.204 million tons of limestone includes Minable Reserves and Resources.

It is proposed to consume about 31.836 million tons of siliceous and flaggy limestone in overall life of the mine which are all sub grade quality and it leads to increase the longevity of themine.

#### JUSTIFICATION FOR OPENING OF MINES:

The Govt. of A.P. vide Memo No. 510020/2018/A1-MINES.III-INDS dt.04.10.2018, had accorded M/s The Ramco Cements Limited, extension of time for period of 3 years, i.e., up to 13.10.2021 to establish cement plant, production and for commencement of mining operation after obtaining all the necessary clearances from both the MoEF&CC and StatePCB.In this context, following statutory clearances for the Cement plant and Mines:

#### **CEMENT PLANT:**

Environmental Clearance has been obtained vide Lr No. J- 11015/135/2017-IA.II (I) dt. 14.01.2019 for the capacity of 3.15 MTPA clinker, 2.0 MTPA cement and 2X 25 MW TPP

Consent for EstablishmentobtainedvideorderNo:289/APPCB/CFE/RO-KNL/HO/2019Dt:12.05.2019fromAPPCBandsubsequentamendmentorderno:289/APPCB/CFE/RO-KNL/HO/2019 Dt: 10.12.20190.12.20190.12.2019

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#### **MINES**:

1) Among the 4 nos. of Mining Leases, Environmental Clearance has been obtained vide approval Letter No: F.No. J- 11015/15/2017-IA.II (M) dt. 23.03.2020 for the production capacity of 4.00 MTPA in respect of Chintalayapalle Limestone Mine. Consequently, Consent for Establishment has been obtained from APPCB vide order No: 302/PCB/CFE/RO-KNL/HO/2020 dated.17.06.2020. Consent for Operation from APPCB is awaited.

2) Obtaining Environmental Clearance for the other attached mining leases named Kolimigundla (present proposal), Kanakadripalle (TOR obtained vide F. No.J-11015/6/2019-IA.II (M) dated. 13.12.2019) and Nayanapalle (TOR obtained vide F. No. J-11.015/95/2017-IA.II (M) Dated 08.11.2017 is in process.

3) In a phased manner, based on the accomplishment of required statutory clearances, all the proposed mining leases will be commenced for mining operation in order to feed the limestone required for cement plant.

Point – 2: The Committee observed from the KML file that PP has shown safety area and mineable area, but it is not clear that what is effective area of mining, what is the area under safety zone, reserves available in the mining area, reserves blocked in the safetyzone.

**Reply:**The details of effective area of mining, area under safety zones along with reserves blocked and reserves available for mining are given below:

Area in Ha			-	sources & Bloc Million Tons	ked	Reserve
Mining	Effective	Area	Minable	Resources	Reserves &	Reserves &
Lease	area of	under	Reserves	(Which	Resources	Resources
area	Mining	Safety	Available	May	blocked in	blocked in the
		Zone	in The	convert in	the safety	safety Zone
			Mining To Zone (ML		(Habitations	
			Area	reserves)	Periphery,	/occupations)
				in ( Million	Road,	
				Tons)	Nalla,	
				Effective	Electric	
				Mining	lines &	
				Area	Bench	
					slope etc )	
255.00	131.05	123.95	3.352	34.754	30.003	34.095

Overall limestone deposit present in 255.00 Ha area of KGBlock

Point-3: The stage wise mine development plan, clearly showing rivers, safety distances,

villages, roads, mine lease, water bodies, embankments, OB dumps, plantations etc. showing critical distances has not available in the EIA/EMP for drawing the appropriate mitigation measures in terms of method mining, method of blasting, monitoring of PPV and AoP due to blast induced vibrations.

**Reply:**PP has submitted the stage wise mine development plan along with plantation plan. PP submitted that there are no rivers within the mining lease area. Madavagu is flowing outside the minearea. No villages are located in the mining lease area except for few habitations for which safety zone of 200 m radius will be left as non-mining area.Road passing through the ML area connecting Kolimigundla - Jammalamadugupasses through the area from West toEast

The following safety distances will be maintained for various structures:

S. No	Feature	Safety Distance provided, M		
A	Pockets of habitation with few houses,College and PetrolBunk	200 m radius		
В	A public road from Kolimigundla to Jammalamadugu passes through the area from West to East.			
С	Mining lease comprises of 11kVA power lines.	50 m on either side		

SAFETY DISTANCES IN MINING LEASE AREA

There are no water bodies or embankments existing in the mining lease area.

#### METHOD OF MINING

Method mining has been arrived at considering the above points with conventional drilling and blasting. RCL will adopt controlled blasting sequential blasting to reduce the impact dueblasting.

National Institute of Rock Mechanics (NIRM) has carried out studies for RCL mine i.e., Nayanapalli located (1.4 km from the subject mine)

NIRM has drawn Predictor equation to arrive at Maximum Charge Per Delay to limit the ground vibrations /Peak Particle Velocity to less than2mm/sec

The predictor equation of NIRM is used for the subject mine Predictor equation  $V=339(D/\sqrt{Q})^{-1.16}$ .

#### CALCULATED MAXIMUM CHARGE PER DELAY IN kg

Distance from blast, m	Suggested safe maximum charge per delay, kg
750	80.6
775	86.1
800	91.7
825	97.6
850	103.6
875	109.8

\*Maximum charge estimated is based on NIRM study done for Nayanapalli Mine. Charge weight will be less for Kolimigndla Mine

The proposed blast designs by The Ramco Cements using 114mm diameter and 150mm diameter drill holes (with a maximum charge per delay of 80kg and 112kg respectively) will restrict the ground vibration at habitation within 2mm/s.

#### SAFETY DISTANCES & MEASURES

The following safety distances will be followed to reduce the impact on habitation and various structures located within the mining leasearea

- 7.5 m barrier zone along MLboundary.
   200 m distance from Habitation is proposed against the DGMS permitted safety distance of 50 m from the habitation
- All safety precautions specified by DGMS will be followed during blasting. Prior approval will be obtained from DGMS to carryout mining activity in the safetyzone.
- Safety bunds of 1.5 m height will be provided all along the mine Boundary as part ofsafety.

#### MONITORING OF BLASTING AND SAFETY PRECAUTIONS

Each and every blast will be monitored with blast mate instrument at mineboundary.

All other safety precautions specified by DGMS will be followed during blasting. Care will be taken to evacuate the mining area completely at the time of blasting operations. The blasting team will be equipped with all personal safety and precautionary measures. The following safety measures will be taken while conducting the blastingoperations.

• A blasting SIREN will be used at the time of blasting for audio signal.

• Before blasting and after blasting, red and green flags will be displayed as visual signals.

• Warning notice boards indicating the time of blasting and NOT TO TRESSPASS will

be displayedprominently.

Point – 4: The Committee also observed that PP has mentioned that dumper will be used for transportation of the mineral but it is not clear that whether HEMM will be used or tippers will be deployed for transportation. Therefore, for better understanding of the project PP is required to submit the above mentioneddetails.

**Reply:** PP submitted that tippers having 20 tons capacity will be deployed for transportation of limestone from Kolimigundla Limestone Mine to Crusher located at CementPlant.

Point – 5: The PP submitted that permission obtained from Water Resources Department, Govt. of Andhra Pradesh for utilization of 2500 KLD of surface water from Owk Reservoir, vide Letter No. EE/SRBC Divn.No3/Owk/IWS/186 M dated 27/05/2019. The Committee is of the view that PP should submit the timeline by which mine will become self-sufficient/water positive for requirement of water.

**Reply:**PP submitted that water requirement of the mine is 90 m<sup>3</sup>/day. Water requirement will be initially supplied by Cement Plant (from Owk Reservoir – permissionobtained).

The mine will reach self -sustenance in Fourth year of operation of mine as per the given table

	DETAILS OF SELF SOSTAINANCE OF WATER FOR MINING OPERATIONS							
Year	Pit Area			Evaporation		Number	Remarks	
	На	annual in	direct	losses (50%)	available	of days		
	(approx.	m)	precipitation	(m³)	(m³)	sustain		
	)		into the pit (m³)					
1	3.74		27302	13651	13651	152	-	
2	5.37		39201	19600.5	19600.5	218	-	
3	7.0		51100	25550	25550	284		
4	8.63	0.73	62999	31499.5	31499.5	350	Mine will become self- sufficient for itsWaterrequir ement by the end of	
5	10.26		74898	37449	37449	416	4 <sup>th</sup> year.	
6 7	11.89 13.52		86797 98696	43398.5 49348	43398.5 49348	482 548	-	

#### DETAILS OF SELF SUSTAINANCE OF WATER FOR MINING OPERATIONS

A sump of 1.7 Ha with 8 m bench will be created in the bottom most benches to store the rain water for use in the mining operations.

## Point–6:The Committee observed that plantation plan needs to be revised as F.Y 2018-19 &2019-20 is already over. PP needs to show the area on map where plantation will bedone.

**Reply:** PP submitted that the plantation plan has been revised. RCL has completed the plantation program as planned for F.Y 2018-19 & 2019-20. Future plantation plan from the year 2020 up to the mining lease period 2050 is given below along with number of species and budget for thesame:

PERIOD	Area (ha)		Locations		Budget (Rs.in Lakhs)		
(Years)	Planned area	Density of Plantation	Total number of Sapling proposed	Type of species	Capital @Rs 150 /- per sapling	Recurring @Rs 40 /- per sapling	
2018-20 RCL has Completed afforestation	2.06	2500 saplings/Ha	5150	<ul> <li>Azadirachtaln dica (Neem),</li> <li>Ficus religiosa (Peepul)</li> </ul>	*7.72	*2.06	
Proposed Plan	tation			<ul> <li>Leucaena leucocephala</li> </ul>			
2020-21	4.8		12000	<ul> <li>(Subabul),</li> <li>MangiferIndic a (Mango),</li> <li>Tamarindu s Indica (Tamarind),</li> <li>Saraca India</li> </ul>	18	4.8	
2021-22	5.6		14000	(Ashoka) • Dalbergia	21	5.6	
2022-23	5.0		12500	Sisoo (Sisoo), • PongamiaPinn ata (Ganuga),	18.75	5.0	
2023-24	4.9		12250	<ul> <li>Eugenia Jambolina(Ner edu),</li> </ul>	18.375	4.90	
2024-25	2.64		6600	<ul> <li>Emblicaofficin ale (Usiri).</li> </ul>	9.9	2.64	
2025-2050	-		-		-	@ Rs 1 Lakhs/annum	
Total	25.00	-	62500		93.75	49.00	

\*RCL has already spent Rs 7.72 Lakhs under capital cost and 2.06 Lakhs under recurring cost for plantation takenup in the years2018-2020

Point – 7: The PP reported that the proposed mining lease area is255.0 ha, out of which 238.19 Ha patta lands and 16.81 Ha of Govt. land. No rehabilitation or resettlement is proposed. RCL has purchased 156.5 Ha of patta land paying suitable compensation by the year 2006 – 2007. RCL has paid additional amount of Rs. 0.75 lakh per acre for all the lands purchased before 2008, through District Collector, Kurnool. The Committee is of the view that still 81.69 Ha of land is remaining. Therefore, PP needs to confirm the status of the same, whether PP is planned to purchase the same or not. What about the R&R plan for thesame.

**Reply:**PP submitted that the proposed mining lease area is 255.0 ha, out of which 238.19 Ha is patta lands and 16.81 Ha is Govt.land.The mining area covers pockets of habitation, College and Petrol Bunk. It is proposed to leave safety zone around all these structures as per DGMS guidelines. No rehabilitation or resettlement isproposed. PP submitted that Ramco Cements has allowed the previous land owners to carryout agricultural activities till the lands are put to use as a goodwill gesture and they have agreed to vacate the lands as and when the **factory comes up.Of the Patta land of 238.19 Ha, 147.267 Ha of patta land is purchased by paying suitable compensation based on mutual agreement with land owners.** 

Most of the Patta lands of the subject mine are purchased in the year 2000 and allowed the farmers to continue for cultivation till date (for a span of nearly 19years). RCL has paid an additional amount of Rs. 0.75 lakh per acre for all the lands purchased before 2008, through District Collector, Kurnool.In unpurchased land of 90.923 Ha, 46.808 Ha is required to be purchased (6.728 Ha in Safety zone which is required for allied activities like transport of limestone (No dwellings) and balance 44.115 Ha lands will not be purchased. However in extraordinary situations and in exigencies, due to local villager's request, RCL may purchase few lands but RCL will not extract limestone and also will not be disturbing the dwellingsalso.RCL will purchase balance required land of 46.808 Ha belonging to 32 land owners required for mining operation with mutual consent of Mine owners. Compensation will be paid considering two times of the market price while purchasing the land. About Rs 11.57 crores is budgeted for Land acquisition which is part of capital cost.In addition to the compensation, RCL will consider employment for the potential candidates and provide contracts like plantation and other unskilled jobs for the Uneducated.

## Point – 8: The Project Proponent submitted Capital cost of Environmental Management Plan is estimated to be about Rs. 88.5 Lakhs and recurring cost is about Rs. 3842.6 Lakhs for 170 years. This include:

L Air pollution control measures – Rs. 35 Lakhs (Capital) and Rs.

10 Lakhs(Recurring),

- **L** Occupational health measures– Rs. 6 Lakhs (Capital) and Rs. 1.2 Lakhs(Recurring),
- **L** Environmental Monitoring Rs. 9.5 Lakhs(Recurring),
- N. Greenbelt Rs. 32.5 Lakhs (Capital) and Rs. 1.2 Lakhs (Recurring),
- V. Rainwater Harvesting Rs. 5 Lakhs (Capital) and Rs. 1 Lakhs (Recurring) and
- **M** Wildlife Conservation Rs. 10 Lakhs(Capital).

The Committee is of the view that PP has taken the cost for170 years but the lease is granted for the less period. Therefore, all the estimation needs to be done for the lease period only. In addition to this PP also provide the details of the Environmental Management Cell, frequency of monitoring for air, water, noise and soil quality, number and tentative location of the monitoring station to be set up.

Env Component	Measures	Capital Cost Rs in Lakhs
Air Pollution Control Measures	Atomized Water Sprinklers And Tanker	35
Occupational Health Measures	Initial medical examination of personnel, Personal Protection Equipment and Sign Boards	6
Greenbelt	Saplings	93.75
Rainwater Harvesting	Bunds Formation for guiding of rainwater	5
Wild Life Conservation	Budget approved by PCCF for Wildlife Conservation	10
Total		149.75

**Reply:** PP submitted that all estimation are revised for lease period. The Revised EMP Capital Cost and Recurring Cost considering the lease period of 2050 is given below:

#### YEARWISE CAPITAL AND RECURRING COST OF EMP (Rs in Lakhs)

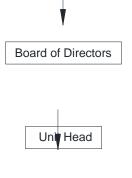
YEAR	AIR POLLU CONT MEAS	ROL	AL HEAL	JPATION .TH SURES	ENVIRO MONITO	NMENTAL DRING	GREENBE	ELT	RAINW HARVE		WILD LIFE CONSER VATION	CONSER MANAGEM	
	с	⁺R	с	⁺R	c	⁺R	с	⁺R	с	⁺R	С	Capital	⁺Recu rring
2018-20	-	-	-	-	-	-	*7.72	*2.06	-	-	-	*7.72	*2.06
2020-21	35.0	-	6.0	0	0	9.5	18	4.8	5	0	#10	74	14.3
21-22	0	10	0	0	0	9.5	21	5.6	0	1	0	21	26.1
22-23	0	10	0	0	0	9.5	18.75	5.0	0	1	0	18.75	25.5
23-24	0	10	0	0	0	9.5	18.375	4.90	0	1	0	18.375	25.4

#### Minutes of meeting of 24th EAC (Non-coal Mining) held during 9th -10th December, 2020

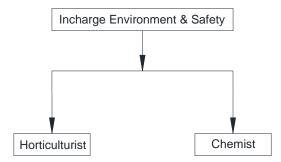
Total Cost	35	309	6	31.7	0	303.5	93.745	49	5	30.9	10	149.75	724.1
49-50	0	12	0	1.4	0	11.5	0	1	0	1.2	0	0	27.1
48-49	0	12	0	1.4	0	11.5	0	1	0	1.2	0	0	27.1
47-48	0	12	0	1.4	0	11.5	0	1	0	1.2	0	0	27.1
46-47	0	12	0	1.4	0	11.5	0	1	0	1.2	0	0	27.1
45-46	0	12	0	1.4	0	11.5	0	1	0	1.2	0	0	27.1
44-45	0	12	0	1.4	0	11.5	0	1	0	1.2	0	0	27.1
43-44	0	12	0	1.4	0	11.5	0	1	0	1.2	0	0	27.1
42-43	0	12	0	1.4	0	11.5	0	1	0	1.2	0	0	27.1
41-42	0	12	0	1.4	0	11.5	0	1	0	1.2	0	0	27.1
40-41	0	12	0	1.4	0	10.5	0	1	0	1.2	0	0	26.1
38-39	0	11	0	1.3	0	10.5	0	1	0	1.1	0	0	24.9
37-38	0	11	0	1.3	0	10.5	0	1	0	1.1	0	0	24.9
36-37	0	11	0	1.3	0	10.5	0	1	0	1.1	0	0	24.9
35-36	0	11	0	1.3	0	10.5	0	1	0	1.1	0	0	24.9
34-35	0	11	0	1.3	0	10.5	0	1	0	1.1	0	0	24.9
33-34	0	11	0	1.3	0	10.5	0	1	0	1.1	0	0	24.9
32-33	0	11	0	1.3	0	10.5	0	1	0	1.1	0	0	24.9
31-32	0	11	0	1.3	0	10.5	0	1	0	1.1	0	0	24.9
30-31	0	11	0	1.3	0	10.5	0	1	0	1.1	0	0	24.9
29-30	0	10	0	1.2	0	9.5	0	1	0	1	0	0	22.7
28-29	0	10	0	1.2	0	9.5	0	1	0	1	0	0	22.7
27-28	0	10	0	1.2	0	9.5	0	1	0	1	0	0	22.7
26-27	0	10	0	1.2	0	9.5	0	1	0	1	0	0	22.7
25-26	0	10	0	1.2	0	9.5	0	1	0	1	0	0	22.7
24-25 25-26	v		-	=	÷		9	2.64 1	v	1	-		_

Note:\*RCL has already spent Rs.7.72 Lakhs under capital cost and Rs. 2.06 Lakhs under recurring cost. #Already deposited in PCCF Account+Recurring cost is with escalation for every 10 years

PP submitted that Capital cost of Environmental Management Plan for the lease period upto 08.08.2050 is estimated to be about Rs. 149.75 Lakhs and recurring cost is about Rs. 724.1 Lakhs for 30 years. The details of the Environmental Management Cell are givenbelow:



Mines Head



PP has submitted a map showing location of the monitoring stations also PP submitted that the Frequency of monitoring for air, water, noise and soil quality, number and location of the monitoring stations are given below:

		Code	Location		
Ambient Air Quality		A1	Mining Lease		
	Monitoring		Area		
	Locations	A2	Kolimigundla		
	Locations	A3	Kalvatala		
	Monitoring	Twice a week d	uring operation		
	Frequency	pł	nase		
	Parameter of	PM10;PM2.5; S	O2;NO2; CO;		
	monitoring				
Dust Fall	Monitoring	DF1	Mining Lease		
Measurement	Locations		Area		
		DF2	Kolimigundla		
		DF3	Kalvatala		
	Monitoring	Once in a season during operation			
	Frequency	phase			
	Parameter of	Dust Fall- pH ,Total undissolved			
	monitoring	matter, Total dissolved matter, total solids, ash (As Per IS 5241 Part 1)			
		Code	Location		
Noise Monitoring	Monitoring	N1	Mining Lease		
_	Locations		Area		
		N2	Kolimigundla		
		N3	Kalvatala		
	Monitoring	Once in a month (	24 hours monitoring		
	Frequency	on hourly basis) as per manufacturer			
		standards & CPCE	•		
		Standards			
	Parameter of	Noise levels - Noi	se Monitoring		
	monitoring	(usingQuest Q 190	00/500 noise level		
		meters)			

ENVIRONMENTAL MONITORING PROGRAMME

		GW1	Mining Looso		
Ground Water		GWI	Mining Lease Area		
Quality Monitoring	Monitoring	C11/2			
	Locations	GW2 Kolimigundla			
		GW3	Kalvatala		
		GW4	Itikyala		
	Monitoring Frequency	Once in a Month.			
	Parameter of	As per IS 10500 (drinking water			
	Monitoring	quality standard)	_		
Surface Water	Monitoring	SW1	MadaVagu		
<b>Quality Monitoring</b>	Locations	SW2	Mine pit		
	Monitoring Frequency	Once in a Month. pH, DO, TSS, BOD, COD, Oil & Grease, Sulphate, Phosphate, Chloride Residual Free chlorine, Ammonical			
	Parameter of				
	monitoring				
	incline				
		Nitrogen, Kjeldhal nitrogen, Coliforms (Ecoli), MPN.			
Soil Quality	Monitoring	S1	Mining Lease		
-	-	51	Area		
Monitoring	Locations	S2	Kolimigundla		
		S3	Kalvatala		
	Monitoring Frequency	Once in a Month.	Kalvatala		
	Parameter of	As per CPCB for t	he following		
	monitoring	parameters	le rene mig		
	monitoring	Particle sized	lictribution		
		Texture			
		• pH			
		Electricalcon	ductivity		
		Cation excha	angecapacity		
		Alkalimetals			
		Sodium Absorptic	on Ratio (SAR)		

Point-9: The PP submitted that Corporate Environment Responsibility (CER) budget as per MoEFCC's office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018 for Rs 10.833 crores capital cost of subject mine is estimated to be about Rs. 22 Lakhs. This willinclude

**3)** Construction of DiningHallinZPHighSchool, Kolimigundla – Rs. 18 Lakhs to bespent in 2 years and

4) ConstructionofToiletsatKolimigundla,ItikyalaSchools- Rs. 4 Lakhs to be spent in 2 years. Additionally, RCL had allocated about Rs. 70 lakhs for providing the infrastructure facilities at the Belum caves, as a part of RCL Plant Corporate Environmental Responsibility. The Committee observed that project cost should also include the cost of land and based on which CER needs to be defined, the Committee is also not agreed with the activities proposed in the CER and is of

#### the view that PP should revise thesame.

**Reply:** PP submitted that Corporate Environment Responsibility (CER) budget as per MoEFCC's office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018 for revised capital cost Rs 22.40 crores of subject mines is estimated to be about Rs. 44.8Lakhs.The detail breakup of the budget towards revised CER is givenbelow:

	Revised CER			
S.No.	Description	Budget in Lakhs		
		1stYear	2ndYear	
1	Construction of rainwater harvesting system at Kalvatala, Kolimigundla& – 01 No's Each Village @ 1.0 Lakhseach.	2.0	-	
2	Providing Solar lights to Kolimigundla Bus Stand.	-	12.0	
3	Construction of Toilets at Kolimigundla, Itikyala Schools - Rs. 4 Lakhs to be spentin 2 years.	2.0	2.0	
4	Providing Tree Guards for Kolimigundla, Itikyala Schools	6.0	6.0	
5	Providingside drains for Kolimigundlaand itikyala villages	8.5	8.5	
	Total	16.5	28.5	

### Point-10: The Committee is of the air quality modelling needs to be revised considering theimpact of activities in the vicinity of the mining lease and details such as pre-dominate wind direction etc. should be clearly mentioned in thereport.

**Reply:** PP has submitted predominant wind directions were from ENE-E-ESE-SE sector accounting to about 49.64% of the total time. Average wind speeds during this period were varying between 1.01-15 kmph and during most of the time the winds were more than 10 kmph. The wind of less than 1.01 kmph was treated as calm, about 13.0% of the time the winds were under calm condition. the revised air quality modeling.PP submitted that Meteorological data was collected through auto weather monitoring station installed near the proposed cement plant site. The impact of the operating industry mines are already reflecting in the baseline data collected during Post Monsoon, 2017. Hence for estimation of cumulative impact, the emissions from the following proposed sources are considered: Cement Plant of RCL, 3.15 MTPA of Clinker ( 2 x 1.575 MTPA), 2.0 MTPA of Cement, 50 MW (2 X 25 MW) Coal Based Captive Power Plant Limestone Mines of RCL (TOR granted by MoEFCC), 1.0 MTPA Limestone production from Kolimigundla Limestone Mine, 4.0 MTPA Limestone production from Chintalayapalle Limestone Mine, 0.1 MTPA Limestone production from Kanakadripalle Limestone Mine, 1.5 MTPA Limestone production from Nayanapalle Limestone Mine.

#### PP submitted that Predicted maximum cumulative ground level concentrations obtained

are superimposed on the following existing baseline concentrations to project the overall post scenario in the study area. The Overall Scenarios with predicted concentrations over the baseline are shown below:

24-Hourly Concentrations	Particulate Matter - 10 (PM10)	Particulate Matter - 2.5	Sulphur Dioxide (SO2)	Nitrogen Dioxide (NO2)
Baseline concentration, max	57.4	28.0	12.8	14.4
Predicted Ground level Concentration (Max)	12.91	1.66	7.96	17.13
Overall Scenario	70.31 {100}	29.66 {60}	20.76{80}	31.53 {80}

PP submitted that the ambient air quality values are not exceeding the stipulated standards due to proposed project. When the predicted values are superimposed on the baseline value i.e., when the contribution of proposed project is added to the background air quality.

Point-11: The Committee observed that issue raised during PH refer to Lord Shree Narshimha Swamy Temple, regular health camps, adoption of mirzapur village, damage to agricultural crops, additional compensation, dairy industry, Belum Caves which is 3 KM away etc. Therefore, PP needs to submit the action plan for the same addressing all the issue raised duringPH.

**Reply:** PP has submitted that:

1. The RCL has allotted 7.5 Crores for developing Lord Shree Narshimha Swamy Temple through Endowment Department (through District Collector). The Temple design drawings have been approved by Endowment Department. Finalization of Contract is underprogress.

2. The RCL has allotted Rs. 70 Lakhs under CER (Plant) for developing infrastructure at Belum Caves. We have submitted request letters to Andhra Pradesh Tourism Development Corporation for developments (through District Collector) works at Belum Caves as per CER allotted Budget. We are waiting for response from Andhra Pradesh Tourism Development Corporation.

3. Additional compensation has been paid Rs. 0.75 Lakhs per Acres through DistrictCollector.

4. Necessary coordination will be made as per CER & CSR activities to Mirzapuram Village after receiving requests from Village Committee.

5. Regular health camps are being carried out in surrounding villages.

# Point-12: The Committee also observed that EIA/EMP report uploaded online and submitted to the Ministry is not the same and some pages are missing in the online report. The Committee warned the consultant to ensure that document submitted online should be complete and correct in all respect.

**Reply:** PP submitted that BSET would like to submit that Annexure – 7A (Public Hearing Minutes) was scanned two times as a result the number of pages are more in the circulated documents. BSET submits that the mistake was unintentional and will not repeat the same in future.

21. Based on the discussion held and information submitted by the PP and the Consultant during the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020,the Committee **recommended** the proposal for grant of environmental clearance for Kolimigundla Limestone Mine (ML Area: 250.0 Ha) of M/s The Ramco Cements Limited for Limestone production of 0.6 MTPA located at Kolimigundla Itikyala&Kalvatala villages, Kolimigundla Mandal, Kurnool Dist. Andhra Pradeshsubject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects:

- i. PP shall demarcate the 250 m safety zone from the edge of habitation, school, agricultural fields, petrol pump, public road and power lines etc. within the mining lease area and necessary land area shall be acquired for the same.
- ii. Blasting activity shall be done with all valid permissions and all the safety precautions should be takenduring blasting and timing of the blasting shall be planned in a manner so that it does not match with the students movement. Blasting should be restricted up to 4.5 m depth.
- iii. PP should explore the possibility of rain water harvesting in addition to the proposed structure within the lease area for which PP may use budget from proposed CER budget.
- iv. Purchasing of vehicles through budget proposed under Wild Life conservation plan is not allowed. The same budget shall be used for creating the water bodies within the lease area.
- v. Mining in first 10 year will be restricted to only in southern zone of the lease area.
- vi. The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020.

1.3: Enhancement of Iron Ore mining capacity from 0.05 MTPA to 2.95 MTPA with 1.0 MTPA Beneficiation plant by M/s JayaswalNeco Industries Limited at the mining lease area 192.25 Ha located at village – Chhotedongar, Tehsil and District – Narayanpur, Chhattisgarh. [Proposal no: IA/CG/MIN/181523/2019; File No. J-110105/62/2019-IA. II(M)]- consideration of EC

The proposal of M/s JayaswalNeco Industries Limited for Enhancement of Iron Ore mining capacity from 0.05 MTPA to 2.95 MTPA with 1.0 MTPA Beneficiation plant in the mining lease area of 192.25 Ha located at village – Chhotedongar, Tehsil and District – Narayanpur, Chhattisgarh. The mine lease area falls under the Survey of India Toposheet No 65 E/7 and bounded by latitude 19°25'40.356"N - 19°27'09.423"N and longitude 81°15'37.175"E - 81°17'34.507"E.

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category A or Activity 1(a) Mining of minerals as the mining lease area is greater than 100 ha.

3. Project Proponent applied for Terms of Reference (TOR) vide Proposal No: IA/CG/MIN/108636/2019 dated 20.06.2019 and submitted the requisite information and documents. The proposal was considered in the EAC meeting held during 27-28 August, 2019 wherein the Committee recommended for issue of Terms of Reference and the Ministry accorded TOR to M/s JayaswalNeco Industries Limited on 20.03.2020. PP also submitted that the Environment Clearance was granted by the Ministry vide Letter No. J-11015/152/2005-IA.II(M) dated 05.02.2007 under EIA Notification, 2006 to M/s JayaswalNeco Limited for iron ore mining with production capacity of 50000 tonnes per annum (0.05 MTPA). PP mentioned that the company name has been changed from M/s JayaswalNeco Limited to M/s JayaswalNeco Industries Limited on 05.11.2007. Thereafter, PP applied for Transfer of EC for name change vide Proposal No. IA/CG/MIN/121273/2019 dated 18.10.2019 and accorded Transfer of EC vide F. No. J-11015/62/2019-IA.II (M) dated 09.10.2020 in the name of M/s JayaswalNeco Industries Limited.

PP now applied vide proposal no. **IA/CG/MIN/181523/2019** for grant of EC and submitted the Form 2 and EIA Report after conducting the Public Hearing. As the complete details was not provided an EDS was raised on 11.11.2020 for submission of requisite information. PP uploaded the information in the PARIVESH vide Lr JNIL/MoEF/CD/2020/452 dated 12.11.2020 and the proposal was placed in the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020.

4. PP submitted that the Government of Chhattisgarh vide Letter No-3–52/98/12/2, Bhopal dated 21.05.1998 issued Letter Of Intent for grant of mine lease of iron ore over 192.25ha, located at village – Chhotedongar, Tehsil and District – Narayanpur, Chhattisgarh for a period of 30 years. The State Government of Chhattisgarh granted mining lease over 192.25Ha vide Letter No. F-.3-52/98/12/2 dated 05.05.2005. PP submitted that the mining lease agreement was executed on 21.06.2005 for a period of 30 years with effect from 21.06.2005 to 20.06.2035. Since the Mining Lease is a captive lease for the Integrated Steel Plant of JNIL, as per the provisions of the Mines & Minerals (Development & Regulation) Amendment Act, 2015, the period of lease was extended to 50 years from the date of execution of the Lease deed. Accordingly, the District Collector issued letter vide Lr No. Khanij/ Khanipatta-01/05/2016/1512, 27.06.2016 and the Mining Officer Narayanpur dated vide Letter No. 1966/Khanij/KhaLip1/ML8/96/2016, Jagdalpur dated 09.08.2016 for execution of the Supplementary Lease Agreement. The Supplementary Lease Agreement was executed on 08.08.2017 in the name of M/s JayaswalNeco Industries Limited extending the mining lease over Chhotedongar Iron Ore Deposit up to 20.06.2055.

5. PP submitted that the Review of Mining Plan along with Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM) vide letter Narayan/Iron Ore/MP-1220/2018-Raipur/573 dated 17.12.2019 for the period of 2020-21 to 2024-25 in the name of M/s JayaswalNeco Industries Limited.

6. PP submitted that the mining will be carried out by mechanized opencast method which involves drilling, blasting, crushing and screening, washing, loading, and transportation with the combination of with the combination of excavator, rock breaker, wagon drill of 100 mm diameter for blast hole drilling, air compressor, ripper dozer, hyva dumper, pay loader, truck mounted water sprinkler, weigh bridge, storage system of fuel oil with dispensing unit, crushing & screening units, beneficiation plant, hired trucks for transporting mineral, ambulance, DG sets, water pump etc.

PP submitted that the Geological mineral reserves are estimated as 87.046 Million Tonnes and the Mineable reserve are 77.521 Million Tonnes. Considering ROM production @ 2.95 MTPA the anticipated life of whole of the mine will be about 27 Years. PP reported 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. It is estimated that about 64,000 Cum waste shall be generated during the proposal Period. This waste shall be in the form of Overburden, Side Burden or Intra-burden. The earmarked Waste Dump Site is located towards south-east of working pit within diverted land of 27.65 Ha. Thus, at the end of Conceptual Period in the said mining block there will be a quarry of 17.58 Ha from 862m to 808m i.e. 54m depth comprising of 9 Numbers of benches each of 6m height and 9m width. Overall slope of the quarry will be maintained at 35°. The excavated ROM will be transported to the Crushing and Screening. The lump to fines ratio at precrushing stage is expected to be about 1:0.30. The graded lumps and fines with

requisite Fe content shall be directly discharged to the Integrated Steel Plant. Some part of the ROM shall be sent to Beneficiation Plant from where two products viz. Concentrates and Tailings would be available. As the Tailings would also be having about 20% to 22% Fe content, it is proposed to sell this waste to cement plant / brick manufacturing unit / tiles manufacturing unit or will be blended with graded ore and sold. The mined Iron Ore Lumps and beneficiated Iron Ore Fines suitable for use in the ISP shall be loaded into the trucks and shall be sent to the designated Weighbridge for weighing and for onward dispatch to the Integrated Steel Plant of the Company located at a distance of about 260 Kms from the Mine in Siltara Growth Centre near Raipur. The proposed road for the transport of iron from the mine face to end user passes through forest land and specific permission for the transport of iron ore from the forest land has been obtained.

7. PP submitted that the hydro geological study concludes that there is no intersection of ground water during mining down to the depth of 75 m bgl. The maximum RL of mine bottom will be 808 m AMSL whereas water table will be below 600 m AMSL. The depth of water level in pre-monsoon is in the range of 5.30 to 9.60m bgl and in post monsoon period is in the range of 0.70 to 4.36m bgl. The average annual fluctuation in the area is 5.03m.

PP submitted that the out of 330 KL/Day water requirement, 325 KL/Day water shall be sourced from Madin River and perennial Nalla locally named Kadam Nalla located at 3 Km away from the mining Lease area. It is proposed to deploy 4 numbers of water tankers each having 10 KL capacity for carrying water from River / Nalla to Mine Site for using it for various purposes. The 5 KL/ Day domestic water requirement shall be sourced from the Bore Well proposed to be sunk near foot hill region of the mine site. Potable water will be pumped though bore well and shall be supplied to the mine site through separate water tanker. PP submitted the NOC for ground water abstraction for 5.0 m<sup>3</sup>/day obtained from CGWA vide CGWA/NOC/MIN/ORIG/2020/7734 which is valid from 18.03.2020 and valid up to 17.03.2022. PP also informed that the application for use of surface water from Madin River / Kadam Nalla of 330m<sup>3</sup>/day submitted to WRD, Chhattisgarh. PP submitted that the process waste-water generated from the plant will be treated in thickeners and will be re-circulated. Excess water from the processed ore will be recovered through Dewatering screens and that from tailings will be removed through pressure filter technique and the water thus collected will be re-circulated in the process. Thus, there will be only a net process water loss of about 231 m<sup>3</sup> /day in the form of moisture in finished product and tailings.

8. PP submitted that the total area proposed under plantation shall be 21 Ha which will bring about 11% of the Project Area. Considering rate of 2000 trees per hectare, the Project involves plantation of 42,000 trees in 27 years of the Mine Life. Species proposed for greenbelt development are *Azadirachta indica (Neem), Acacia nilotica* 

(Babool),Punica granatum (Anar), Terminalia arjuna (Arjuna), Ziziphus mauritiana (Ber), Mangifera indica (Aam), Musa acuminata (Banana), Dalbergia sissoo (Shesham) Ficus religiosa (Pipal), Ocimum sanctum (Tulsi), Syzygiumcumini( Jamun),Tamarindus indica (Imli) etc. having survival rate of more than 90%. PP submitted that the budget earmarked for the green belt including plantation shall be Rs 50 lakhs.

PP submitted that the total land in the mining lease area (192.25 ha) is forest land 9. for which the Government of Chhattisgarh (Forest Department) had recommended the total 192.25 hectare mining lease area for grant of Stage 1 Approval vide letter No F-5/69/98/10/3 dated 07.12.1998. MoEF& FC granted in-principle approval for diversion of forest over an area of 91 Ha, the MoEF&CC has accorded Final Approval (Stage - II) over an area of 35.74 Ha (27.65 Ha for mining and other purposes over Ore Body - I and 8.09 Ha for Approach Road & Infrastructure) in 1st phase vide Letter No. 8- 31/99-FC dated 18-01-2007. Out of 35.74 Ha, the Forest Department granted permission to enter upon 5 Ha land vide Letter No. Ma Chi/593 dated 05-02-2016. Stage II (Final Clearance) for the balance 55.26 Ha Forest area is in process and for 101.25 Ha, Stage I (In principal Approval) is also initiated. However, NPV for the total 192.25 Ha had been deposited in the Adhoc-CAMPA fund. The Project Proponent has deposited NPV of Rs. 16,94,70,330/-(Rupees Sixteen Crore Ninety Four Lakh Seventy Thousand Three Hundred and Thirty Rupees Only) for 192.25 ha. Besides this, payment for compensatory afforestation for 91 Ha and safety zone of 8.0 Ha of Rs. 1,69,81,118/- and Rs. 6,62,175/- respectively has been deposited to the competent authority. After the payment of NPV by Company, the State Government has initiated and forwarded the detailed status of the proposal to the MOEF for necessary action on balance land 101.25 hac. MOEF has asked the State Government to submit required latest status regarding 101.25 ha balance land and compliance of stage 2 of balance land of 56 Ha. PP also submitted that the mining lease area is located in the Chhotedongar Reserved Forest and is surrounded by forest land in all directions and there is no National Park, Wildlife Sanctuary, Biosphere Reserve and Migratory Corridor of Wild animals up to 15 km from the mining lease area.

10. PP submitted that there is no presence of Schedule-I species and submitted the letter from the Forest Department dated 19.12.2019 for authenticated list of flora and fauna, distance from protected area and involvement of forest land.

11. PP submitted that the baseline data for ambient air quality ( $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$ &  $NO_2$ ), water quality, noise level, soil and flora & fauna was generated for the period during March-May 2019 (13 weeks) & October - November 2019 (6 weeks) as per the CPCB norms. PP submitted that the air quality monitoring has been carried out at 6 locations. The air quality concentrations of  $PM_{2.5}$  and  $PM_{10}$  for all the 6 AAQM stations were found between 17.3 to 34.6  $\mu$ g/m<sup>3</sup> and 31.9 to 59.6  $\mu$ g/m<sup>3</sup> respectively. The concentrations of  $NO_x$  and  $SO_2$  were found to be in range of 7.1 to 23.3  $\mu$ g/m<sup>3</sup> and 7.1 to 14.5  $\mu$ g/m<sup>3</sup> respectively. AAQ parameters in the study area have been found well within prescribed norms. The noise Levels in the ChhoteDongar Iron Ore Mine lease

buffer zone was observed in the range of 36.6 to 54.9 dB (A). PP further submitted that ground water samples were collected from 6 locations and surface water from 4 locations within study area. PP submitted that the overall quality of water samples indicated that the water quality of all the sources is satisfactory of the area are not polluted except the surface water samples which showed bacteriological contamination possibly from surface run-off. PP also submitted that total of 7 samples were collected from 7 different locations representing waste land, agriculture land and forest land at 3 different depths viz. 0-30, 30-60 and 60-90 cm below the surface. The forest land soil is found to have sufficient nutrients. The agricultural land soils are also found suitable for cultivation of climatic crops and have good fertility. PP submitted that post project concentration of various air pollutants is well within the prescribed standards.

The Project Proponent reported that Public Hearing for the project was 12. conducted on 09.10.2020 by Chhattisgarh Environment Conservation Board. The advertisement for public hearing was published in "Patrika" dated 06.09.2020 and "Business Standard Newspaper" dated 07.09.2020. Considering the prevailing of COVID-19 situation, the District Collector had ensured in the advertisement itself that all the protocol specified by the Central/State Government shall be strictly adhered to during the conduct of the said Public Hearing. The Public hearing was conducted under the chairmanship of District Collector, Narayanpur at Post Matric Boys Hostel, Village Chhotedongar, Tahsil and District Narayanpur. The Public Hearing was attended by around 200 persons out of which 183 persons have signed on the register while 76 persons (which include local males, females, unemployed youths, social workers and eminent elders) expressed their view during the course of Public Hearing. The issues raised during public hearing were also deliberated during the meeting are mainly on Employment, Health, Education, Drinking Water, Roads, Renovation of Temple, mobile network. PP submitted that to utilize the funds allocated under CER for complying with the issues raised during public hearing for the project.

13. PP submitted that the capital CSR Budget has been worked out as per the expressed felt needs of villagers during Rapid Rural Appraisal. The proposed total capital budget is to the extent Rs. 30.85 Lakhs (Rupees Thirty Lakhs &Eighty five Thousand Only) and will be spent in core and buffer villages of study area during the first five years. About Rs. 23.90(Rupees twenty tree lakhs ninety thousand only) would be spent as recurring expenditure for CSR activities respectively in the first five years. In addition to the CSR, JNIL proposes to undertake a number of activities as one time measure under the Corporate Environment Responsibility Initiative during the operation of Chhotedongar Iron Ore Mining Project. A budgetary provision of Rs. 85.58 Lakhs is proposed to be made for implementing the CER Activities. In line with the MoEF&CC OM dated 30th September 2020 and 20th October 2020.

14. PP has submitted that the entire 192.25 Ha leasehold area of the Chhotedongar Deposit is forest land, the question of R & R does not arise in this Project. However, though the Action Plan against R & R is not required, a specific action plan towards the Project Affected Persons (PAPs) shall be required. It is proposed to provide Skill development training to enhance the employability and self-employment for the local villagers, Services and Support of Social Organizations will be sought for assessment of felt needs of PAP's, Preference to procurement of support material or services, Involvement in plantation and allied activities, Support for non-farm activities for desiring persons, Medical checkups and appropriate support for medical facilities.

15. The Project Proponent submitted that the Capital Budget for Environmental Protection Measure is estimated to be Rs. 570.00 Lakhs and the Recurring Budget is estimated to be Rs. 65.00 Lakhs. The capital cost includes the following i) Rs 165.0 Lakhs for Air Pollution Control, ii) Rs 170 Lakhs for Water Pollution Control, iii) Rs 6.0 Lakhs for Noise & Vibration control, iv). Rs 55.0 Lakhs for Pollution monitoring, v). Rs 50.0 Lakhs for Conservation of Natural Resources vi). Rs 50.0 Lakhs for Greenbelt Development, vii).Rs 34 Lakhs for Occupational health and viii). Rs. 40.0 Lakhs for Miscellaneous purposes.

16. PP submitted that for the safety of workers engaged at the dust generation points like drills, loading & unloading points, crushing etc., dust masks will be provided to prevent inhalation of RSPM/dust thereby reducing the risk of lung diseases and other respiratory disorders. Regular health monitoring of workers and nearby villagers in the impacted area, will be carried out by JNIL. In addition, the company will also carry out regular occupational health assessment of employees as per government regulations. All the employees in the mine and beneficiation plant will be subjected to pre-employment & periodic medical examination to assess the occupational health impacts. The tests will be conducted as per Form O as given in Mines Rules 1955. PP also submitted that periodical medical examination (Once in 3 years for >45 years age, once in 5 years <45 years age) & PPE for 30% of workers & Health insurance and training for all employees. PP reported that the total budget earmarked for occupational health is Rs 35.63 Lakhs (Capital) and Rs 22.05 Lakhs for (Recurring).

17. PP submitted that the certified monitoring report for compliance of previous environmental clearance conditions from Regional Office of MoEF&CC vide F.No. : EC-3-12/2007(ENV)/5937 dated 29.11.2019. PP also submitted the Consent to Establish (CTE) issued by Chhattisgarh Environment Conservation Board, Raipur vide Letter No. 3409 dated 12.06.2007. Consent to Operate (CTO) issued by the Regional Office (RO), Chhattisgarh Environment Conservation Board, Jagdalpur vide Letter No. 1841/RO/TS/CECB/ 2018 dated 07.03.2018 for 3 years from 01.04.2018 to 31.03.2021.

18. 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 also 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 (Up to May 2019) vide letter dated 22.06.2019 due to the Naxalite problem and other law and order issues. PP also submitted an undertaking vide letter dated 29.10.2020 that information and data incorporated in the report for obtaining Environment Clearance are true and factual to the best of our knowledge and belief and we take the ownership of the information and data given in the report. Consultant, SrushtiSeva Private Limited also submitted an undertaking vide letter dated 30.10.2020 that the data submitted is factually correct and we own the contents of information and data. Baseline environmental monitoring and analysis of air, water, noise, soil and meteorology have been carried out by M/s Nilawar Laboratories, Nagpur (NABL accredited).

19. Project Proponent submitted that the total Project Cost of the Project been estimated at Rs. 8558.78 Lakhs and 225 people (165 people for mining & 60 people for Beneficiation plant) will get employment in the mines.

20. Based on the information submitted and presentation made by the PP and the Consultant during the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020, the Committee after detailed deliberations **deferred** the proposal for the want of the following information.

- 1. PP shall submit the details of Land Use of area available with Forest Clearance is inside the Mine Lease i.e., about 29 Hectares, for the various activities proposed like Mining, Workshops, Office, Crushing Plant, Beneficiation Plant and area earmarked for Safety Zone Plantation.
- 2. PP needs to submit the grade and size of fines being sent to Beneficiation Plant and quantities (Percentage) and grades of concentrate and rejects.
- 3. PP also needs to provide water handling of proposed wet screening.
- 4. PP should bring out the material balance, mass balance, equipment flow sheet, process of beneficiation plant with flow charts along with the environmental impacts in the EIA/EMP report.
- 5. PP should carry out a detailed risk assessment study for use of explosives, storage of explosives and transportation of explosives.

- 6. PP should also submit the letter from the State Govt. for use of conventional explosives and storage of explosives in sensitive areas.
- 7. PP needs to submit the letter from the State forest and wildlife department that there is no National Park, Wildlife Sanctuary, Biosphere Reserve and Migratory Corridor of Wild animals up to 10 km from the mining lease area.
- 8. PP needs to submit the letter from the forest department for access road.

#### (1.4) GarbhamMaganese Ore Mine of M/s Rashtriyalspat Nigam Limited at Village Garbham, Tehsil Merakamudldam in District Vizianagaram in Andhra Pradesh (264.540 Ha. 50 TPD)[Proposal no: IA/AP/MIN/180932/2020; File No. J-11015/60/2020-IA.II(M)]- Consideration of Terms of Reference

The proposal of M/s Rashtriyalspat Nigam Limited is Garbham Manganese Ore Mine of M/s Rashtriyalspat Nigam Limited at Village Garbham, Tehsil Merakamudldam in District Vizianagaram in Andhra Pradesh (264.540 Ha. 50 TPD).

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category A or Activity 1(a) as the mining lease area is greater than 100 ha.

3. PP has submitted that the environmental clearance was granted by MoEF&CC vide letter no. J-11015/375/2005-IA.II (M) dated 04.10.2006 with a general condition no. B (i) "No change in mining technology and scope of working shall be made without prior approval of Ministry of Environment & Forest." PP vide its Proposal No. IA/AP/MIN/11447/2006 dated 11.11.2016 has applied for amendment in EC w.r.t. the above-mentioned general condition B (i) for change in technology. The PP has mentioned that the modernization through mechanized screening would bring down the demand supply gap. Hence it is proposed to set-up screening plant with a handling capacity of 40 MT/hour powered by Diesel Generator set. The proposal was earlier placed in the EAC meeting held during 23<sup>rd</sup> -25<sup>th</sup> November, 2016 wherein the Committee deferred the proposal for want of requisite information. The PP submitted the requisite information online on 30.07.2020 and the proposal was placed in EAC meeting held **during 19-21 August, 2020** wherein Committee observed that the EC granted in this case was granted under EIA Notification 1994 and PP was required to apply as per provision of S.O. 1530(E) dated 6.04.2018. The Committee is of the view that if PP would have submitted the information on time the amendment in EC was granted under EIA 2006 and PP is not required to apply as per S.O. 1530(E). PP

informed the Committee the delay in reply to the ADS is due to delay in preparation and approval of the modified mining plan & preparation of impact study for DG Set. The Committee is of the view that EC is no more valid the amendment in the same could not be granted at this stage, however as the proposal was already under consideration in the Ministry, before the issuance of S.O. 1530(E) dated 06.04.2018, the PP may be allowed for lateral entry, under S.O. 1530(E) dated 06.04.2018, to apply in Form-1 for grant of ToR. The Committee therefore **returned the proposal in present form** and asked the PP to apply afresh in Form-1 for obtaining EC as per provision of S.O. 1530 (E) dated 06.4.2018. PP applied online vide proposal no.**IA/AP/MIN/180932/2020 Dated 13.11.2020** and the proposal was placed in the EAC meeting held on 09.12.2020.

4. PP has submitted that the Lessee i.e. M/s. Rashtriyal Spat Nigam Limited, Visakhapatnam Steel Plant has been granted mining lease for the Garbham Manganese Mine for a period of 20 years over an extent of 264.54 Ha (653.690 Acres) in Sy.No. 251,253,254,255 & 257(P),87 to 107, 109 to 120 etc. of Garbham Village of Merakamudidam Mandal, Vizianagaram District vide G.O. Ms. No. 491 is related to Central Garbham and 625 is for East & West Garbham, together 264.54 Ha of Industries & Commerce Department, Govt. of A.P. dated 07.08.1982 for a period of 20 years. Later on, Central, East & West Garbham leases were amalgamated and first renewal of mining lease was granted vide G.O. Ms. No. 214 of Industries & Commerce department, Govt. of A.P. dated 08.08.2008 for a period of 20 years and the lease is valid up to 07.10.2022.

5.PP has submitted that the lands around are agricultural lands and there is no forest, National Park, wildlife Sanctuary nearby. PP also submitted that proposal does not involves approval/clearance under the C.R.Z notification, 2011.

6. PP has submitted that the five year period of scheme of mining was submitted and approved for the period 2013-14 to 2017-18 vide letter No. AP/VZNR/MS/Mn-265-SZ/2048 dated 15.12.2013 was valid up to 31st March 2018. The present review of mining is submitted under rule no. 17(2), MCR 2016 for the period 2018-19 till the mining lease validity period i.e. 07.10.2022 and mining scheme was approved by the Letter No: AP/VZNR/MP/Mn-81/HYD, dated 21.02.2018.

PP has submitted that Total reserves & resource is 12,49,987 T out of which reserve in existing dump is 3,88,987 T. Life of mine as per mining scheme is 6.48 years say 7 years and as per existing EC capacity is 21.61 years say 22 years. The mining will be carried out in the existing dump by open cast method by deploying shovel and dumper combination for excavation as per the production plan. Benches are proposed to develop at a height of 4 m and 12 m width. The total height of the dump is about 20 m. The no. of working benches will be 4 in the plan period. There is no drilling and blasting envisaged as the dump material is friable in nature and can be easily excavated with shovel. The benches are connected through rams of 1:16 gradient for smooth haulage

of dumpers and other HEMM. The lump andfines are segregated from the ROM by deploying manual screening and sizing for existing CFO capacity of 50 TPD.To meet the additional lump requirement, it is proposed to introduce a mechanized screening facility with 40 TPH capacity. The mechanization of screening is proposed for scientific mining, environmental protection and mineral conservation. Dust collector will be provided for environmental protection measures and water sprinkling system will be followed for dust suppression. Material from dump will be transported to Screening plant with a combination of excavator and tipper will be deployed to product 40 TPH. PP also submitted that no external raw material is required for the project. The finished products i.e., Manganese Ore Fines & Lump are transported by road to Visakhapatnam Steel plant.

7. PP has submitted that the proposed mining area is in the existing waste dumps (10 Ha). There will be no excavation proposed below the ground level. The formed pits will be utilized for water storage and as rainwater harvesting structure. Plain areas will be developed with green belt at the end of mine life. The total water quantity requirement for the project is 17.0 KLD & the source of drinking water is from the nearest village through water tankers. PP submitted that out of total water requirement 6.0 KLD will be required for dust suppression, 10.0 KLD for Green belt and 1.0 KLD Domestic use. PP submitted that 0.8 KLD waste-water will be generated which will be treated through septic tank followed by soak pit. PP also submitted that worked pit water will be utilized for dust suppression and green belt development.

8.PP has submitted that no human settlements exist in the M.L. area and no humans have been displaced from the area so the project does not involve any rehabilitation and resettlement. PP submitted that area covered by plantation is 6.33 hectares of the lease hold area. Hence, most of the vacant lands in the government area of the mining lease is afforested. In addition to the existing greenbelt, 2200 plants will be planted over an area of 2.0 ha within the lease area.

9.PP has submitted the Past Production details from 2006-07 to 2019-20 issued from Department of Mines & Geology, Govt. of Andhra Pradesh vide Lr No. 3527/M/2001 Dated 10.08.2020.Production capacity as per EC granted vide dated 04.10.2006 is 50 TPD (18000 MT). As per the production details dispatched quantity during 2008-09 was 19026.340 MT and production quantity was 13906.027 MT.PP has submitted that CFE obtained vide Order No. APPCB/VSP/VZN/174/HO/2003/41-9155 Dt. 03.07.2003. CFO obtained vide Order No. 9059/APPCB/ZO-VSP/Tech.2013-1302 Dt. 20.03.2014 & renewed vide Order No. 9059-VZN/APPCB/ZOVSP/CFO/2016 Dt. 26.09.2016 and valid up to 31.12.2021.

10.PP has reported that there is no litigation pending against the project and/or land in which the project is proposed to be set up.

11.PP has submitted that the total Project capital Cost is Rs. 150 Lakhs. The Proposed change in mining method/mineral beneficiation would not bring down the existing manpower which is 24 persons.

12. Based on the information submitted by the PP and the Consultant during the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020and discussion held EAC **recommended**the proposal for only dump access in the 10 Ha area with manganese production 50 TPD and to set-up screening plant with a handling capacity of 40 MT/hour powered by Diesel Generator set only change in will be from manual to screening at Garbham Manganese Ore Mine of M/s Rashtriyalspat Nigam Limited at Village Garbham, Tehsil Merakamudldam in District Vizianagaram in Andhra Pradesh as per S.O. 1530(E) dated 06.04.2018 subject to the following additional TOR in addition to the Standard Terms of Reference for non-coal mining & beneficiation:

- a) Impact of screening and transportation of mining materialshould be properly accessed and included in the EIA/EMP report.
- b) Status report of the dump mining that has been carried out in last 14 years and its impact on the nearby area should be properly reflected in the EIA/EMP report to ensure no damage in future lease life. No new area will be opened for mining.
- c) As mine lease is valid up to 07.10.2022 the proposal of EC shall be considered for the lease period only.
- d) PP should submit Copy of RO Compliance report.
- e) PP should submit an undertaking by the way of affidavit in pursuance MoEF&CC guidelines NO. 3-50/2017-414.III (Pt) dated 30<sup>th</sup> May 2018.
- f) PP should submit the past production details proposed and achieved and details of the CTE/CTO, Mining plan etc. from 1993-94 to onward.
- g) PP should submit the NOC from the concern authority to source the water.
- PP shouldsubmit letter from State Forest and Wildlife Department that there is no National Park, Protected area, wildlife sanctuary within 10 km of lease area otherwise proper wildlife conservation plan should be prepared.
- i) Since the project is reviewed under S.O. 1530(E) dated 06.04.2018 repeated public hearing in not required as there is neither change in production nor any change in mining methodology.

(1.5): Jaribahal Iron Ore Mines with production capacity of 0.998 MTPA iron ore by M/s Kashvi International at - Jaribahal, Palsa(kha), Palsa(ka), Tehsil-Barbil, Dist-Keonjhar, Odisha [Proposal no: IA/OR/ MIN/ 178808/2020; File No. J110105/61/2020-IA.II(M)] – Consideration of Terms of Reference The Proposal of M/s Kashvi International is for grant of Term of Reference for Jaribahal Iron Ore Mines with production capacity of 0.998 MTPA iron ore over an area of 107.440 Ha (As per DGPS)/106.533 Ha (As per ROR) located at village Jaribahal, Palsa(kha), Palsa(ka), Tehsil-Barbil, Dist-Keonjhar, Odisha. The mine lease area is located between Latitude: 21°54′ 54.14″ N to 21°55′ 31.24″ N and Longitude 85°24′ 14.06″ E to 85°24′ 17.06″ E and within survey of India Toposheet No. F 45 N 5.

2. PP has submitted that the said proposal is covered under the ambit of EIA Notification, 2006 & its subsequent amendments and the project falls under Schedule 1(a) of mining of minerals and is a Category- "A" as the mining lease area is greater than 100 Ha.

3. PP submitted that the previous Environment Clearance obtained byM/s Patnaik Minerals Pvt. Ltd (the previous lessee) vide MoEF&CC letter no J-11015/516/2007-IA. II (M) dated 25.07.2008 for production of iron ore to 0.998 million tons per annum. PP has now applied vide Proposal no: IA/OR/MIN/178808/2020 dated 13.10.2020for prescribing Term of Reference (ToR) and submitted Form-1 and Pre-feasibility report. Thereafter, Ministry examined the proposal and raised EDS on 12.11.2020 and the PP submitted the information on 18.11.2020. The proposal was considered in the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020.

4. PP submitted that the M/s Kashvi International Pvt Ltd. was declared as the preferred Bidder emerged as preferred bidder in the e-auction process and accordingly Government of Odisha, Steel and Mines Department granted the mine lease for iron ore in favour of M/s Kashvi International Pvt Ltd. In respect of Jaribahal Iron Ore block over an area of 107.440 Ha (As per DGPS)/106.533 Ha (As per ROR) in village Jaribahal, Palsa(kha), Palsa(ka), Tehsil-Barbil, Dist-Keonjhar, Odisha for a period of 50 years. The details of the valid rights, approvals, clearances, licenses, and the like held by the previous lessee were vested in favour M/s Kashvi International Pvt. Ltd. by the Govt. of Odisha for a period of 2 years from the date of execution of lease deed or till the date of getting fresh approvals, clearances, licenses, permits, and the like, whichever is earlier vide order No-4350/SM/III(A)SM-08/2020, dated 01.06.2020.

5. PP submitted that, out of 107.440 ha (ML area), 99.099 ha is forest land and balance 8.341 ha is non- forest land. PP also submitted that The Stage-II forest clearance for the entire forest area over 99.099 hectares has been obtained from Ministry of Environment Forest, Govt. of India under Forest Conservation Act 1980 in the name of M/s Patnaik Minerals Pvt. Ltd vide Lr F.No. 8-261/97-FC(pt), Dtd 19.02.2015.

PP reported that the nearest reserve forest from the mine site are Baitarani RF (9.3km, N) and Chamakpur RF (7.7km NE). PP further submitted that there are no wild life sanctuaries, national parks, elephant/tiger reserves within 10 km of the mine lease area.

6. PP submitted that the letter for Approval of Modification of Review of Mining Plan of Jaribahal Iron Ore Mines over an area of 106.531 ha in Keonjhar district of Odisha of Mis Patnaik Minerals Private Limited submitted under Rule-17 (3) of MCR, 2016 and Rule 12 (4A} of Mineral Conservation and Development (Amendment) Rules, 2018 and was valid up to 31.03.2020.

PP submitted that the fully mechanized opencast method of mining adopted presently and will be continued. The iron ore block consists of 9 numbers of quarries iron ore deposit occurs at various levels. The quarries namely quarry - 1, 2, 5, 6 and 9 have been selected for further development. PP reported that total Geological Reserves of are estimated to be 71,54,658 T. Mineable reserves to be 65,78,150 T. The targeted production during first four years will be 0.998 MTPA and in the last year production of 2.058 MTPA will be achieved and the life of the mine is 5.261 years.

PP reported that waste to be generated from Quarry-1,2 and 5 will be disposed of at proposed waste dump-1 and waste to be generated from Quarry 6 & 9 will be disposed of at proposed waste dump-2. Further, it has been planned to shift the waste at dump-5 to dump-1 & dump-2 during 5th year as dump-5 area is within UPL and during 5th year mining operation will be carried out at that location. In the existing waste dump-5, about 6, 71,000 cum or 13, 42,000MT of waste is available. 50% waste i.e 6,71,000MT will be disposed of at proposed waste dump-2. Total waste generation from the iron ore zone will be 14,35,770 cum. This will be utilized for back-filling of exhausted pit during conceptual period. Back-filling will be done at three locations.

PP also submitted that Processing of ROM and mineral rejects are being done only by dry crushing & screening method. The dry processing method is being adopted for processing of ROM with the help of crushing and screening unit. The ROM ore will be subjected to screening, crushing, sizing, blending etc before finished product is ready for dispatch. Mobile crushing and screen unit of 400TPH capacity will be deployed for separation into different size material as per the requirement.

7. PP submitted that the total water requirement for the project is 500cum/day which will be sourced from Rain water harvesting pond and ground water. CGWA permission exists for withdrawal of 900 KLD of ground water vide Lr. No: 21-4(313)/SER/CGWA/2011/418 dt 15.04.2011.

8.PP submitted that there is no human settlement within mine lease area and hence, there is no R & R involved.

9. PP reported that there is no Court Cases pending against the project and/or land in which the project is proposed to be set up.

10. PP has submitted that the estimated total capital cost of the project will be approximately Rs. 75.5 crores. PP reported that 41 persons will be engaged as

managerial staff and 512 semi-skilled &unskilled persons will be engaged from local village area.

11. Based on the information submitted and presentation made by the PP and the Consultant during the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020, the Committee was of the view that the recommendation of CSIR-NEERI report on carrying capacity study may be included in the TOR condition w.r.t. mining proposal of Iron Ore and/or manganese in the State of Odisha and further the proposal was **recommended** for Standard TOR along with Additional TORas follows:

The PP shall submit the present state of mine including primary environmental baseline data along with TOR application in order to assess the status and level of environmental compliance while transfer of lease. The PP must show any non-compliance of earlier EC by previous occupier so that the same can be considered at the time of appraisal for grant of Environmental Clearance.

- i. The draft TOR should also include damage assessment due to such noncompliance as one of the activities. In absence of such disclosure by PP, any subsequent identification of environmental non- compliance would be liability of new PP. The information to be submitted may be related to, but not limited to,
  - a. Compliance of mining plan, including waste and OB dump management, mine closure plan etc
  - b. Compliance to Common cause judgment
  - c. Status of R&R
  - d. Compliance of plantation
  - e. Compliance of public hearing issues
  - f. Status of complaints/ court cases/legal action
  - g. Compliance of specific conditions of earlier EC
- ii. MoEF&CC RO office shall preferably conduct visit of each of such mine lease/s where e-auction have been conducted to document the compliance status of existing EC at such leases, at earliest.
- iii. New lessee shall take possession of all records and documents related to EC and consent form the earlier lessee, including EIA reports, EC, consent, correspondence with MOEFCC and SPCB/CPCB etc.
- iv. The new lessee shall provide the NRSC certified imaginary of the project site, depicting the real status of land use, canopy coverage, level of plantation, land

degradation etc., one at the time of taking possession of lease and second after 6 -12 months to assess changes effected by present occupier.

- v. PP needs to submit the execution of the lease deed.
- vi. In earlier EC dated 25.07.2008 shows that the forest land is 3.893 Ha only whereas in present proposal PP submitted that 99.099 ha falls under reserve forest category and Forest clearance has already been obtained dated 19.02.2015. PP shall provide actual status of forest land involved in mine lease area and shall submit forest clearance accordingly.
- vii. PP shall submit the Proof of application submitted to CGWA in the name of M/s Kashvi International.
- viii. PP needs to carry out a Public Hearing as per the EIA Notification, 2006 as this is an e-auction mine and the lessee is new.
- ix. PP needs to submit the complete mining plan in the PARIVESH portal along with final EIA/EMP report.
- x. PP needs to submit the Affidavit in a non-judicial stamp paper as per Ministry's OM dated 30.05.2018.

(1.6)Sitapuram Limestone (ML -1) Mining Project of M/s Zuari Cement Ltd. for proposed production capacity of 30,00,000 TPA over an area of 770.23 ha. The mine lease area is located at the Village/s –Dondapadu, Ramapuram and Revoor, District –Suryapet, Telangana [Proposal No.IA/TG/MIN/117756/2019; File No. J-11015/63/2003-IA. II(M)]- Consideration of Terms of Reference

The proposal of M/s Zuari Cement Ltd. for seeking Terms of Reference for conducting EIA for Mining of Limestone for production of 3.0 MTPA of Limestone, mining area of 770.23 ha of M.L-1 & 558.94 ha of M.L-2 located at Villages-Dondapadu, Ramapuram and Revoor, Tehsil- MellaCheruvu,District: Nalgonda, Telangana. The applied area forms a part of Survey of India toposheet no. 56 P/13 & 65D/1. The lease is located at following latitude and longitudes: Latitude: 16°48'41.69"N to 16°50'2.58"N, Longitude: 79°59'17.31"E to 80° 2'28.70"E. The mine lease area is falling in seismic zone-II.

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category A or Activity 1(a) as the mining lease area is greater than 100 ha.

3. PP earlier applied online for grant of ToR on 05.10.2018 and submitted the Form-1, Pre-feasibility Report as per EIA Notification dated 14th September, 2006. As PP applied in a single From-1 for two mining leases, the Ministry advised the PP to apply separately for both the mining leases. The PP vide its reply dated 17.11.2018, submitted that Ministry has issued corrigendum vide Lr No. J11015/63/2003-IA. II (II) dated 04.04.2006 for EC-I [J-11015/63/2003-IA. II(M) dated 09.05.2005; area 777.09 Ha] & EC-2 [J-11015/174/2003-IA. II(M) dated 04.04.2006; area 558.94 Ha] for EC-II. The production of 3.0 MTPA is merged through these two corrigendum& corrigendum is being maintained as EC-I for production of 3.0 MTPA. PP also requested to extend the validation of the said corrigendum. The application was made in pursuant to the notification dated 06.04.2018. There was ambiguity as how corrigendum is divided in two parts. The Ministry then placed the proposal in EAC Meeting held on January 22nd-23rd, 2019, wherein the Committee deferred the proposal as the PP did not attend the meeting. However, the Committee was of the view that *PP should submit the requisite information* viz. complete details pertaining to mining lease (initial grant, transfer of mining lease, renewal of mining lease, validity of mining lease as on date), Past production details since the inception of mine duly authenticated from DMG, copy of CTO and CTE, comparative of all the figures (waste, O.B., land use, water requirement, etc.) mentioned in the previous EC and what is proposed now, details of any modification/expansion/amendment/change of scope of work/method of mining etc. if any carried out after grant of EC, any corrigendum/ amendment in EC granted by MoEF&CC. In addition to this the Committee observed that area of mining lease is mentioned as 1336.03 Ha in the Form-1 but EC uploaded in the Form 1 is for the mining lease having area of 777.09 Ha. Thus, PP is requested to provide the complete justification in this regard with supporting documents. The information sought by Committee needs to be submitted within one month.

The PP submitted the information vide its letter dated 20.02.2019.

The proposal was then considered in the EAC meeting held during **October 21-22**, **2019** wherein the Committee observed that EC in the instant case was granted on 09.05.2005 for a production capacity of 3.0 Million Tonne /Annum. The Ministry vide LR No. J11015/63/2003-IA.II(M) dated 04.04.2006 issued corrigendum in the EC granted for this mines and in the said corrigendum the **Ministry restricted the maximum combined production from both the mining lease (ML-1: 770.09 Ha & ML-2: 558.94 Ha) to 3.0 Million Tonne.** This means that the production from ML-2 is 0.03 MTPA and Production from ML-1 (this mines) should not be more that 2.97 Million TPA.

But from the past production submitted by the PP it is found that the base year production 1993-94 was 914243 TPA and the same has been increased to 921059 TPA in the year 1994-95 at this stage PP was required to obtain EC but PP obtained EC on 9.05.2005 for 3.0 MTPA which was amended to 2.97 MTPA on 4.4.2006. Further, after grant of EC, PP did not increase the production over the approved EC capacity; however, **period for whichPP has mined without obtaining EC is a violation as per Hon'ble Supreme Court Judgment dated 02.08.2017.** In addition to this *Committee observed that proposal of the PP is for 3.0 MTPA but the existing mining plan is for 1.6 MTPA. The Committee therefore deferred the proposal as the capacity desired by PP is not matching with the approved mining plan/scheme capacity and ask the PP to justify the same with valid documents. PP is also required to submit the past production details duly authenticated by DMG and comparative land use, waster generation, water requirement etc, proposed at the time of grant of EC and what is proposed now.* 

The proposal was placed in the EAC meeting held during **January 30-31, 2020** wherein PP did not attend the meeting and the Committee therefore deferred the proposal. PP submitted the information vide Lr. No. SP/ZCL-EC-113/20 Dated 27.11.2020 and the proposal was considered in the EAC meeting held during 9<sup>th</sup> -11<sup>th</sup> December, 2020 wherein PP submitted the following:

# Point 1: Committee observed that proposal of the PP is for 3.0 MTPA but the existing mining plan is for 1.6 MTPA the capacity desired by PP is not matching with the approved mining plan/scheme capacity and ask the PP to justify the same with valid documents.

**Reply:** The proposal has been revised with the revised production capacity of 1.6 MTPA, which is matching with the production capacity of Modified Mining Plan. The revised Proposal (Form 1, PFR) and approved mining plan has been submitted.

# Point 2: PP is also required to submit the past production details duly authenticated by DMG.

**Reply:** PP has submitted past production details from 1986-87 to 2018-19 authenticated by Office of the Asst. Director of Mines and Geology, Department of Mines & Geology, Govt. of Telangana as per which the base year production 1993-94 was 914243 TPA and the same has been increased to 921059 TPA in the year 1994-95 at this stage PP was required to obtain EC but PP obtained EC on 9.05.2005 for 3.0 MTPA which was amended to 2.97 MTPA on 4.4.2006. Further, after grant of EC, PP did not increase the production over the approved EC capacity.

# Point 3: Comparative land use, waste generation, water generation etc which was proposed at the time of grant of EC and what is proposed now.

**Reply:** PP has submitted Comparative land use, waste generation, water generation etc which was proposed at the time of grant of EC and what is proposed now as follows:

A. Land use: PP submitted that EC was granted on 9<sup>th</sup> May 2005, under the EIA Notification 1994. At that time the land use proposal was not in existence, so the land use was not mentioned in EIA report. Land Use proposal came into force after EIA Notification, 2006. So the exiting land use and conceptual land use is given in the table:

SI. No.	Partio	culars	Area put to use at start of review of mining plan period (Ha)	Total area put to use at the end of Review of mining plan period (Conceptual period)
1	Min	iing	71.63	83.66
2	Storage o	f Top Soil		
3	Waste d	ump site		
4	Mineral	Storage		
5	Infrastr Work Admini buildir	shop, strative	5.00	5.00
6		ads	9.82	9.922
7	Railway		1.80	1.80
8	Township			
9	Tailing Pond Crusher/plant area Effluent Treatment Plant			
10			36.00	36.00
11				
12	Others	Nala & pond (Kunta)	10.0	10.0
		Bund, Fencing	2.768	7.156
		Plantation	30.6	45.6
	Sub <sup>-</sup>	Total	167.618	199.138

Area remained untouched	602.612	571.092
Total	770.23	770.23

#### B. Waste generation:

SI. No.	Particulars	Proposed at the time of grant of EC	Proposed now for EC
1	Solid Waste	960 m <sup>3</sup> /month	NIL

PP submitted that old mining proposal was having overburden (OB) which has been used for approach road. Now the proposed area of mining is having Limestone exposure, hence no Over Burden is generated. The Top Soil generated have been used for plantation.

#### **C.** Water Requirement:

SI. No.	Particulars	Proposed at the time of grant of EC	Proposed now for EC
1	Water	41.50 m <sup>3</sup> /month	100 m³/day

PP submitted that haul road area is increased so the sprinkling of water demand is increased for dust suppression. Water requirement will be met through the rain water accumulated in the existing pit.

4. The PP submitted that the Mining Lease Sitapuram Limestone Mine (ML-1) was initially granted in favour of M/s Raasi Cement Ltd. vide Govt. order G.O. no. 141 Dated 07.03.1984. The same lease was transferred in favour of M/s Vishnu Cement Ltd. Vide Govt. Order no. 186 Dated 10.04.1985. M/s Vishnu Cement Ltd. was merged with M/s Zuari Cement Ltd & the mining lease got transferred vide Govt. order 68 dated 09.07.2010and accordingly the lease deed was executed over an extent of 770.23 Ha. PP submitted that the 1st renewal of ML granted vide GO No. 361 Dt. 19.12.2003 for the period of 20 years w.e.f. dated 24.04.2004. Presently, the validity of ML is till 23.04.2024. PP submitted that the lease has been granted in favour of M/s Zuari Cement Ltd. Validity of lease of ML-1 is up to 2034.

5.PP has submitted that no any Eco-sensitive areas i.e. National Park and Wild Life Sanctuary lie within the 10 Km radius of the lease area. No forest land (i.e. Reserved

Forest/ Protected Forest) falls within the lease area. There is no Schedule-I species found in the study area.

6. PP has submitted that the mining plan was approved vide letter No. MP/ANP/NLG/Lst-78-SZ dated 12.11.2003. The PMCP was approved vide letter No. MP/AP/NLG/ Lst-78-SZ dated 21.03.2005. The Modification of approved mining plan was approved vide letter MP/AP/NLG/Lst-78-SZ dated 26.10.2006. Subsequently the scheme of mining was approved vide letter No. MS/AP/NLG/ L.ST-199-SZ dated 06.05.2009 valid up to 31.03.2014. The Review of mining plan (including progressive mine closure plan) was approved vide letter no AP/NLG/MP/Lst-52/Hyd. Dated 18<sup>th</sup> December, 2018 valid up to 2023-24.

PP has submitted that With the envisaged rate of annual production of about 1.6 Million TPA, when the mine is fully developed, the estimated total mineable reserves of about 196502750 T of ML-1 will sustain the mining during the 5 year plan period. So there is no subsequent life of the mine after the 5 year Mining Plan period. During this scheme period the mining operations will be fully developed. At the end of the life of the mine the quarry will be backfilled during conceptual period. The mining is proposed to be carried out by Fully Mechanized means, deploying drifter drill and 30tonne Dumpers, etc. Sub grade ore will be kept separately and would be blended with high grade. Bench height and width will be maintained at 9m and 9m each respectively both in ore and waste. The limestone shall be extracted with deployment of an excavator and different grade of limestone will be sent to cement plant.

7. PP has submitted that the ultimate height and width of the benches at the conceptual period will be 9m the final pit slope will be about 590. As the Limestone deposits are noticed up to a depth of 60m in the nearby Limestone mine, further detailed explorations will be carried out to establish the availability Cement Grade Limestone. On account of this additional available Limestone, the total reserve will go up extending the life of this mine further with the mining depth reaching 60m. Mine working will not intersect ground water table.PP submitted that around 100 m3 / day of water will be required for the project activity for both the leases. Water requirement will be met through rain water & use in the mine for spraying on the haul roads and working faces to suppress the dust and also for use in the garage and for green belt development. Also a small quantity of drinking water is required from tube well. Out of total water requirement 4.00 KLD will be used for domestic purpose, 75 KLD for dust suppression, 19 KLD for plantation and 2 KLD for workshop. PP submitted that no solid and liquid effluent will be generated at the mining site. Domestic waste-water generated will be treated in septic tank followed by soak pit.

8.PP has submitted that no human settlements are existed in the explored ML area and no humans will be displaced from the area, so the proposed project does not involve any rehabilitation and resettlement. PP submitted that the plantation is developed in the buffer zone and same practice is proposed for future course of mining. During plan period, it has been proposed by the lessee to plant 7500 nos. of saplings, covering 15 ha. area, along the entire lease boundary.

9.PP has reported that there is no litigation pending against the project and/or land in which the project is proposed to be set up.

10.PP has submitted that the total Project capital Cost is Rs. 1445 Lakhs. The mining operations shall be providing employment to approximately 25 people of the local area and benefiting more than 30 people indirectly.

11. Based on the discussion held and information submitted by the PP and the Consultant during the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020, Committee **recommended** the proposal for grant of standard TOR for undertaking EIA study for production of 3.0 MTPA of Limestone by M/s Zuari Cement Ltd. having mining area of 770.23 ha of M.L-1 & 558.94 ha of M.L-2 located at Villages-Dondapadu, Ramapuram and Revoor, Tehsil- MellaCheruvu,District: Nalgonda, Telangana with following additional TOR:

- I. PP should submit the copy of RO Compliance report along with EIA/EMP report.
- II. Undertaking by the way of affidavit in pursuance MoEF&CC guidelines NO. 3-50/2017-414.III (Pt) dated 30<sup>th</sup> May 2018 should be submitted by the PP.
- III. PP shall submit the permission of CGWA for withdrawing ground water.
- IV. PP should submit letter from forest department regarding status of Forest land within lease area and National Park, Protected area, wildlife sanctuary within 10 km of lease area.
- V. PP should submit the document in support of the validity of mine lease up to 2034.
- VI. PP should submit the revised surface plan showing the distance of the nearest habitation from the mining area, non-mining area, control area, safety distance and safety barrier in the KML file. PP should also show the exact mine lease area in the KML file deleting the area surrendered after amalgamation of lease area.

- VII. PP should submit the details of plantation done in safety zone, open and closed area and map locating the same.
- VIII. PP should submit the complete details of plantation work carried out before and after 2011-12.
- IX. Safety measures adopted for habitation and impact monitored on the habitation during the last 10 years should be submitted.
- X. Concern expressed by people during public consultation, compliance of the same shall be documented/ recorded and be submitted with final EIA/EMP report.
- XI. Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.

(1.7): Proposed Sand Mining Project of M/S Shree Ganesh Medical Agency located at Nawada District, Bihar River: Sakri (Unit VI) of Area 1060.6 Ha [Proposal no: IA/BR/MIN/163073/2020; File No. J110105/67/2020-IA.II(M) ]- Consideration of Terms of Reference.

The Proposal of **M/S Shree Ganesh Medical Agency** is for grant of Term of Reference for sand mining of **2481804 cum per annum** or 4467247.2 TPA (bulk density 1.8) in lease area of **1060.6 Ha** located at Mauza/ Vill- Kunj, Block- Roah, District-Nawada, Bihar River: Sakri (Unit VI). Project area falls in Zone-III and in Moderate Damage Risk Zone. Floods are also anticipated during monsoon season. The pillar co-ordinates of the proposed sand mining lease (14 Blocks) are:-

SI.	Name & Address of sand Ghats	Area in	GPS Coordinates	s (Latitude &
No.		Ha.	Longitude)	
1	GOVINDPUR SAND GHAT Mauza-	52.0	24°46'48.46"N	85°42'1.15"E
	Govindpur, Block-Gobindpur, Distt-		24°46'58.27"N	85°42'10.52"E
	Nawada, Bihar		24°47'43.53"N	85°41'39.53"E
			24°47'29.16"N	85°41'40.05"E
2	VINOVA NAGAR SAND GHAT	98.0	24°47'27.31"N	85°41'21.45"E
	Mauza- Vinova Nagar		24°47'38.87"N	85°41'18.74"E
	BlockGobindpur, Distt- Nawada,		24°47'17.61"N	85°39'42.29"E
	Bihar		24°47'6.64"N	85°39'41.04"E
3	KUMHAR BIGHA SAND GHAT	98.5	24°47'14.14"N	85°39'9.99"E
	Mauza- Kumhar Bigha,		24°47'25.37"N	85°39'16.14"E
	BlockGobindpur, Distt- Nawada,		24°48'10.72"N	85°38'12.99"E
	Bihar		24°48'4.01"N	85°37'58.45"E
4	KARANPUR SAND GHAT Mauza-	40.0	24°48'29.15"N	85°37'54.70"E

	Karanpur, Block-Gobindpur, Distt-		24°48'33.04"N	85°38'4.10"E
	Nawada, Bihar		24°49'6.40"N	85°37'37.58"E
			24°48'56.11"N	85°37'36.42"E
5	LAKHPATBIGHA SAND GHAT	80.0	24°48'22.70"N	85°37'20.71"E
	Mauza- LakhpatbighaBaksouti,		24°48'30.73"N	85°37'27.48"E
	Block-Gobindpur, Distt- Nawada,		24°49'4.65"N	85°36'58.84"E
	Bihar		24°48'49.42"N	85°36'35.77"E
6	LAKHMOHNA SAND GHAT Mauza-	75.0	24°49'10.45"N	85°36'33.13"E
	Dhanwara, Block- Akbarpur, Distt-		24°49'18.74"N	85°36'49.72"E
	Nawada, Bihar		24°50'4.77"N	85°36'29.31"E
			24°49'56.47"N	85°36'10.38"E
7	KUNJ SAND GHAT Mauza-Kunj,	98.4	24°50'41.47"N	85°36'10.06"E
	Block- Roah, DisttNawada, Bihar		24°50'44.03"N	85°36'26.67"E
			24°51'52.60"N	85°35'58.02"E
			24°51'46.00"N	85°35'46.55"E
8	GOSAI BIGHA SAND GHAT Mauza-	92.6	24°52'4.22"N	85°35'26.86"E
	Gosai Bigha, Block- Akbarpur, Distt-		24°52'10.17"N	85°35'31.76"E
	Nawada, Bihar		24°53'12.44"N	85°35'20.17"E
			24°53'17.30"N	85°35'9.40"E
9	JAMUAWAN PATWA SARAY Mauza-	62.0	24°53'31.02"N	85°35'16.05"E
	JamuawanPatwasarai, BlockNawada,		24°53'29.11"N	85°35'30.14"E
	Distt- Nawada, Bihar		24°54'27.47"N	85°35'41.52"E
			24°54'30.17"N	85°35'33.05"E
10	KADIR GANJ SAND GHAT Mauza-	30.0	24°55'11.11"N	85°35'48.06"E
	Kadirganj, Block- Nawada, Distt-		24°55'7.86"N	85°35'59.41"E
	Nawada, Bihar		24°55'39.18"N	85°36'13.61"E
			24°55'41.77"N	85°36'5.38"E
11	MILKI SAND GHAT Mauza-Milki,	90.0	24°56'17.48"N	85°36'7.95"E
	Block- Warsaliganj, Distt- Nawada,		24°56'18.35"N	85°36'17.82"E
	Bihar		24°57'33.43"N	85°36'49.60"E
			24°57'35.99"N	85°36'37.87"E
12	SULTANPUR SAND GHAT Mauza-	55.0	24°57'49.32"N	85°36'36.90"E
	Sultanpur, Block- Warsaliganj, Distt-		24°57'51.36"N	85°36'44.69"E
	Nawada, Bihar		24°58'45.29"N	85°36'15.12"E
			24°58'40.68"N	85°36'2.97"E
13	DARIYAPUR SAND GHAT Mauza-	98.6	24°58'57.97"N	85°36'2.88"E
	Dariyapur, BlockWarsaliganj, Distt-		24°59'1.63"N	85°36'13.41"E
	Nawada, Bihar		25° 0'3.72"N	85°35'41.62"E
			24°59'54.51"N	85°35'31.07"E
14	MURGIYA CHAK SAND GHAT	90.5	25° 0'24.39"N	85°34'49.12"E
	Mauza-Murgiya, Block- Warsaliganj,		25° 0'27.61"N	85°34'52.68"E
	Distt- Nawada, Bihar		25° 1'31.97"N	85°34'12.30"E

Minutes of meeting of 24th EAC (Non-coal Mining) held during 9th -10th December, 2020

	25° 1'33.62"N	85°33'53.04"E
	23 T 33.02 TN	05 55 55.04 E

2. As per EIA Notification dated 14th Sept, 2006 and its subsequent amendments, the project falls under Project Activity 1 (a) "Mining of Minerals" and is Category "A" project.

3. PP vide proposal No. IA/BR/MIN/163073/2020 dated 30.11.2020 applied for grant of ToR and submitted Form-1 & Pre-Feasibility Report. The EDS was raised on 17/07/2020 to submit (i) copy of letter of intent cleraly showing the area of mining lease, (ii) cluster certificate from DMG, (iii) distance between each mining ghat if any, verify and submit correct KML file as the lease is in three parts, (iv) copy of DSR, (v) Type of river perennial or non-perennial to be confirmed by State Government and the same except Cluster certificate obtained from the DMG was replied by PP on 06/10/2020. For the same EDS was again raised on 12/11/2020 to submit Cluster certificate obtained from the DMG and for the same was replied by PP on 06/10/2020. The proposal was placed in 24<sup>th</sup> EAC meeting held during 09<sup>th</sup> to 11<sup>th</sup> December, 2020.

4. PP has reported that the District Mining Office Nawada, has given consent for mining for five years to Shri Ganesh Medical Agency through letter no- 1218 dated 23.12.19 issue by District Mining Office, Nawada. PP has submitted the copy of revised LOI letter from District Mining office Nawada vide letter no. 945 dated 24/08/2020 and it is mentioned that the lease was obtained by auction by paying 10% of total auctioned amount i.e. 3,60,89,346/- by Shri Ganesh Medical Agency (Shri Ialit Mittal S/o Shri Om Prakash Mittal, Rajasthan). Due to details of sand blocks not mention in LOI and issue raised by MoEF&CC, New Delhi, the revised LOI are issued with details of sand blocks with distance between every two Ghats and verify that the Sakari river (Unit -6) is Non perennial river. The above letter undersign by Asst. Director, (Mine) Nawada.

S. No.	Names of Ghats	Arial Distance b/w Ghats
1	Govindpur Sand Ghat and Vinova Nagar Sand Ghat	550 M
2	Vinova Nagar Sand Ghat and Kumhar Bigha Sand Ghat	800 M
3	Kumhar Bigha Sand Ghat and Karanpur Sand Ghat	730 M
4	Karanpur Sand Ghat and Lakhpatbigha Sand Ghat	680 M
5	Lakhpatbigha Sand Ghat and Lakhmohna Sand Ghat	540 M
6	Lakhmohna Sand Ghat And Kunj Sand Ghat	1250 M
7	Kunj Sand Ghat and Gosai Bigha Sand Ghat	850 M

Distance between two ghat are given below:-

8	Gosai Bigha Sand Ghat and Jamuawan Patwa Saray	500 M
9	Jamuawan Patwa Saray and Kadir Ganj Sand Ghat	1310 M
10	Kadir Ganj Sand Ghat and Milki Sand Ghat	1150 M
11	Milki Sand Ghat and Sultanpur Sand Ghat	440 M
12	Sultanpur Sand Ghat and Dariyapur Sand Ghat	500 M
13	Dariyapur Sand Ghat and MurgiyaChak Sand Ghat	500 M

PP also submit the copy of DSR of Nawada district dated 21.12.2017 it is mentioned that in the Sakari river 8 Ghats i.e.Gosai Bigha-10 Ha, Kalyugwa sand Ghat-1.8, Milki Sand Ghat 2.6, Kadriganj Sand Ghat-23.5 Ha, Kunj Sand Ghat-2.4 ha, Karnupur Sand Ghat- 3.1 ha, Dariyapur Sand Ghat-24.9 ha and Lakpatbigha sand Ghat-8.5 Ha (total-76.8 ha) and mineable mineral potential is 578.33 lakh metric tone (60% of total mineral).

5. PP has submitted that the allotted sand mining river block has an area of 1060.6 ha. And the entire mining lease lies within River bed of Sakri River, no any forest and agriculture lands involved in this area. The Lease area also near the Bihar-Jharkhand Interstate Boundary (Approx. 0.82 Km towards WNW). Pant Wildlife Sanctuary within the radius of 10 KM (Approx. 9.8 Km towards West)

6.PP has submitted that the total mineable reserves of all Ghats are 23.8635 Million cu meter. The annual Production is proposed to be 2481804 cum per annum or 4467247.2 TPA. Life of the mine is 5 Years. The mining will be done by open- cast, semi - mechanized method of mining. Mining will be done in seven sand ghats leaving safety distance from bank and stream for river-bed blocks and barrier zone of 7.5 m around the Applied Area. The river sand to be won from river ghats will be exploited and it will be simultaneously reclaimed by replenished river sand brought out during monsoon period. The river sand will be excavated by light weight excavators & it will be directly loaded into tippers for dispatch to consumers of Nawada District. The material will be collected in its existing form. Mining will be carried out only during the day-time. Extraction of the minor mineral will be completely stopped during the lease period, the mining will be restricted down to 3 m below river bed or above ground water table. No raw material will be required in the proposed project.

The operation involves the extraction of sand in its existing form and loaded into trucks/trolleys which will transport the material to the local market. The existing roads will be utilized for the transport of sand from mine site to market.

Approximately **130 nos of Truck/Tipper** and Tractor will be used for transportation of sand. There are all weather metaled road and then an unmetalled road

right up to the mines to dispatch the material from mines to the market. Mineral will be purchased by the customers at mine site and transported by them through their own arrangement of trucks. The practice is quite sound in the area and ensure continuous lifting of the material. However necessary arrangement of truck can be done from the local truck operator union.

There are no mineral rejects of any kind produced during mining. However small quantity of municipal solid waste i.e. 232.5 kg/day will be generated at the mining site such as paper pouch, Gutkha pouch and some food residue by working laborers only, for that separate bin will be provided at the mine site, which will be sent to the nearby community disposal facility on daily basis by laborers itself.

7. The total water requirement for the proposed mining is about 42.3 KLD, out of this 28 KLD used for dust suppression, 9.3 KLD used for Domestic and 5 KLD used for developing green belt. PP has not mention any source of water. This water will be supplied by nearby available sources or private water tankers.

8. The project site is part of the river and during monsoon the river use to flow. In view of this, there are no Rehabilitation & Resettlement issues.

9. PP reported that there is no Court Cases pending against the projectand/or land in which the project is proposed to be set up.

10. PP submitted that the project will commence once Environmental Clearance and other necessary certificates are obtained from the respective departments. The total cost of project would be around Rs. 4144.23 lakhs which includes the auction cost (3608.93 lacks), cost of labour& equipment (530.30 lakhs) and miscellaneous cost (5 lakhs). PP reported that total direct manpower requirement for the proposed mining operation will be around 930 (Administrative-5, Supervisor-15, Skilled Workers-60 and Unskilled Workers-850) Significant Indirect employment is also expected due to the associated activities. This project operation will provide livelihood to the poorest section of the society.

11. The proposal was placed in the 24<sup>th</sup> EAC (Non-coal Mining) held during 9<sup>th</sup> to 11<sup>th</sup> December, 2020. It was noted that the neither PP nor his representative was present to make presentation on their proposal before the EAC. No contact detail was available on Parivesh Portal. Ministry tried to contact the PP but could not reach the PP and, therefore, the EAC decided to deliberate on the proposal based on documents and information submitted by the PP on Parivesh Portal and it was observed that the proposal is lacking following information:

- i. No of ghats and area of Ghat not matched with proposed mining lease as per the DSR of Nawada. Hence, PP should submit a justification letter from DMG for the difference in lease document and in the DSR.
- ii. PP should submit the details of transportation plan including the capacity of truck and number of trips required for fulfilling the requirement, loading/unloading points in each Ghats, transporting route, location of storage yard etc. And also PP needs to ascertain the impact of transportation and details of transportation route viz. (length of the road, type of road, passing through the village or habitation) and mitigative measures to be taken for abatement of pollution due to transportation. The budget for the same needs to be provided.
- iii. PP need to submit the approved mining plan in Parivesh Portal.
- iv. A letter from wild life division and forest department regarding presence of national park, wild life sanctuary, eco-sensitive area or any protected area within 10 km radius of lease area.
- v. Affidavit as per Ministry's O.M. Dated 30.05.2018.
- vi. The details of the area to be utilized & not to be utilized for mining, as approved mining plan at the end of 5 years needs to be provided. Whether area demarcated by DMG comes under the utilized zone or unutilized zone. In addition to this, area required for mining in the next 5 years needs to be provided with proper justification. The details of any prohibited area within the LOI area or demarcated area needs to be provided.
- vii. PP will ensure to curb illegal mining in the demarcated area and rest of the area falling in the lease (provision of Enforcement and Monitoring Guidelines for Sand Mining ,2020 shall be referred for the same). In addition to this budget for installation surveillance equipment like CCTV, security guards weigh bridge etc., needs to be provided.
- viii. PP should ensure not use any kind of heavy machinery for mining of minerals. PP need replace use of light weight excavators with scraper and same another alternative.
- ix. In case there any proposal for utilization of land outside the mining lease for transportation with a mutual agreement with villagers then details of the same needs to be provided along with proposed compensation details.

- x. PP needs to re-estimate the requirement of water for plantation, dust suppression and domestic use. The source of water needs to be mentioned.
- xi. PP mentioned that "mineral will be purchased by the customers at mine site and transported by them through their own arrangement of trucks. The practice is quite sound in the area and ensure continuous lifting of the material. However necessary arrangement of truck can be done from the local truck operator union." PP need to submit details action plan and mitigative measures to be taken for abatement of pollution due to such kind of transportation.

Accordingly the Committee decided to defer the Proposal.

(1.8): Production of 2.5 MTPA Limestone by M/s RMG Superconductors Ltd (RMG) at village - Jamuwani Kalan, Khira&Durjanpur Tehsil Vijayraghavad, Katni District, Madhya Pradesh. [Proposal no: IA/MP/MIN/65784/2017; File No. J-11015/62/2017-IA-II(M)]]– Reconsideration of Terms of Reference

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

2. PP has submitted that the said proposal is covered under the ambit of EIA Notification, 2006 & its subsequent amendments and the project falls under Schedule 1(a) of mining of minerals and is a Category- "A" as the mining lease area is greater than 100 Ha.

3. PP applied vide Proposal no: IA/MP/MIN/65784/2017 dated 29.06.2007for prescribing Term of Reference (ToR) and submitted Form-1 and Pre-feasibility report. The proposal was considered in the 20<sup>th</sup> EAC meeting held during July 24, 2017 and the Committee noticed that the *papers related to the presentation of the proposal were not complete and therefore, informed the PP to come in next meeting with complete presentation and accordingly, deferred the proposal.* 

The proposal was again considered in the 21<sup>st</sup> EAC meeting held during August 29-30, 2017 and the Committee asked the *PP to furnish the details of the Project Affected* 

Households (PAH and broad contours of the R&R plan along with plan and sections of the proposed mining operations clearly delineating the active mining area. In view of the above, the proposal was deferred for grant of ToR.

The proposal was again placed in the 24<sup>th</sup> EAC Meeting held during November 27-28, 2017 wherein the committee noted that on viewing the KML file submitted by the PP on DSS, Approx. 4.02 Ha area of Mining lease is falling inside Forest Compartment No. 27 & 28 under Katni Forest Division of Madhya Pradesh State. The Committee therefore, deferred the proposal and asked the PP to submit a certificate from State Forest Department stating that no forest land is involved in the ML area. In this regard, Ministry also requested the Secretary, Department of Forests, Bhopal vide letter dated 20.12.2017 to provide the factual status whether the forest land is involved in the matter. Then, the proposal was delisted on 11.07.2018. The proposal was then relisted on 18.11.2020.

## In view of the above, PP submitted the letter from Additional Principal Chief Conservator of Forests, Bhopal vide Lr.No. F-1/2020/10-11/2194 dated 09.07.2020 stating that the Forest Compartment No. 27 & 28 under Katni Forest Division is 250m away from the ML area and no forest land is involved in the ML area.

The proposal was reconsidered in the 24<sup>th</sup> EAC meeting held during 9-11<sup>th</sup> December, 2020.

4. PP reported that the mining lease area covers 740.35 Ha consisting of 734.54 Ha Private Land and 05.81 Ha Government Land. The entire lease area is sub divided into 3 blocks as Block 1- Jamuwanikalan area- 264.22 Ha, Block 2- Khirwa area-142.32 Ha, Block 3- Durjanpur area- 333.81 Ha. The State Govt. of M.P. vide letter no. F 3- 22/2010/12/2, Bhopal dated- 16.09.2010 has recommended 740.35 Ha. of area for mining of Limestone and Laterite. The lease deed is executed on 31.01.2012 for a period of 30 years.

5. PP submitted that there is no forest land involved in the mine lease area. PP reported that the nearest reserve forest from the mine site is Hardua RF Dense Mixed Jungle (2.5 km, SE adjoining/NW) and river Tons/Tamas (3.0 km NE). PP further submitted that there is no National Park, Wildlife sanctuary, defense installation or sensitive area located within 15 km radius of the proposed mine. There is no historical monument or public building near the area and within 10 kms radius except a few temples.

6. PP submitted that the Mining Plan with Progressive Mine Closure Plan has been approved by Indian Bureau of Mines vide letter no 314(3)/2011- MCCM(CZ)/MP/MS/ PMCP-6 dated 01.08.2011. The method of mining is proposed to be open-cast using drilling Machine along with compressor for drilling and subsequent blasting and Excavator/ shovels/ dumper combination for extraction, loading, sizing by crusher and

transportation of limestone. PP reported that there will be no generation of waste, subgrade limestone and reject material. The net geological reserves are estimated to be about 59.30 Million tonnes and the mineable reserves are estimated to be 45.96 Million tonnes.

PP submitted that after excavation of the OB in all the three blocks, the exposed limestone bed will be drilled by wagon drills (100mm. dia.), the required no of holes upto 6.0 m depth will be drilled to obtained a bench of 6 m height wherever necessary and the drill holes will be blasted. The oversized boulders will be side-casted by the excavator/shovel and thereafter reduced to loadable size by hydraulic rock breaker for loading into dumpers and transported to the C & S plants located in each block. The broken ROM of loadable size will be loaded by 2.5 cum bucket capacity excavator/shovel into 20 tonner dumpers and transported to the C & S Plant and the graded sized limestone (+10 mm) will be transported the proposed cement plant. The clayey material filled in cavities in limestone along with finer fraction of limestone (-10mm) will get separated out during screening which will be stacked near to the C & S Plant at specified sites for future blending in required proportion with graded limestone.

7. PP submitted that the groundwater is not likely to be encountered during the mining as water table is 25-30 m below ground level and maximum mining depth will 5be only 15m during the mining plan period. The Block I (Jamuawanikalan) and Block II (Khirwa) is separated by a perennial nallah bordering both the blocks. Beside this, few small seasonal nalas on the boundary are also available. One nonperennial nala flows within the Block-III (Durjanpur) lease area. The water requirement is estimated to be 300 m3 /day out of which 250 m3 /day of the water is required for dust suppression (within the lease and outside the lease in nearby villages), plantation and vehicle washing and 50 m3 /day is required for drinking purposes. The water requirement is proposed to be met from groundwater and rainwater collected in mining pit.

8.PP submitted that the Rehabilitation and Resettlement (R & R) Plan is not applicable.

9. PP reported that there is no Court Cases pending against the project and/or land in which the project is proposed to be set up.

10. PP reported that the expected project cost is ₹7100 Lakhs and the capital budget for environmental protection measure is estimated to be Rs 100 Lakhs. The employment generation is 211 persons. There will be employment generation of double this number in secondary and tertiary sectors. It is proposed to employ the locals wherever possible in the proposed project activities.

11. Based on the information submitted and presentation made by the PP and the Consultant, the Committee **recommended** the proposal for issuance of Standard TOR along with following additional TOR for undertaking EIA study for production of 2.5 MTPA Limestone by M/s RMG Superconductors Ltd (RMG) at village - Jamuwani Kalan,

Khira&Durjanpur Tehsil Vijayraghavad, Katni District, Madhya Pradesh for undertaking detailed EIA/EMP study: PP needs to submit the valid mining plan approval.

- 1. PP needs to submit the proof of application submitted to CGWA for water drawl.
- 2. PP needs to submit the letter from the Forest Department for authentication of flora and fauna in the study area around 10km radius.
- 3. PP should submit the Affidavit in a non-judicial stamp paper as per the Ministry's OM dated 30.05.2018.

## Minutes of the 2<sup>nd</sup> Day EAC (Non Coal) meeting held on 10<sup>th</sup> December, 2020

(2.1): Persoda Limestone mine of M/s RCCPL Private Limited with total excavation of 2.9 MTPA (2.0 MTPA of limestone (ROM), waste & dolomite of 0.815 MTPA and topsoil of 0.085 MTPA) for production of 2.0 MTPA limestone (ROM) located at villages Persoda, KothodaKhurd, KothodaBuzurg and Govindpur, Tehsil -Korpana, District -Chandrapur, Maharashtra. [Proposal no: IA/MH/MIN/89273/2018; File No. J110105/22/2019-IA.II(M)] - Environmental Clearance regarding.

The proposal of M/s RCCPL Private Limited is for total with total excavation of 2.9 MTPA (2.0 MTPA of limestone (ROM), waste & dolomite of 0.815 MTPA and topsoil of 0.085 MTPA) for production of 2.0 MTPA limestone (ROM) located at villages Persoda, KothodaKhurd, KothodaBuzurg and Govindpur, Tehsil -Korpana, District -Chandrapur, Maharashtra. The mine lease area lies between the 19°43'54.10" N to 19°46'09.78" N latitude and 78°50'41.18" E to 78°52'23.39" E Longitude with an altitude of 196-219m above MSL on the Survey of India Topo-sheet No. E 55 A 13, E 44A14 (56 I/13 & 56 I/14).

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category A or Activity 1(a) Mining of Minerals as the mining lease area is greater than 100 ha.

3. PP applied vide proposal no IA/MH/MIN/89273/2018 on 22.01.2019 and submitted revised Form-1 and PFR and the proposal was considered in 2nd EAC Meeting held during February 20-21, 2019 wherein the Committee recommended the Terms of Reference and the Ministry accorded Terms of Reference vide Lr. No. J-

11015/22/2019-IA.II (M) dated 09.04.2019. PP now applied vide proposal no. IA/MH/MIN/89273/2018 dated 01.12.2020 applied for grant of EC and submitted the Form 2 and EIA Report after conducting the Public Hearing. The proposal was placed in 24<sup>th</sup> EAC meeting held during 09-11 December, 2020.

4. PP submitted that Letter of Intent (LoI) was issued by Govt. of Maharashtra vide No. MMN - 1010/ CR.3338/ ind-9 dated 13.06.2018 over an area of 756.14 Ha in the name of M/s Reliance Cementation Private Limited. This letter of intent is valid for one year i.e. up to 12.06.2019. The PP submitted that name of Reliance Cementation Private Limited was changed to Reliance Cement Company Private Limited on 8.8.2011. The name of Reliance Cement Company Private Limited was changed to RCCPL Private The Limited on 1.08.2018. PP also submitted letter MMNа No. 1010/F.No./3338/Industries-9 dated 4.01.2019 issued by Industry, Energy & Labour Dept. Govt. of Maharashtra addressed to Director, Directorate of Geology & Mining wherein it has mentioned that "as per section 62 of Mineral Concession Rules, 1960, with respect to their 756.14 Ha Prospecting License/Mining lease in village PersodaKothodaBuzurg and Govindpur, Tehsil: Korpana, District: Chandrapur; company has informed regarding change of name of company within stipulated time. In case prospecting license/mining lease of the company, government hereby approves to take note of change of name of the company as M/s RCCPL Pvt Limited instead of M/s Reliance Cementation Private Limited. Henceforth, correspondence with the company is to be made in the name of M/s RCCPL Pvt Limited."

5. PP submitted the Approval of Mining Plan along with Progressive Mine Closure Plan in respect of Persoda Limestone deposit approved by Indian Bureau of Mines (IBM) vide letter No. CND/LST/MPLN-1178/NGP-2019 dated 09.10.2019 over an area of 756.14 Ha in the name of M/s RCCPL Private Limited.

6. PP submitted that the mining operation will be fully mechanized and the sequence of operation in quarrying will be drilling, blasting, loading, hauling, crushing and transportation and will be operated in two shifts of 8 hours each. The excavation of mineral & waste is by deploying loader/excavator and transportation is through dumpers. The size of machinery will be as per approved mining plan. Site will be cleared with the help of dozer / loader and top soil will be utilized for plantation or stacked separately for future use. Removal of over burden will be done by loader / excavator. For limestone, 115 mm size drills will be used for drilling. Crawler mounted hydraulic excavator with bucket capacity of 3.5 m3 capacity will be used for loading. 115 mm size drills will be used for doing. 115 mm size drills will be used to transport the blasted material from the face to dump area and crusher.

PP submitted that the Mining activity will be carried out in two pits with benches of 6-8 m height and minimum 25 m width. PP reported that total Geological Reserves is 134.88 million tonnes Mineable Reserve is 106.60 million tonnes and Extractable reserves 40.77 million tonnes at the rate of 38.25%. PP submitted that the limestone mine will produce 2.0 MTPA of limestone (ROM) by opencast fully mechanized method of mining with deep hole drilling & blasting. During the production of limestone, waste and dolomite of 0.815 MTPA and topsoil of 0.085 MTPA will also be generated. Thus, the total excavation will be 2.9 MTPA. The expected life of the mine is about 23 years. The top soil will be scraped or dozed as far as possible. The soil will be loaded into dumpers by shovels/ pay loaders. The top soil is fertile in nature which will be used for plantation purpose. During the first five years period, about 2,75,679 cum of top soil will be generated and this will be temporarily stacked near the crushing plant, for this about 2.0 Ha area will be earmarked. Up to conceptual period, total 29,69,800 cum top soil will be generated this will be initial dumped near the crushing plant and thereafter, utilized for plantation as well as top filling of filled back on mined out pit. The OB/ Waste/IB material contains dolomite, clay band sand dolomitic limestone. During the first five years period, about 22,60,955 cum of OB/waste will be generated. Up to conceptual period, 838,18,950 cum OB will be generated. The dumping ground is outside UPL, considering the UPL for the ensuing mining plan period. At present no simultaneous backfilling is proposed. The dumping ground will be used for a temporary dumping. In the later stages of mine, entire quantity of waste and soil will be utilized for back-filling and plantation purposes.

PP submitted that the crushed limestone will be dispatched to the cement plant located at Mukutban in Yavatmal district by 'Over Land Closed Belt Conveyor' of around 4 km length crossing over Penganga River. Since the Parsoda ML area is situated on other side of Penganga River, the limestone after crushing is proposed to be transported from crusher at Persoda by Overland Belt conveyor (OLBC) to the plant site. The rated capacity of OLBC shall be 1000 tph from Persoda mines. Further, till the installation of crusher, sized limestone will be transported to cement plant for captive use. Crusher will be erected in first/second year of operation of the plan period. After commissioning of crusher, the ROM will be crushed. The ROM limestone will be unloaded by dumpers in to crusher hopper. An apron feeder will feed the limestone from the hopper to the grizzly/wobblers. Crushing will be done in single/double stage impactor to give final output size of -75 mm to suit the requirement of captive cement plant.

7. PP submitted that Based on the Electrical Resistivity Tests (ERTs) and local drilling information, the depth of water yielding aquifer zones in ML area varies from 28.00 m to

90.00 m bgl. Hence, the mining activity during 1st 5 years will not intersect water table or aquifer and there will be no ground water inflow into mine pits during the ensuing proposal period of 5 years. PP submitted that the total water requirement for mines is estimated to be around 234 KLD of which Dust suppression is 175 KLD, Green belt 50 KLD, Domestic 5 KLD and Workshop 4 KLD. It is proposed to meet this requirement through ground water during initial years of operation after obtaining necessary clearances/permissions from the concerned authorities. Obtaining NOC from CGWA is under progress. No wastewater generation from the proposed mining activity. Domestic waste water will be treated and will be utilized for gardening.

8. PP reported that the total no of 92,450 saplings will be planted in an area of 92.45 Ha during 30 years period out of which during 1<sup>st</sup> five years 20,450 saplings will be planted in area of 20.45 Ha along the village habitation, Karanj, Khamar, Akesia, Gulmohar, Sal, Mango, Jamun, Amrud etc. Similarly, the extent in backfilled area proposed to be covered from the  $11^{th} - 30^{th}$  year and the number of plants proposed to be planted is 1,64,770 no.s in area of 164.77 Ha. In total Backfilling Area (164.77) + Greenbelt area (92.45 ha) = 257.22 ha. At the end of life of the mine, 50 m barrier zone along road, electric line, some virgin land as well as entire 7.5 m of barrier zone will be converted by plantation, this area will be about 126.33 ha. Based on climate and soil characteristics of the study area, some species are recommended for plantation. The climate of the region is extreme where there is heavy rainfall as well as extreme heat and soil temperature is very high in summer. Hence in order to have a ground cover, some fast-growing species which do not require watering have been recommended for mass plantation. Albizialebeck (Kala siris) and Leucenalatisiliqua (Subabul) which not only resist water stress but also covers the ground guickly and also have a wider soil adaptability. PP suggested Plant species for mine lease area and its boundary as follows Azadirachtaindica (Neem), Polyalthialongifolira (Asoka), Butea monosperma (Palas), Bauhinia purpuriai (Papeli), Bauhinia recemosa (Zinza), Syzygiumcummin (Jamun), Pongamiaglabra(Ganuga), Peltophorumferrusinium (Copper Pod) Mangiferaindica(Aam), Dalbergiasissoo (Sissoo), Tectonagrandis (Teak), Ficusreeligiosa (Pipal), Cassia fistula (Amaltas), Bambusa multiplex (Bas), Tamarindusindica (Imli), Acacia procera (kala siris), Acacia lebbeck (siris) and Acacia Leucophloe (Sarkar Tumma). Plant species for mined out follows as Mangiferaindica (Aam), Azadirachtaindica (Neem), area Polyalthialongifolira(Asoka), Butea monosperma (Palas), Bauhinia purpuria (Papeli), Bauhinia recemosa (Zinza), Pongamiaglabra (Ganuga), Peltophorumferrusinium (Copper pod), Dalbergiasissoo (Sissoo), Ficusreeligiosa (Pipal), Cassia fistula (Amaltas), Bambusa (Bamboo), Tamarindusindica (Imli), Alstoniascholaris multiplex (Char) and Meliaazadirachta (TurakaVepa). Plant species for vacant spaces as follows are Syzygiumcumminii (Jamun), Azadirachtaindica (Neem), Pongamiaglabra (Ganuga), Peltophorumferrusinum, Terminalia Arjun (Arjun), Dalbergiasissoo (Sissoo),

Tectonagrandis (Teak), Ficusreliosa (Pipal), Casia fistula (Amaltas), Bambuea multiplex (bas), Tamarindusindica (Imli), Polyalthialongifolirai (Asoka) and Butea monosperma (Palas). The budget earmarked for greenbelt/plantation is Rs 75 Lakhs (Capital) and Rs 1.75 Lakh/annum (recurring).

9. PP submitted that proposal does not require clearance under Forest Conservation Act, 1980, Wildlife Protection Act, 1972 and C.R.Z notification, 2011. PP submitted that general condition is applicable to the project as mining lease is falling within 5 KM of the inter-state boundary. PP submitted the letter from the Office of the Deputy Conservator of Forests, Central Chanda Forest Division, that forest land is not involved in the mine lease area vide letter dated 26.11.2019. However, PP also submitted that the nearest reserve forest from the mining site are Mangalhira RF (0.8 km, SW), PF near Yedsi (0.8 km, E), RF near Pimprod (1.7 km, NW), Pardi RF (4.4 km, E), Akapur RF (4.8 km, NE), Ruikot RF (4.6 km, N), Manikgarh RF (6.2 km, SSE), Satnala RF (6.3 km, S), Chilai RF (6.6 km, NE), Ardwan RF(7.8 km, NW), Kannargoan RF(8.8 km, E) and Sekarpur RF (9.5 km, NW) and water bodies from the nearest mining site are Penganga River (Adjacent, N), Mukutban pond (4.5 km, N) and Vaidarbha river (9.9 km, NE). PP also submitted the letter from Principle Chief Conservation of Forest Dept. Chandrapur dated 26.12.2019 that national parks, sanctuaries, Biosphere Reserves, Wildlife corridors, Ramsar Site Tiger/Elephant Reserves are not included in the 10 km radius area around the proposed mineral bearing area and the map showing mineral bearing area and 10 km radius area. PP has reported that there are no Scheduled – I species in the 10 km study area 10.

of the buffer zone of the mine lease area. PP also submitted that the authenticated List of Flora and Fauna fromDy. Conservation of Forest, Chendrapur vide letter dated 22.08.2019.

11. PP submitted that the baseline data for ambient air quality ( $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2\&$   $NO_2$ ), water quality, noise level, soil and flora & fauna was generated for the period during Winter season, Dec, 2018 - Feb, 2019. PP submitted that the air quality monitoring has been carried out at 8 locations. The air quality concentrations of  $PM_{2.5}$  and  $PM_{10}$  for all the 6 AAQM stations were found between 12.2 to  $31.5\mu g/m^3$  and 17.7 to  $47.7\mu g/m^3$  respectively. The concentrations of  $NO_x$  and  $SO_2$  were found to be in range of 11.1 to  $18.6\mu g/m^3$  and 9.1 to  $14.1 \ \mu g/m^3$  respectively. AAQ parameters in the study area have been found well within prescribed norms of NAAQS. Ambient noise levels were measured at eight locations around the mine lease area. The daytime (Lday) noise levels at all the locations are observed to be in the range of 41.4 dB (A) to 49.5 dB (A). The night time (Lnight) noise levels at all the locations were observed to be in the range of 38.4 dB (A) to 44.9 dB (A). The daytime and night time noise levels in all the residential locations were observed to be within the permissible limits. PP further submitted that 8 ground water samples and 2 surface water samples were collected

within the study area. PP submitted that water quality results indicate ground water is in conformity with IS-10500 standards. PP submitted that post project concentration of various air pollutants is well within the prescribed standards.

12. PP submitted that initially Public Hearing was scheduled on 24.04.2020 and the advertisements were published in Marathi newspaper namely "Loksatta" and English newspaper "The Hitvada" dated 18.03.2020. However, due to Covid-19 pandemic, sudden lockdown was declared all over the country w.e.f. 22.03.2020, hence the scheduled public hearing has been postponed & informed to the concerned by publishing a public notice on 22.04.2020 in Marathi newspaper namely "Loksatta" and English newspaper "The Hitvada". In this connection, MPCB decided to hold public hearing in respect of the said project on 22.09.2020 in consultation with District Collector, Chandrapur. Maharashtra State Pollution Control Board has published public notices in Marathi newspaper namely "Loksatta" and english newspaper "The Hitvada" on dated 01.09.2020. Thereafter, MoEF&CC, Govt. of India issued an office memorandum no. F.No. 22-25/2020-IA.III dated 14.09.2020 which states that "Use of Virtual platform/online facilities may also be employed in addition to the physical Public Hearing Process" as per point no. 3(iii) of the said memorandum. To comply with this notification, a corrigendum has been published in Marathi newspaper namely "Loksatta" and English newspaper "The Hitvada" on dated 20.09.2020. Similarly a foot note was published in the advertisements dated 20.09.2020.

The Project Proponent reported that then, Public Hearing for the project was conducted through both online & offline on 22.09.2020 by Maharashtra State Pollution Control Board. And hence, accordingly, to the participants who want to join the Public Hearing online, access to them was given via CISCO WEBEX App The Public hearing was conducted under the chairmanship of Additional District Magistrate, Chandrapur at Niyojan Bhavan, Collector Office, Tal. Dist. Chandrapur. The issues raised during public hearing were mainly about land, employment, CSR, Pollution etc. impact of mining on forests and wildlife sanctuaries. PP also submitted that 70 persons were physically present at the public hearing venue i.e. at Niyojan Bhavan, Chandrapur and 118 persons were connected online though Cisco Webex app. PP has also made budgetary provisions in the form of CER, EMP and CSR to address the issues raised during Public consultation.

13. PP submitted that during last three year financial years 2016-17 to 2018-19 CSR spent was Rs 659.90 Lakhs. CSR activities will be taken up to fulfil the basic requirement of the people in the area. Separate fund for CSR will be allocated for implementation of CSR plan. Some of the activities which can be carried out in CSR, are infrastructure & water resource development, education, medical facilities, sanitation, community

development, awareness programs, livelihood and skill training in and around the project site.

14. PP has submitted that the proposed mine lease covers 4 villages which will be partially affected due to mining of limestone from proposed mining lease in Korpana Taluka of Chandrapur District. As per the primary survey, it was observed that a total land affected families are 584. However, we could able to meet only 325 project affected families due to their non-availability in these affected villages. These PAFs are residing other than the project affected area and they have their land holdings in Persoda, Govindpur, Kothoda Khurd and KothodaBuzurg village revenue locations as per the revenue records. PP earmarked the budget for R & R as Rs 15946.8 Lakhs. PP submitted that will pay compensation as per the private negotiation with land owners i.e. willing seller and willing purchaser concept, where the interests of the project affected families and its persons will be well protected and paid adequate compensation followed by win and win situations to both the parties.

15. Project Proponent submitted that the capital cost of environment protection measures is 2.0 crores and recurring cost is Rs 5.0 lakh per annum.

16. PP submitted that the main factors affecting occupational health in limestone mine are fugitive dust and noise. Safety of employee during blasting operation and maintenance of mining equipment and handling of explosive materials are taken care of as per Mine Regulations 1961. PPEs such as dust mask, ear plugs/earmuffs etc. will be provided to workmen. All working personnel will be medically examined as per the statutory requirement. This is in addition to the pre-employment medical examination. Safety training will be provided by the safety officers with the assistance of faculty members called from professional safety institutions and universities. Hence, no significant impact on health of workmen is envisaged.

17. PP submitted an undertaking by the way of an affidavit bearing IN-DL02339997936052Q dated 13.12.2018 to comply with all the statutory requirement and common cause judgment dated 02.08.2017. Consultant submitted an undertaking that "M/s Vimta Labs Limited has complied with all the prescribed Terms of Reference (TOR) issued by Ministry of Environment, Forests & Climate Change (MoEF&CC) vide Letter no. J-11055/22/2019-IA.II (M) dated 09.04.2019 stipulated for the preparation of ELA Report for the proposed Persoda Limestone mine with total excavation of 2.9 MTPA (2.0 MTPA of limestone (ROM), waste & dolomite of 0.815 MTPA and topsoil of 0.085 MTPA) for production of 2.0 MTPA limestone (ROM) located at villages Persoda, KothodaKhurd, KothodaBuzurg and Govindpur, Tehsil -Korpana, District -Chandrapur, Maharashtra. Minutes of meeting of 24th EAC (Non-coal Mining) held during 9th -10th December, 2020

18. Project Proponent submitted that the estimated cost for the proposed mining project including utilities, offsite, auxiliary services etc., is about Rs.352 crores and shall give direct employment to 105 persons, of which managerial 12, supervisory 13, skilled operators and maintenance staff 80.

19. Based on the information submitted and presentation made by the PP and the Consultant during the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020, the Committee after detailed deliberations **deferred** the proposal for the want of the following information.

- i.Detailed Hydrogeology study needs to be carried out by PP by NABET Accredited under Ground Water Consultant Organization (GWCO) along with impact of mine on surface water bodies and impact of surface water body on mine.
- ii.PP needs to submit the design of the embankment and its efficacy and details of the flow simulation model carried out.
- iii.PP should obtain the NOC from CGWA for ground water withdrawal.
- iv.PP needs to submit the incremental noise level and the impact of noise and ground vibration on habitation and surface water bodies.
- v.PP needs to submit the periodic monitoring plan to sustain the mine with environment safeguards.
- vi.PP needs to clearly bring out the use of explosives, quantity of explosives to be used, storage of explosives at site and necessary approvals to be obtained from Competent Authority.
- vii.PP should also submit the letter from the Principal Chief Conservator of Forests, Telangana for no involvement of forest land in the mine lease area and national parks, sanctuaries, Biosphere Reserves, Wildlife corridors, Ramsar Site Tiger/Elephant Reserves within 10km radius.
- viii.PP informed the Committee that the land affected families are 584 and they are going to be affected through land acquisition only and not going to be disturbed. Hence, PP should submit the undertaking in this regard.

ix.PP should submit the document showing the validity of the lease.

- x.PP accorded TOR for mining of minerals only whereas in EC proposal it is observed that the crusher is proposed to install within the mining lease area. A proper clarification with detailed risk assessment on the local environment be submitted.
- xi.PP should submit the copy of the Attendance Sheet of the participants participated in the Public Hearing.

xii.PP should clarify the Distance of Public Hearing Venue from the Proposed Project.

- xiii.The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020.
- xiv.PP should submit the breakup of the budget of the Environment management plan.

(2.2): Narayanposhi Iron and Manganese Ore Mine of M/s JSW Steel Ltd for production of 10 million TPA (ROM) of Iron ore with total excavation of 10.815 million TPA (ROM 10 MTPA + OB 0.815 MTPA) and 0.036 million TPA of Manganese ore (ROM) with total excavation of 0.3059 million TPA (ROM 0.036 MTPA + OB 0.269 MTPA) along with screening, crushing and 6 MTPA beneficiation plant in lease area of 347.008 ha (As per DGPS) /349.254 ha (As per ROR) in Harischandrapur, Koira, Kashira, Kusumdihi and Kathamala R. [Proposal No. IA/OR/MIN/177994/2020; File No. J- 110105/62/2020-IA.II(M)] – Terms of Reference

The Proposal ofM/s JSW Steel Ltd is for grant of Term of Reference for production of 10 million TPA (ROM) of Iron ore with total excavation of 10.815 million TPA (ROM 10 MTPA + OB 0.815 MTPA) and 0.036 million TPA of Manganese ore (ROM) with total excavation of 0.3059 million TPA (ROM 0.036 MTPA + OB 0.269 MTPA) along with screening, crushing and 6 MTPA beneficiation plant in lease area of 347.008 ha (As per DGPS) /349.254 ha (As per ROR) in Harischandrapur, Koira, Kashira, Kusumdihi and Kathamala RF villages under Koira Tehsil of SundargarhDistrict,Odisha. The mine lease area is located between Latitude: 21°54′46.07″ N - 21°56′23.13″ N and Longitude

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85°13'41.16" E - 85°14'56.56" E and within survey of India Toposheet No. 73 F/4, F/8, G/1 and G/5.

2. PP has submitted that the said proposal is covered under the ambit of EIA Notification, 2006 & its subsequent amendments and the project falls under Schedule 1(a) of mining of minerals and is a Category- "A" as the mining lease area is greater than 100 Ha and 2(b) Mineral beneficiation.

3. PP has applied online vide Proposal no: IA/OR/MIN/177994/2020 dated 08.10.2020for prescribing Terms of Reference (ToR) and submitted Form-1 and Prefeasibility report. Thereafter, Ministry examined the proposal and raised EDS on 12.11.2020 and the PP submitted the information on 21.11.2020. The proposal was considered in the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020.

4. PP submitted that the Narayanposhi Iron and Manganese Ore mine (erstwhile lessee M/s Aryan Mining & Trading Corporation Pvt. Limited) was one of the mines whose lease expired on 31.03.2020. In pursuant to the Mines and Minerals (Development and Regulation) Act, 1957 and the Mineral (Auction) Rules, 2015, Govt. of Odisha issued the notice inviting tender dated December, 2019 for commencement of the auction process to grant the mining lease in respect of Narayanposhi Iron & Manganese Ore Block over an area of 349.254 Ha as per ROR (347.008 Ha as per DGPS computation) in villages Harischandrapur, Koira, Kashira, Kusumdihi and Kathamala RF of Sundargarh District, Odisha for a resource size of about 186.05 Million tonnes (Mt). The e-auction process was conducted in accordance with the tender document and the mineral auction rule, 2015 for the said mineral block and M/s JSW Steel Limited was declared as the preferred bidder under Rule 9(9)(iii) of Mineral (Auction) Rules 2015. Without prejudice to the generality of the provisions of section 8B(2) of the MMDR Act, 1957, the details of the valid rights, approvals, clearances, licenses and the like held by the previous lessee are vested in favor of M/S JSW Steel Ltd by the Govt. of Odisha for a period of 2 years from the date of execution of lease deed or till the date of getting fresh approvals, clearances, licenses, permits, and the like, whichever is earlier vide order No4212/SM, dated 30.05.2020.

PP submitted that the Mining Lease was granted in favor of M/s JSW Steel Limited for a period of 50 years w.e.f 26.06.2020. Subsequent to signing of the MDPA with the Collector, Sundargarh, M/s JSW Steel Limited has made payment of the third installment being the eighty percent of the upfront value and executed and registered the mining lease with the Government of Odisha, on 27.06.2020.

5. PP submitted that, Out of the total 347.008 Ha (as per DGPS) mining lease area, forest land is 257.451 Ha and Non-forest land is 89.557 Ha. PP also submitted the fresh proposal vide Proposal No. FP/OR/ MIN/51059/2020 dated 14.10.2020 for obtaining Forest Clearance.

PP reported that the nearest reserve forest from the mine site are Karo RF (1.5 km, N), Torha RF (1.6 km, NW), Protected Forest (3.2 km, SSE), Sarkanda RF (5.7 km, S), Uliburu RF (6.5 km, N), Khajurdihi RF (7.8 km, SSE), Karampada RF (8.7 km, N), Lakrhaghat RF (8.7 km, NE), Siddhamatha RF (10.1 km, ENE) and Baitarni RF (11.2 km, East) and water bodies from the mine site are Kashiranala (within ML Area), Narayanposhi Nala (within ML Area), Orahuri nala (adjacent to ML Area, S), Lekerapaninala (30m, E), KaroNadi (50m,W), KukarhaJora (0.1 km, W), Samijnala (4.0 km, WNW), Tehereinala (5.8km, SE), Eruanala (6.9km,West), Kundranadi (7.2km, E), Korainala (7.9 km, NNW), Tapadihinala (8.1km, NE), Geranala (8.3 km, West), BachaNala (8.8km, WNW), Archanda Nala (10.0 km, SE), SarkandaNadi (10.7 km, SSW), KakarPani Nala (11.2 km, East) and Kunduru Nala (13.0km, NE). PP further submitted that there are no wild life sanctuaries, national parks, elephant/tiger reserves within 10 km of the mine lease area.

6. PP submitted that the letter from IBM for Approval of Mining Plan of Narayanposhi Iron & Mn. mine ·along with Progressive Mine Closure Plan (PMCP), over an area of 347.008 ha (As per DGPS) /349.254 ha (As per ROR) in SundargarhDistrict,Odisha vide Lr No. MP/A/14-ORI/BHU/2020-21 dated 08.09.2020 in favour of M/s JSW Steel Limited.

PP submitted that the Fully mechanized open cast method of mining by drilling and blasting and by deploying HEMM equipments like hydraulic drills and excavators, wheel loaders, dumpers, will be undertaken. The mine will be operated in a three shift basis. Process of excavation and loading of overburden/waste will be done by deploying hydraulic excavators and dumpers. Excavators of 2.5m3 to 9.0m3 capacities will be deployed for excavation & loading of ROM ore and dumpers 100t/35t capacity shall be deployed for transportation of ore and OB. The blasted material will be excavated by shovels of 2.5m3 – 9.0m3 capacity and loaded onto 35 – 100t dumpers for transportation of the ROM, sub-grade and waste. Loading will be done mechanically. The ROM ore from different mining faces will be transported by dumpers of 35 -100t in a pre-determined proportion (for blending different qualities of ore), and delivered to the processing plant. Iron ore will be evacuated from the lease area by road/conveyor/pipe line to the destination point. Further, Railway siding at Jajang Iron ore block will also be used for the transportation of iron ore as and when required.

PP submitted that 170 bore holes have drilled within the lease area for a meterage of 8436.30m. For Iron ore the maximum depth attained is 165.95m and the minimum depth is 22.35m whereas for Mn ore the Maximum and Minimum depth attended is 68.10m and 23.30m respectively. The iron ore block consists of 5 numbers of quarries iron ore deposit which occurs at various levels. The active pits are Q-3, 4 and RF pit. Part of the Q-3 has been exhausted where back-filling has been already carried out by old lessee. In between the quarry-3 and 4 there is occurrence of ore which has been envisaged to be developed to obtain the production of ore. RF pit has been selected for

the development to obtain the production of 10 Mt/yr Iron Ore (ROM) during plan period of 5 years. The height and width of the benches for iron ore will be kept at 9m and 15m respectively. In case of Manganese ore, there are 10 nos. of pits. The targeted production of 0.036 Mt/yr of Manganese Ore (ROM) has been envisaged from the development of Quarry-5. The height and width of the proposed manganese quarry will be kept at 6m and 10m respectively.

PP reported that the total mineable reserve is about 186.05 Million tonnes (Mt) out of which the mineable iron ore reserve is about 185.51 Mt and mineable manganese ore reserve is about 0.538 Mt. It is proposed to produce 10.0 Mt/yr of Iron Ore (ROM) and 0.036 Mt/yr of Manganese Ore (ROM). The excavated ROM ore is proposed to be processed in the crushing and screening plants to obtain the lump and fine ore as product mix. PP submitted that Part of the quarry-3 was exhausted due to earlier mining operation by the previous lessee. The earlier lessee (AMTC) has already made the back-filling of 2-3m within the exhausted part of quarry-3. Therefore, it has been planned to continue back-filling over same area and subsequently expanded laterally. For Manganese waste disposal will be over the existing waste dump-2 created by earlier lessee. Ultimately, there will be three pits at the end of life of the mine. During conceptual period, quarry-4, RF pit will be merged to form one quarry which has been named as UPL-1. The other quarry namely, quarry-5 has been named as UPL-2. The manganese quarry has been named as UPL-3. Cumulatively, these three pits will cover about an area of 202.520Ha.

PP submitted that ROM to be excavated from the mine will categorized into two types Fe content + 45 - 55 % and Fe content > 55 % The requirement of the plant is +61.5%Fe. Low grade iron ore (+58%Fe to 60%Fe) and high grade (+62%Fe) will be blended proportionately to meet the requirement of plant. ROM having +45-55%Fe will be store separately. ROM having Fe of +55% with an average of 60%Fe (after blending/direct ore) will be transported to the crushing plant and shall be fed directly into the hopper. A rock breaker will be installed at the top of the hopper to break the +600 mm material. The ore from the hopper shall be passed through a 80mm aperture vibrating grizzly via apron feeder. In vibrating grizzly, the material of size -80 mm and +80mm will be separated. The -80mm size ore will be fed to the screening plant to separate out different product size of -10mm, 10-30mm and +30-80mm sized ores. The screened ore +30-80 mm and +80 mm are fed to the jaw crusher. The product from the crusher is then fed to the screening unit to segregate into -10 mm, +10-30 mm and +30 mm sized ore. The +30 mm (oversize) is then fed to the secondary crusher and the product size of -10mm and 10-30mm sized ores will be produced.

7. PP submitted that the total water requirement for the proposed mining shall be 415 m3/h and it will be met from bore well and rain water harvesting pond. NOC from CGWA for withdrawal of 1715 m3/day ground water issued in favour of previous lessee

is deemed to have vested in favour of JSW for a period of 2 years from the date of execution of lease deed vide Order No. 4212/SM dt. 30.05.2020. Hardcopy of NOC application was submitted to CGWB on 16.10.2020 as the online application portal was under maintenance due to up gradation of new guidelines. The permission for drawl of water from bore well shall be obtained from Central Ground Water Authority. No Effluent will be generated due to mining. Sewage generated from toilet blocks would be collected by means of suitable sewer system for treatment in Sewage Treatment Plant (STP). Biological solid waste generated from STP would be used as manure for development of greenery. No tailing dam is required as filter press with fully automatic process will be installed to produce cake for easy handling and transport. The system is ideal for convenient disposal of tailing cake. The tailing cake will be disposed of along with the mine waste.

8.PP submitted that the mine area does not cover any habitation. Hence the mining activities do not involve any displacement of human settlement. No public buildings, places, monuments etc., exist within the lease area or in the vicinity. The mining operations will not disturb / relocate any village and hence, there is no R & R involved.

9. PP reported that there is no Court Cases pending against the project and/or land in which the project is proposed to be set up.

10. PP has submitted that the estimated total capital cost of the project is Rs. 960 crores. PP reported that the estimated manpower requirement for mining of iron ore and manganese ore shall be about 997.

11. Based on the information submitted and presentation made by the PP and the Consultant during the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020, the Committee after detailed deliberations the Committee **recommended** the proposal for grant of Standard TOR. Further, the TOR may have the specific conditions as recommended by CSIR-NEERI on carrying capacity study as per Annexure III. PP shall also submit the details of final mine closure plan in the EIA/EMP Report. The EAC also recommended following additional TOR:

- i. The PP shall submit the present state of mine including primary environmental baseline data along with TOR application in order to assess the status and level of environmental compliance while transfer of lease. The PP must show any non-compliance of earlier EC by previous occupier so that the same can be considered at the time of appraisal for grant of Environmental Clearance.
- ii. The draft TOR should also include damage assessment due to such noncompliance as one of the activities. In absence of such disclosure by PP, any subsequent identification of environmental non- compliance would be liability

of new PP. The information to be submitted may be related to, but not limited to,

- a. Compliance of mining plan, including waste and OB dump management, mine closure plan etc.
- b. Compliance to Common cause judgment
- c. Status of R&R
- d. Compliance of plantation
- e. Compliance of public hearing issues
- f. Status of complaints/ court cases/legal action
- g. Compliance of specific conditions of earlier EC
- iii. MoEF&CC RO office shall preferably conduct visit of each of such mine lease/s where e-auction have been conducted to document the compliance status of existing EC at such leases, at earliest.
- iv. New lessee shall take possession of all records and documents related to EC and consent form the earlier lessee, including EIA reports, EC, consent, correspondence with MOEFCC and SPCB/CPCB etc and be submitted final EIA/EMP report.
- v. The new lessee shall provide the NRSC certified imaginary of the project site, depicting the real status of land use, canopy coverage, level of plantation, land degradation etc., one at the time of taking possession of lease and second after 6 -12 months to assess changes effected by present occupier.
- vi. PP should bring out the factual information on the existing mine operation with photographs, flow sheet for mining material, transportation details and proper action plan in the final EIA/EMP report.
- vii. PP should upload the complete mining plan in the PARIVESH portal.
- viii. PP should resubmit the Affidavit as per the requirement of Ministry's OM dated 30.05.2018.
- ix. Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.

(2.3): Proposed expansion of limestone mine from 3.5 MTPA to 5.0 MTPA by M/s RCCPL PVT LTD within existing mining lease area (363.440 ha) [Forest area-66.359 ha, revenue area-297.08 ha] top soil/alluvium: 0.039 MTPA, Overburden: 0.628 MTPA, Mineral Reject/IB: 0.250 MTPA, limestone : 5.0 MTPA, total excavation: 5.917 MTPA at Sadhera village, Maihar tehsil, Satna district, Madhya Pradesh [Proposal No. IA/MP/MIN/185837/2020; File No. J- 110105/63/2020-IA.II(M)] – Terms of Reference The Proposal of M/s RCCPL PVT LTD is for grant of Term of Reference for Proposed expansion of limestone mine from 3.5 MTPA to 5.0 MTPA within existing mining lease area (363.440 ha) [Forest area-66.359 ha, revenue area-297.08 ha] top soil/alluvium: 0.039 MTPA, Overburden: 0.628 MTPA, Mineral Reject/IB: 0.250 MTPA, limestone: 5.0 MTPA, total excavation: 5.917 MTPA at Sadhera village, Maihar tehsil, Satna District, Madhya Pradesh.The mine lease area is located between Latitude: 24°6'54.34"N to 24°08'37.7"N and Longitude 80° 44' 29.85"E to 80° 45' 50.05 E and within survey of India Toposheet No. 63D/12 & 16.

2. PP has submitted that the said proposal is covered under the ambit of EIA Notification, 2006 & its subsequent amendments and the project falls under Schedule 1(a) of mining of minerals and is a Category- "A" as the mining lease area is greater than 100 Ha.

3. PP now applied vide Proposal no: IA/MP/MIN/185837/2020 dated 01.12.2020 for prescribing Term of Reference (ToR) and submitted Form-1 and Pre-feasibility report. The proposal was considered in the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020.

4. PP submitted that the RCCPL Pvt. Ltd. has set up an Integrated cement plant of 3.6 MTPA Clinker & 5.0 MTPA Cement capacity in Satna District of Madhya Pradesh State in the year 2013 and accorded Environmental clearance for integrated cement plant and limestone mine (3.5 MTPA, 539.651 Ha) in the village Sadhera for the limestone production of 3.5 MTPA vide F.No. J-11011/700/2008-IA.II (I) dated 23.03.2011.

5. PP submitted that, Out of the total 363.440 Ha, forest land is 66.359 Ha, and revenue area is 297.08 Ha. PP also submitted that MOEF has accorded Stage-I & Stage-II clearances for approval of the diversion of 66.359 Ha forest land vide order No.F.No.8-66/2010-FC dated. 14.01.2011 and vide order No.F.No.8-66/2010-FC dated 08.11.2011 respectively.

PP reported that the nearest reserve forest from the mine site are Kaimur Hills (Adjcent to mine site, E), Hardua R.F (6.7 km, SSE), PF near Goraya (RCC Plant) (10.4 km, NW), Karreha R.F (12.4 km, ESE), Goraia R.F (14.9 km, E) and water bodies from the mine site are Adjacent to mine site, E Tons River (3.6 km, NNW), Kalindari Nala (3.9 km, E), JarjararNadi (5.3 km, SSW), Ghusru Nala (6.2 km, N), Bansagar Reservoir (8.5 km, SSE), Maihar Dam (10.7 km, NNW) and Lilji Nala (14.0 km, N). PP further submitted that there are no wild life sanctuaries, national parks, elephant/tiger reserves within 10 km of the mine lease area.

6. PP submitted that the letter from IBM for Approval of Mining Plan over an area of 363.44 ha vide Lr No. MP/Satna/Limestone/RMP-37/2019-20 dated 02.07.2020 which is valid up to 31.03.2025.

PP submitted that the mining method is open cast fully mechanized method of mining by forming benches and the height may vary between 8 m to 10 m. Drilling is being carried out by using DTH drills. Blasting is being done by using slurry explosives with nonel detonators and blast induced vibrations are recorded by using Minimates. Hydraulic excavator and Electrical Shovels are being used to load the blasted limestone into 55 ton dumpers and the same is transported to the crushing plant located at a distance of about 2 to 3 km.

PP reported that the geological reserve/ resources in the limestone mine is 93.944 million tonnes of which 79.763 million tonnes of mineral reserves and 14.181 million tonnes of remaining resources. The dumping ground is located at north side of the mining lease and south side of mining lease. The locations are considered in view of ultimate pit limit and non-mineralized bearing area. At present, these are active dumps. The above sites are temporary and are owned land. Classified the site as Waste Dump No.1 and Dump No. 3 at South side of Mine Lease Boundary and Waste Dump No.2 at North side of Mine Lease Boundary. The major part of OB, IB and waste will be used for backfilling from 2023-24 onwards. Prior to this, the quantity will be dumped separately. Partial quantity will be used for repairing the inadvertent access of men and animals. At conceptual stage the OB Soil as well as inter burden will be backfilled in matured area i.e. in South East direction, so that plantation may be raised on it. It will not be possible to backfilled the entire mined out area due to non-availability of backfilled material. Part of the waste/soil may be utilized for preparation of bund around water reservoir and for providing slope all around the worked out area converted into water reservoir, through water harvesting.

7. PP submitted that the post monsoon water table varies from 2.0 m to 4 m in the ML area where as the water table level varies during pre-monsoon varies from 6 m to 8 m. The seasonal fluctuation is around 4 m in core zone. The maximum and minimum RL of working is from 354 and 394 mRL during ensuing period of Mining Plan. With reference to general contour of the area, the maximum and minimum depth of the water table in terms of MRL is 384 m and 385 m. The present mining operation is encountered with ground water table within the pit. The pumped out water will be utilized for sprinkling of water on haul roads, watering of plants, drilling and other dust suppression measures. Mine water will be allowed to settle in the Mine sump and settling pit before discharge. A proper garland drain along with silt arrestor has been made to discharge the water. Garland drain of 1.7 km length with average width of 4m and depth of 3m has been made along the ML boundary in forest area from NW to W direction of the lease. This is in accordance with the compliance of forest diversion.

PP reported that the total water requirement is about 250 m<sup>3</sup> /day. Required water for drinking purpose is being provided from the tube wells already installed in the mining area. For dust suppression water is sourced from the accumulated rain water

from the pits. In view of the enhanced production, the requirement of water in the mine will be about 343 m<sup>3</sup> /day. PP also installed 20 KLD STP for treatment of sewage water which will be utilized for green belt development.

8. PP submitted that the mine area does not cover any habitation. Hence, the mining activities do not involve any displacement of human settlement. No public buildings, places, monuments exist in the lease area or in the vicinity. The mining operations do not disturb / relocate any village or need any resettlement.

9. PP reported that there is no Court Cases pending against the project and/or land in which the project is proposed to be set up.

10.

PP submitted the certified EC compliance report for earlier EC granted on 23.03.2011 vide MOEF Lr. No. 5-21/2011 (ENV)/691 dated 05.10.2020.

11. PP has submitted that the estimated total capital cost of the project is Rs. 51 crores. PP submitted that the existing manpower is 81no.s and proposed manpower due to expansion is 26 and total is 107.

12. Based on the information submitted and presentation made by the PP and the Consultant during the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020, the Committee after detailed deliberations **recommended** the proposal for issuance of Standard TOR for the proposed expansion of limestone mine from 3.5 MTPA to 5.0 MTPA within existing mining lease area (363.440 ha) [Forest area-66.359 ha, revenue area-297.08 ha] top soil/alluvium: 0.039MTPA, Overburden:0.628 MTPA, Mineral Reject/IB: 0.250 MTPA, limestone : 5.0 MTPA, total excavation: 5.917 MTPA at Sadhera village, Maihar tehsil, Satna District, Madhya Pradesh for under taking detailed EMP study with following additional TOR:

- i. PP should submit the permission letter obtained regarding reduction in ML area.
- ii. PP needs to submit the valid lease document.
- iii. PP should comply with the compliance of the earlier EC within 6 months by plantation along the periphery and plantation along the corridor
- iv. PP needs to submit the monitoring of noise from the corridor of the conveyor to the habitation and the measures taken to reduce noise by adopting barriers.
- v. PP needs to carry out the public hearing as per the EC regulations 2006 as the present proposal is for expansion of limestone mine from 3.5 MTPA to 5.0 MTPA.
- vi. PP needs to submit the NOC from CGWA for ground water withdrawal.
- vii. PP needs to submit the past production details duly authenticated by Department of Geology and Mining, Govt. of Madhya Pradesh.

- viii. PP should submit the Affidavit as per the requirement of Ministry's OM dated 30.05.2018.
- ix. Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.

(2.4): Narayana Iron & Manganese Ore Mine of M/s JSW Steel Ltd. (ML Area 107.51 Ha) with proposed Iron ore production (ROM) of 1.112 MTPA (Total excavation 1.59 MMTPA) & Maganese ore production of 0.0076 MTPA (Total excavation 0.031 MMTPA) located at village, Sandur Taluk Ballari District of Karnataka– Terms of Reference. [Proposal No.IA/KA/MIN/185051/2020; File No. J-110105/64/2020-IA.II(M)]

The Proposal of M/S JSW Steel Ltd is for grant of Term of Reference to produce 1.112 Million Tonnes per annum of Iron ore & 0.0076 Million Tonnes per annum of Mn ore from Narayana Iron & Manganese Ore Mine, ML No. 0012 (erstwhile lessee M/s Narayana Mines Private Limited ML No. 1602). The lease area is located in Narayanpura village of Sandur Taluk, Ballari District, Karnataka, over an extent of 107.51 Ha. area in Sandur Range Forest. The mine is located between Latitudes 14°59'01.2627" and 14°59'51.38844" and Longitudes 76°38'58.1917" and 76°39'49.44603" and within survey of Survey of India ToposheetNo.57-B/9.

2. As per EIA Notification dated 14th Sept, 2006 and its subsequent amendments, the project falls under Project Activity 1 (a) "Mining of Minerals" and is Category "A" project.

3. PP submitted online proposal vide proposal no. IA/KA/MIN/185051/2020 Dated 28.11.2020 and PP also submitted Form-1 & Pre-Feasibility Report. The proposal was placed in EAC meeting held during 9<sup>th</sup> -11<sup>th</sup> December, 2020.

4. PP has submitted that the Narayana Iron & Manganese Ore Mine, ML No. 0012 (erstwhile lessee M/s Narayana Mines Private Limited ML No. 1602) was one of the mines whose lease expired on 31.03.2020. As per the NIT dated 08.03.2019 (letter no. DMG: 2020: MLS: AUC: 2018-19) the e-auction for Narayana Iron & Manganese Ore Mine was held on 25.07.2019 wherein M/s. JSW Steel Limited was declared as the Preferred Bidder (DMG2020: MLS: AUC: 2018-19; dated 26.07.2019). Subsequently, received Letter of Intent vide letter no. DMG-2020: MLS: AUC: 2018-19; dated

13.08.2019 and declared as Successful Bidder vide letter no. DMG-2020: MLS: AUC: 2018-19/5188; dated 19.02.2020.

PP has submitted as per the Mineral Laws (Amendment) Ordinance 2020, "the successful bidder of mining leases expiring under the provisions of sub-sections (5) and (6) of section 8A and selected through auction as per the procedure provided under this Act and the rules made there under, shall be deemed to have acquired all the valid rights, approval, clearances, licenses and the like vested with the previous lessee for a period of two years". Accordingly, Government of Karnataka issued vesting order in the name of M/s JSW Steel limited vide letter no. CI 61 MMM 2020; dated 01.07.2020 which states that "all the valid rights, approval clearances, licenses and like vested with the previous lessee in respect of M/s Narayana Mines Private Limited ML No:1602 are deemed to have vested in favor of the Successful Bidder. Subsequently, M/s JSW Steel Limited obtained execution of MDPA by DMG vide letter no. DMG/MLS/MDPA-012/2020-21/1573; dated 03.07.2020 and the mining operations have been started since 25.09.2020 and as per MMDR (Amendment) Act- 2015 the lease period is for 50 years.

5.PP has submitted that the mine is spread over 105.481 Ha of forest land and 2.029 Ha of non-forest land of Sandur Range Forest of Sandur Taluka, Ballari District, Karnataka State. PP has submitted that the Stage-1 forest clearance in under process. PP has submitted that there are no wild life sanctuaries, national parks, elephant/tiger reserves in the nearby areas.

6. PP has submitted that the total estimated mineable reserves (as on 17.09.2020) of Iron ore are 23.81 Million Tonnes& Mn Ore 0.493407 Million Tonnes as per the mining plan. The mine operation will be by fully mechanized opencast method of mining by drilling and blasting and by deploying HEMM equipments like hydraulic drills and excavators, wheel loaders and dumpers. The solid waste generated is the overburden waste produced by the mining activities. Waste rock consists mainly of shale and Mn Clay. Dumping is proposed to be carried out in PD in SW portion of the lease area. In this plan period, 3.37 Ha will be used out of total 18.56 Ha area earmarked for dumping. The waste generation will be about 1.317 MMT in this plan period and proposed dumping area is enough to accommodate the waste. This dumping area is in anti-dip side (footwall) of the ore body, away from UPL. Waste will be dumped systematically by terracing with average height of 10m with reverse slopes. In this plan period, dumping will be from the bottom most level of the area earmarked in the SW slopes. No mineral rejects generation as Fe ≥35% material and Mn ≥10% material produced in this plan period is ROM.

7. PP has submitted that the total water requirement is 130 KLD. This includes domestic requirement of 5 KLD, 20 KLD towards dust suppression at C & S plant, 80 KLD towards sprinkling on haul roads and 25 KLD towards plantations and green belt development. Processed water pipeline is proposed to be laid in future from JSW plant to the Narayana mine. Till then, water will be purchased through hired tankers and company owned tankers. The mining activity will be concentrated on the elevated portions of the hill range. The RL of minimum depth of workings will be 920 MRL and maximum depth of workings will be around 824 MRL. Mine working is expected to reach around 830m MRL, which is 160 m above water table at the end of the life of the mine. There is no chance of encountering ground water during mining as the water table in the vicinity is about 20-30 m below the general ground level of around 700 MRL.

8. PP has submitted that the mine area does not cover any habitation. Hence the mining activities do not involve any displacement of human settlement. No public buildings, places, monuments etc., exist within the lease area or in the vicinity. The mining operations will not disturb/relocate any village. PP submitted that 7.5 m of mine periphery area of 3.38 Ha is already developed as greenbelt by plantation. However, gap plantation will be undertaken in the same area as per the requirement. Conceptually, 89.28 Ha will be brought under afforestation.

9.PP has submitted that the estimated total project cost for the Iron & Manganese ore production will be approximately Rs. 109.0496 crores. Direct employment due to operation of project is 53 (27 onroll& 26 outsourced) and indirect employment is 97. Most of the work force employed by the lessee is for mine supervision, greenbelt development, production and development and implementation of R & R works.

10. Based on the discussion held and information submitted by the PP and the Consultant during the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020, the Committee recommended the proposal for grant of Standard TOR. Further, the TOR may have the specific conditions as recommended by CSIR-NEERI on carrying capacity study as per Annexure III. PP shall also submit the details of final mine closure plan in the EIA/EMP Report. The EAC also recommended following additional TOR:

- a) PP should submit the mining plan approval letter.
- b) PP should submit the copy of earlier EC and the proposal should be for the same EC capacity which was granted to previous lease holder.
- c) PP should submit an undertaking by the way of affidavit in pursuance MoEF&CC guidelines NO. 3-50/2017-414.III (Pt) dated 30<sup>th</sup> May 2018.

- d) PP should submit the proof of application made for Stage-1 forest clearance also a letter from state forest department mentioning that there is no forest land involved in the mine lease area.
- e) In the PFR, PP has mentioned that nearest national park is Gudekote Sloth Bear Sanctuary at 9.01 km and in the summary PP has mentioned that it is at 3.28 km from the ML area also during the presentation PP reported that the same is at a distance of 3.7 km from the ML area. In this regard PP need to submit a map showing the location of Gudekote Sloth Bear Sanctuary and exact distance from ML area. PP should also mention the date of ESZ notification and its extent and whether the lease area falls in Eco Sensitive Zone or not, authenticated by PCCF.
- f) PP should submit a detailed time bound plantation plan and for the area where soil is not feasible or available, soil from other place should bring and put in the pits after creating and tall seedlings should be planted.
- g) The PP shall submit the present state of mine including primary environmental baseline data along with TOR application in order to assess the status and level of environmental compliance while transfer of lease. The PP must show any non-compliance of earlier EC by previous occupier so that the same can be considered at the time of appraisal for grant of Environmental Clearance.
- h) The draft TOR should also include damage assessment due to such noncompliance as one of the activities. In absence of such disclosure by PP, any subsequent identification of environmental non- compliance would be liability of new PP. The information to be submitted may be related to, but not limited to,
  - a. Compliance of mining plan, including waste and OB dump management, mine closure plan etc.
  - b. Compliance to Common cause judgment
  - c. Status of R&R
  - d. Compliance of plantation
  - e. Compliance of public hearing issues
  - f. Status of complaints/ court cases/legal action
  - g. Compliance of specific conditions of earlier EC
- i) MoEF&CC RO office shall preferably conduct visit of each of such mine lease/s where e-auction have been conducted to document the compliance status of existing EC at such leases, at earliest.
- j) New lessee shall take possession of all records and documents related to EC and consent form the earlier lessee, including EIA reports, EC, consent, correspondence with MOEFCC and SPCB/CPCB etc.
- k) The new lessee shall provide the NRSC certified imaginary of the project site, depicting the real status of land use, canopy coverage, level of plantation, land

degradation etc., one at the time of taking possession of lease and second after 6 -12 months to assess changes effected by present occupier.

## (2.5): Saruabil Chromite Block (ML Area: 246.858 Ha) of M/s TS Alloys Limited for production of 1.0 MTPA Chromite Ore (ROM) With Maximum Excavation of 6.48 Million Cum per Annum through Opencast Mining At Village: Saruabil, Kamarda, &Tailangi under Sukinda Tehsil, Jajpur District of Odisha State. [Proposal No.IA/OR/MIN/185361/2020; File No. J-110105/65/2020-IA.II(M)] – Terms of Reference

The Proposal ofM/s Tata Steel Mining Limited. (Formerly known as M/s TS Alloys Limited) is for grant of Term of Reference for production of 1.0 MTPA Chromite Ore (ROM) With Maximum Excavation of 6.48 Million Cum per Annum in Saruabil Chromite Block (ML Area: 246.858 Ha), located at village Saruabil, Kamarda, &Tailangi under Sukinda Tehsil, Jajpur District Odisha. The mine lease area is located between Latitude: 21°02'42.64" N to 21°03'49.65" N and Longitude 85°48'35.38" E to 85°49'49.92" E and within survey of India Toposheet No. F45N16 (73G/16).

2.PP has submitted that the said proposal is covered under the ambit of EIA Notification, 2006 & its subsequent amendments and the project falls under Schedule 1(a) of mining of minerals and is a Category- "A" as the mining lease area is greater than 100 Ha.

3. PP has now applied vide Proposal no: IA/OR/MIN/185361/2020 dated 27.11.2020for prescribing Term of Reference (ToR) and submitted Form-1 and Pre-feasibility report. The proposal was considered in the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020.

4.PP submitted thattheSaruabil Chromite Block was initially granted under mining lease for chromite ore in favour of Sri Misrilall Jain on 15.05.1954 and the mining lease was executed on 20.08.1959 for a period of 20 years. Subsequently the lease was transferred in favour of M/s Misrilall Mines Pvt. Ltd (MMPL). The 1st renewal of mining lease area over 259 hectares was granted on 14.03.1974 and executed on 20.08.1974 for a period of 20 years with effect from 15.05.1974 and 2nd renewal of mining lease area over 246.858 hectares was granted on 13.07.1997 and executed on 26.07.1997 for a period of next 20 years w.e.f. 15.05.1994 to 14.05.2014 in favour of MMPL. Subsequently, in view of Section 8A of MM (D&R) Amendment Act, 2015, the lease period was extended by the State Govt. up to 31.03.2020, vide supplementary lease deed dt. 02.04.2016. Thereafter, Government of Odisha pursuant to the Mines & Minerals (Development & Regulation) Act 1957 (the "Act") and the Mineral (Auction) Rules 2015 (the "Rules"), issued notice inviting tender dated 31.07.2019to commence the auction process for grant of lease for Saruabil Chromite Block located in Jajpur district of Odisha. M/S Tata Steel Mining Limited (Formerly known as M/S T S. Alloys Limited), who submitted the highest final price offer was declared as preferred bidder under Rule 9 (9) (iii) of Mineral Auction Rules, 2015 vide State Government's declaration dated 02.01.2020.

PP submitted that the Odisha Government had issued the Letter of Intent (LOI) for Chromite ore mining in Saruabil Chromite Block to Tata Steel Mining Limited (formerly known as M/s T S Alloys Limited) over an area of 246.858 Ha for a period of 50 years vide letter no. 223/SM dated 6th January 2020. In terms of section 8B (2) of MMDR Act, 1957 read with rule 9A(4) of MCR, 2016, the bidder is deemed to have acquired all valid rights, approvals, clearances, licenses and the like vested with the previous lessee for a period of two years from the date of execution of the lease deed or till the date of getting fresh approvals, clearances, licenses, permits and the like whichever is earlier vide letter no. 4174/SM dated 29.05.2020. Lease deed for the Saruabil Chromite Block was executed on 26.06.2020. The Environmental Clearance has been obtained from MoEF& CC, New Delhi for enhancement in production of 0.35 million TPA (ROM) along with expansion of Beneficiation plant from 20TPH to 30 TPH on 20.07.2018 vide Letter No J-11015/72/20106-IA.II(M) in the name of previous lessee M/s Mishrilall Mines Pvt. Ltd.

5. PP submitted that, out of the total 246.858 ha mining lease area, forest land is 241.77 ha and Non-forest land is 5.088 ha. PP also submitted that 224.633 forest land and 22.225 Ha Non-Forest Land as per HAL Settlement. As per the joint verification report dated 08.02.2016 by the authorities, 17.14 hectares Government land as per HAL settlement record was recorded as forest land in Sabik settlement before 25.10.1980 and accordingly, the total forest land before 25.10.1980 was 241.77 Ha i.e. (224.63 Ha+17.14 Ha). PP also submitted the fresh proposal vide Proposal No. FP/OR/MIN/51793/2020 for obtaining Forest Clearance.

PP reported that the nearest reserve forests from the mine site are Daitari Protected Forest (0.67km, North) and the mine site partly falls in Mahagiri PF. PP also submitted that as per letter no. 10180/1WL-SSP-55/2016, dt. 27.12.2016 of DCF (WLM), Bhubaneswar, a proposed Tiger Corridor in Daitari DPF falls at a distance of 9.115 km from the mining lease. PP further submitted that there are no wild life sanctuaries, national parks, elephant/tiger reserves within 10 km of the mine lease area.

6. PP submitted that the Approval of Mining Plan of Saruabil Chromite Block ·along with Progressive Mine Closure Plan (PMCP), over an area of 246.858ha in JajpurDistrict, Odisha vide Lr No. MP/A/19-ORI/BHU/2020-21 dated 10.11.2020 in favour of M/s Tata Steel Mining Limited.

PP submitted that the fully mechanized opencast mining is proposed to be carried out during the plan period. The operations like digging, excavation and removal of ore in conjunction with deep hole drilling and blasting will be done with the help of heavy earth moving machineries. Controlled blasting will be adopted for excavation of chromite ore. Three (3) shift operations are proposed in which drilling of blast holes

shall be done by Pneumatic DTH drill of 150mm dia holes while excavation and transportation of ROM ore and waste materials shall be done through excavators of 1.9 CuM/ 3.5 CuM capacity and dumpers of 35 t capacity. Besides, a dozer of appropriate capacity shall be used for construction, leveling and compaction of haul road and waste dump.

PP reported that there are 2 ore bands exposed in the block namely Ore Band IV and V. The chromite ore band has been folded forming north and south limb. The ore band IV is exposed in Quarry-A, B &C while Band-V is exposed in Quarry-D. During the past mining operations, Quarry-B & C have been merged and the mining operations are concentrated in merged Quarry B & C. Further, operations in Quarry-A have been suspended since the guarry is at a distance of 50 meters from existing public road and there is a proposal of widening and strengthening of Tomka – Mangalapur / Kaliapani road (passing through the M.L. area adjacent to Quarry-A) into four lane. Company has represented before the State for diversion of the Road which is presently cutting across the mining lease for better safety, extraction of mineral from greater depth by expanding the pits laterally. Director of Mines has also suitably recommended the proposal for necessary approval from State. PP submitted that the projected resources of chromite ore in the block as on 31.03.2020 is 10,126,115.4 tonnes as per the Mineral Block Summary provided by the State Government in the auction notice. PP reported that Total Geological reserves are estimated as 10,127,580 tonnes as on 01.10.2020 and Total Mineable reserves are estimated as 4,389,400 tonnes as on 01.10.2020. With present Mineable reserve and proposed production schedule life of mine is estimated to be 7 years, which will increase with planned future exploration, road diversion and slope steepening.

PP submitted that during the 5 years of plan period (2020-21 to 2024 -25), about 14,521,500CuM of OB/waste shall be generated. Among existing six waste dumps WD-1, WD-2 & WD-3 are inactive, and no dumping has been proposed there. However, WD-2 will be partially rehandled to facilitate the excavation. Therefore, waste dumping during 2020-21 to 2023-24 have been proposed on waste dump-7 and waste dumping during 2024-25 have been proposed in waste dump-8, which are outside the UPL. The area of waste dump-7 has been proved to be non-mineralized by boreholes i.e. DTH 10/11, 9/18, 5/18, 6/18, 12/18 and BH 4/98, 5/98, 14/98, 10/18, 15/18, 16/98, 7/18, 17/98, 8/18 and area of waste dump-8 has been proved to be non-mineralized by borehole DTH 17/18. In case feasibility of mining is established in conceptual period, the waste materials shall be rehandled. Presently, Nickel dump of the previous lessee and a waterlogged area are at the place where proposal of dumping in 3rd year (WD-7) has been given. Nickel dump will be shifted in year 2022-23 to a suitable place. After pumping out the water, dumping will be done in the waterlogged area with necessary safety precautions. The existing waste dumps 4, 5 & 6 which shall be merged into waste

dump-7 shall be regularized by proper terracing so that waste materials during plan period i.e. 2020-21 to 2024-25 can be dumped over these by increasing the height up to 105 mt. However, a detail scientific study on the dump stability and heightening shall be done through CIMFR and accordingly decision on heightening of the waste dump shall be undertaken. Waste Dump-8 has been proposed in the year 2024-25 and height of the dump shall go up to 45 mt. Total waste recovery will be about 14.522 MCuM during the proposed plan period. These waste materials shall be kept over the earmarked dumps 7 & 8. During the conceptual period, it is estimated that around 9.07 MCuM of waste shall be generated considering the average stripping ratio of ROM (tonnes): waste (CuM) as 1:5.7.

The part of Chrome ore produced from the mine shall be utilized for Ferro Chrome manufacturing at Lessee's plants located at Bamnipal, Athagarh, Gopalpur of Jajpur, Cuttack and Ganjam district respectively in Odisha as well as other FeCr plants located in Odisha, West Bengal, Andhra Pradesh, Chhattisgarh etc.

7. PP submitted that the Total water requirement of the Saruabil mine is estimated to be about 420 KLD. Permission from Central Ground Water Authority (CGWA) vide letter No.21-4(73)/CGWA/SER/2008-686 dated 16.07.2019 for withdrawal of ground water of 147,045 CuM/ year consisting of 12,045 CuM/ year through two existing bore wells and 1,35,000 CuM/ year through dewatering the mine seepage from mine pit. Fresh permission for ground water drawl and mine pit dewatering will be obtained by the project proponent.

PP also submitted that the permission of de-watering shall be obtained from Central Ground Water Authority, Ministry of Water Resources, Govt. of India. Around 471 KL per hour of water shall be accumulated in the mine pits, out of which some portion of de-watering water shall be used for dust suppression on haul roads and green belt development. Since Quarry-A shall not be worked during the plan period, part of the water shall be stored in this pit and the rest shall be treated in the Effluent Treatment Plant. Two ETPs of 180 KL/hour and 200 KL/hour capacity has been commissioned by the previous lessee within the leasehold area which will be retained by the lessee. So, the total capacity of Effluent Treatment Plants is 380 KL/hour. In the meantime, the Company proposes to install a centralized Effluent Treatment Plant of 1200 m<sup>3</sup>/hour capacity in the Saruabil chromite block. This centralized ETP shall be operational for adjacent Kamarda lease as well as for Saruabil lease from 4th year of mining operation i.e. 2023-24 after undertaking a detailed study by some reputed scientific organization and obtaining necessary permissions from the authorities. The treated water shall be discharged to Damsal nala.

8.PP submitted that the M.L. area is a part of Forest & Govt. land. NOCs and clearances from various departments have been obtained by the previous lessee and has been

vested to M/s Tata Steel Mining Ltd. for 2 years period. There is some habitation in the form of Colony of the previous lessee in the northern part of the Mining Block. One encroachment exists near Common boundary of Kamarda and Saruabil lease area. The existing habitation in north western part & north eastern part will not be disturbed for mining. The encroachments in eastern part will be removed as & when required for mining activities in consultation with the District Administration. In case of displacement of the habitants, suitable R&R plan will be prepared as per the R&R policy of Odisha State & will be implemented in consultation with the District Administration. Necessary budget provision for this R&R will be made in the EMP budget of the project. Surface right over a total area of 242.581 Ha has already been obtained from the district authorities (Mining section, Cuttack &Jajpur) from times to time during lease period for mining.

9. PP reported that there is no Court Cases pending against the project and/or land in which the project is proposed to be set up.

10. PP has submitted that the estimated total capital cost of the project is Rs. 179.91 crores and recurring cost is Rs 66.93 Cr. PP reported that the estimated manpower requirement shall be about 650.

11. Based on the information submitted and presentation made by the PP and the Consultant during the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020, the Committee after detailed deliberations **recommended** the proposal for issuance of Standard TOR along with following Additional TOR for undertaking detailed EIA/EMP study:

- i. The PP shall submit the present state of mine including primary environmental baseline data along with TOR application in order to assess the status and level of environmental compliance while transfer of lease. The PP must show any non-compliance of earlier EC by previous occupier so that the same can be considered at the time of appraisal for grant of Environmental Clearance.
- ii. The draft TOR should also include damage assessment due to such noncompliance as one of the activities. In absence of such disclosure by PP, any subsequent identification of environmental non- compliance would be liability of new PP. The information to be submitted may be related to, but not limited to,
  - a. Compliance of mining plan, including waste and OB dump management, mine closure plan etc.
  - b. Compliance to Common cause judgment
  - c. Status of R&R
  - d. Compliance of plantation
  - e. Compliance of public hearing issues

- f. Status of complaints/ court cases/legal action
- g. Compliance of specific conditions of earlier EC
- iii. MoEF&CC RO office shall preferably conduct visit of each of such mine lease/s where e-auction have been conducted to document the compliance status of existing EC at such leases, at earliest.
- iv. New lessee shall take possession of all records and documents related to EC and consent form the earlier lessee, including EIA reports, EC, consent, correspondence with MOEFCC and SPCB/CPCB etc.
- v. The new lessee shall provide the NRSC certified imaginary of the project site, depicting the real status of land use, canopy coverage, level of plantation, land degradation etc., one at the time of taking possession of lease and second after 6 -12 months to assess changes effected by present occupier.
- vi. The Rehabilitation policy as per the State is proposed by Tata Steel, however as the EAC felt that the no. of peoples being displaced is small i.e. family is being 65 only, PP should explore the possibility of land for land policy.
- vii. As the stripping ratio is very high which is 1:13.6 T/T and looking at the inadequate compliances by the previous lessee, suitable dump management plan using simultaneous pit filling be in place to reduce the environmental impacts.
- viii. PP needs to submit the status/approval for road diversion inside the mine lease area.
- ix. PP should submit the previous Forest clearance and the proof of application submitted vide FP/OR/MIN/51793/2020.
- x. PP should submit the previous CGWA approvals for water withdrawal and the proof of application submitted to CGWA at present.
- xi. PP submitted the application in the name of TS Alloys Limited in the PARIVESH portal wherein it is observed that the company name was changed from 'M/S T S Alloys Limited' to 'M/s Tata Steel Mining Limited' and PP needs to submit the Approval of name change by Govt. of Odisha and Certificate of Incorporation.
- xii. PP should submit Affidavit as per the requirement of Ministry's OM dated 30.05.2018.

(2.6): Nuagaon Iron Ore Mine of M/s JSW Steel Ltd for production of 20 MTPA (ROM) of Iron ore with total excavation of 22.013 MTPA (ROM 20 MTPA + OB/SB/IB 2.013 MTPA) with screening, crushing, 4500 TPH Central processing unit (CPU) and 30 MTPA Grinding & Desliming/beneficiation plant along with 30 MTPA slurry transportation system in lease area of 776.969 ha (As per DGPS) /767.284 ha (As per ROR) in Nuagaon, Barapada, Gandhalpada, Guali, Katesahi, Parediposi, KohlaRudukela, Panduliposhi, Topadihi villages under Barbil Tehsil of Keonjhar

## District, Odisha [Proposal No. IA/OR/MIN/ 179208/2020; File No. J110105/66/2020-IA.II(M)] – Terms of Reference

The Proposal of M/s JSW Steel Ltd is for grant of Term of Reference for production of 20 MTPA (ROM) of Iron ore with total excavation of 22.013 MTPA (ROM 20 MTPA + OB/SB/IB 2.013 MTPA) with screening, crushing, 4500 TPH Central processing unit (CPU) and 30 MTPA Grinding & Desliming/beneficiation plant along with 30 MTPA slurry transportation system in lease area of 776.969 ha (As per DGPS) /767.284 ha (As per ROR) in Nuagaon, Barapada, Gandhalpada, Guali, Katesahi, Parediposi, KohlaRudukela, Panduliposhi, Topadihi villages under Barbil Tehsil of Keonjhar District, Odisha. The mine lease area is located between Latitude: 22°06′16.72057″ N - 22° 07′41.65495″ N and Longitude 85°25′32.28303″ E - 85° 26′40.67115″ E and within survey of India Toposheet No. 73 F/8 and 73G/5.

2.PP has submitted that the said proposal is covered under the ambit of EIA Notification, 2006 & its subsequent amendments and the project falls under Schedule 1(a) of mining of minerals and is a Category- "A" as the mining lease area is greater than 100 Ha and 2(b) Mineral beneficiation.

3. PP has now applied vide Proposal no: IA/OR/MIN/179208/2020 dated 15.10.2020for prescribing Term of Reference (ToR) and submitted Form-1 and Prefeasibility report. Thereafter, Ministry examined the proposal and sought EDS on 12.11.2020 and PP submitted the reply for EDS on 21.11.2020. The proposal was considered in the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020.

4.PP Government submitted thatthe of Odisha vide No. letter 2291/S&M/Bhubaneshwar/IV(Misc.)SM66/2016 dated 02.03.2020 issued the notice for grant of Mining Lease (ML) for Nuagaon Iron ore Block over an area of 767.284 Ha (as per ROR) (776.969 Ha as per DGPS computation) in Nuagaon, Barapada, Gandhalpada, Guali, Katesahi, Parediposi, KohlaRudukela, Panduliposi and Topadihi villages under BarbilTahasil, Keonjhar district, Odisha for a reserve size of about 789.04 Million Tonnes (Mt). In pursuant to the Mines and Minerals (Development and Regulation) Act, 1957 and the Mineral (Auction) Rules, 2015, Govt. of Odisha issued the notice inviting tender dated December 6, 2019 for commencement of the auction process to grant the mining lease in respect of Nuagaon Iron ore Block located in Nuagaon, Barapada, Gandhalpada, Guali, Katesahi, Parediposi, KohlaRudukela, Panduliposi and Topadihi villages under BarbilTahasil, district Keonjhar, Odisha. The e-auction process was conducted in accordance with the tender document and the mineral auction rule, 2015 for the said mineral block and M/s JSW Steel Limited was declared as the Preferred Bidder under Rule 9(9)(iii) of Mineral (Auction) Rules 2015. Thereafter on payment of first instalment i.e., 10% of the upfront payment on 20th February, 2020. Subsequently, a Letter of Intent (LoI) was issued to M/s JSW Steel Ltd. for grant of Mining Lease for Nuagaon Iron ore Block comprising of 767.284 Ha (as per ROR) for a period of 50 years.

5. PP submitted that, as per DGPS survey, the total mining lease area is 776.969 Ha out of which the forest area is 622.929 Ha and non-forest area is 154.040 Ha. As per LS certified by Tahasildar, Barbil, Total Lease Area as per RoR: 767.284 Ha which includes Forest: 626.295 ha and Non-Forest: 155.492 ha. Stage-II FC of 476.205 Ha already diverted on 22.04.2004 & vested to JSW for 2 years. Fresh Forest Clearance (Stage I) for diversion of 626.295 Ha Forest area has also been applied vide Proposal No. FP/OR/MIN/50899/2020 dated 14.10.2020.

PP reported that the nearest reserve forests from the mine site are Kathamala RF (Within ML Area), Lakrhaghat RF (0.7 km, N), Karo RF (0.8 km, W), Siddhamath RF (1.4 km, E), Uliburu RF (1.6 km, N), Baitarani RF (3.2 km, E), Tholkabad RF (4.9 km, NW), Torha RF (5.0 km, W), RF near Kantarkala village (8.8 km, SSW), Karampada RF (10.3 km, NNW), Sarkhanda RF (12.2 km, SW), Khajurdihi RF (12.8 km, S), Chamakpur RF (13.4 km, E), Thakurani RF (13.7 km, NE) and Karo- Karampada elephant corridor at 12.5 km and the nearest water bodies from the mine site are Two Nalas passing in ML Area, Tapadihi Nala (20 m, NE), Karo Nadi (30 m, W), KundraNadi (0.4 km, SE), Kakarpani Nala (3.3 km, SE), Kunduru Nala (4.2 km, E), Teherei Nala (4.9 km, S), KainaGara (6.8 km, NW), Samij Nala (6.9 km, W), KukarhaJora (7.0 km, SW), Korai Nala (7.5 km, WNW), Erua Nala (11.3 km, WSW), Archanda Nala (11.6 km, S), Bacha Nala (12.0 km, W), Baitarani Nadi (13.2 km ,E) and Gera Nal(14.2 km, SW). PP further submitted that there are no wild life sanctuaries, national parks, elephant/tiger reserves within 10 km of the mine lease area.

6. PP submitted that the Approval of Mining Plan of Nuagaon Iron Ore Block ·along with Progressive Mine Closure Plan (PMCP), over an area of 776.969 ha (As per DGPS) /767.284 ha (As per ROR) in Keonjhar District, Odisha vide Lr No. MP/A/18-ORI/BHU/2020-21 dated 12.10.2020 in favour of M/s JSW Steel Limited.

PP submitted that the Fully mechanized open cast method of mining by drilling and blasting and by deploying HEMM equipment's like hydraulic drills and excavators, wheel loaders, dumpers, will be undertaken. Mining equipment like DTH drill of 150 mm dia., compressor of 450 cfm, dumper (35-100t), hydraulic excavators of 2.5-9.0 m3 capacity etc. will be used during ensuing plan period to achieve the targeted production. Processes of excavation and loading of overburden/waste will be done by deploying hydraulic excavators and dumpers.

PP reported that the total reserve of Nuagaon mine is about 789.04 Million tonnes (Mt) out of which the mineable iron ore reserve is about 632.99 Mt. During the ensuing plan period, it has been envisaged to make the production of ROM from 5.62 Mt/yr to 20.0 Mt/yr from the Barapada Block (Chanaguda quarry, &BBottom), Sonukocha Quarry, and Kanhusahi quarry during the plan period, since these blocks were already developed and open having mineable reserve with high grade ore. Both lateral and depth ward development has been proposed to be undertaken to achieve the targeted production. The working pits in all these quarries have been proposed to

be developed with a bench height of 6m to 10m and the width of the benches will be kept at 12m to 15m. The waste generated from the Nuagaon iron ore mine is proposed to be utilized for internal haul road maintenance and remaining material will be dumped at the earmarked waste dump location and will be used for backfilling quarry. Considering the production target of 20.0 Mt of ROM per annum the life of the mine will be around 31.64 years including the plan period of 5 years.

PP submitted that extracted ROM ore will be crushed by primary and secondary crusher and screened in the Central Processing Unit (CPU). For 30 Mt/yr grinding & desliming/beneficiation plant and slurry transportation system about 31.5 Mt/yr iron ore fines will be required. About 14 Mt/yr of iron ore fines will be used from the Nuagaon iron ore mine and remaining 17.5 Mt/yr iron ore fines will be sourced from the JSW nearest mines. Iron ore lumps of size +10 mm will be stored in the CPU storage area and transported through trucks to the nearest railway sidings. Iron ore fines of size -10 mm will be conveyed through pipe conveyor to 30 Mt/yr grinding and desliming/beneficiation plant which will be located within Nuagaon mining lease area for grinding and desliming of iron ore fines to the required particle size suitable for further transportation in slurry form. Slurry pipeline will transport about 30 Mt/yr iron ore concentrate from Nuagaon to Jatadhar, Paradip situated in Jagatsinghpur district of Odisha State. The length of slurry pipeline from Nuagaon to Jatadhar, Paradip will be about 324 km.

7. PP submitted that the water requirement for the proposed mining & central processing unit, grinding & desliming/beneficiation plant, and slurry transportation system is about 3,660 m3 /hr (87,840 m3 /day) and it will be met from Baitarani River in Kanupur dam downstream side located at Champua in Keonjhar district of Odisha through a dedicated 35 km water pipeline and ground water borewells. Further, pit namely Katesahi-B and Gangeiguda-pit are water logged during rainy season. This water will be utilized to fulfill partly during rainy season. The process water required for the slurry preparation and transportation is around 2300 m3 /hr. After dewatering of slurry at Jatadhar, Paradip site the recovered water shall be treated and used in Paradip Port terminal. The balance recovered water will be supplied to nearby industrial units to meet their requirements. This will however be for intermediate period only till the establishment of JSW Integrated Steel Plant proposed in Jatadhar, Paradip.

PP also submitted the NOC from CGWA for withdrawal of 1225 m3/day ground water issued in favour of previous lessee is deemed to have vested in favour of JSW for a period of two years and new application was submitted to CGWB on dated 16.10.2020 as the online application portal was under maintenance due to upgradation of new guidelines.

PP submitted that the waste generated from the Nuagaon iron ore mine is proposed to utilize for internal haul road maintenance, remaining will be dumped at the earmarked waste dump location and will be used for backfilling quarry. No Effluent will be generated due to mining. Sewage generated from toilet blocks etc would be collected by means of suitable sewer system for treatment in Sewage Treatment Plant (STP). Biological solid waste generated from STP would be used as manure for development of greenery. No tailing dam is involved due to installation of filter press which is a fully automatic process, which produces a cake for easy handling and transport, the system is ideal for convenient disposal of tailing cake. The tailing cake will be disposed of along with the mine waste.

8.PP submitted that the R&R is applicable for the Nuagaon Iron ore project. A Detailed R&R Study will be carried out including R&R plan with data on the existing socioeconomic status of the population in the study area and a broad plan for resettlement of the displaced population. This study will be submitted along with EIA report and recommendations will be implemented as per National & State R&R Guidelines & related laws.

9. PP submitted that two court cases vide WP (C) 24918/2020 regarding refund of the excess stamp duty paid during the time of registration of lease deed and WP (C) 17630/2020 regarding extension of the earlier order dated 21.12.2016 passed by Odisha High Court in W.P. (C) No. 22382 of 2016 by virtue of which the ex-lessee was operating on Sabik forest land for which no order has been passed till now.

10. PP has submitted that the estimated total capital cost of the project is Rs. 2433 crores for which the capital investment in Nuagaon iron ore mine development including utility facilities is about Rs. 683 crores and the capital investment in grinding, desliming/beneficiation, slurry preparation and slurry pumping facilities, which are located inside the Nuagaon mining lease area is about Rs. 1750 crores. PP reported that the estimated manpower requirement shall be about 1250 including skilled, semi-skilled, unskilled and clerical manpower apart from managerial staff.

11. Based on the information submitted and presentation made by the PP and the Consultant during the 24<sup>th</sup> EAC meeting held during 09-11 December, 2020, the Committee recommended the proposal for grant of Standard TOR. Further, the TOR may have the specific conditions as **recommended** by CSIR-NEERI on carrying capacity study as per Annexure III. PP shall also submit the details of final mine closure plan in the EIA/EMP Report. The EAC also recommended following additional TOR:

i. The PP shall submit the present state of mine including primary environmental baseline data along with TOR application in order to assess the

status and level of environmental compliance while transfer of lease. The PP must show any non-compliance of earlier EC by previous occupier so that the same can be considered at the time of appraisal for grant of Environmental Clearance.

- ii. The draft TOR should also include damage assessment due to such noncompliance as one of the activities. In absence of such disclosure by PP, any subsequent identification of environmental non- compliance would be liability of new PP. The information to be submitted may be related to, but not limited to,
  - a. Compliance of mining plan, including waste and OB dump management, mine closure plan etc.
  - b. Compliance to Common cause judgment
  - c. Status of R&R
  - d. Compliance of plantation
  - e. Compliance of public hearing issues
  - f. Status of complaints/ court cases/legal action
  - g. Compliance of specific conditions of earlier EC
- iii. MoEF&CC RO office shall preferably conduct visit of each of such mine lease/s where e-auction have been conducted to document the compliance status of existing EC at such leases, at earliest.
- iv. New lessee shall take possession of all records and documents related to EC and consent form the earlier lessee, including EIA reports, EC, consent, correspondence with MOEFCC and SPCB/CPCB etc.
- v. The new lessee shall provide the NRSC certified imaginary of the project site, depicting the real status of land use, canopy coverage, level of plantation, land degradation etc., one at the time of taking possession of lease and second after 6 -12 months to assess changes effected by present occupier.
- vi. PP should bring out the factual information on the existing mine operation with photographs, flowsheet for mining material, transportation details and proper action plan.
- vii. PP should submit the previous Environment and Forest clearance.
- viii. PP should upload the complete mining plan in the PARIVESH portal.
- ix. PP should resubmit the Affidavit as per the requirement of Ministry's OM dated 30.05.2018.

(2.7): Collection of Minor Mineral (Reta, Bajri and Boulder) from the River Bed of Dabka River by M/s UttarakhandVan Vikas Nigam KhananRamnagarDabka located in Tarai West Forest Division, Ramnagar, District Nainital, Uttarakhand (223.0 ha)– Extension of validity of EC.[Proposal No: IA/UK/MIN/8695/2011 File No: J-11015/359/2009- IA.II(M)]

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The proposal of M/s Uttarakhand Van Vikas Nigam KhananRamnagarDabkais for Amendment w.r.t. the extension of validity of EC coterminous with the validity of Forest Clearance i.e. 15<sup>th</sup>February, 2023. The EC was granted vide Letter No. J-11015/359/2009-IA.II(M) dated 15.04.2011 for Collection of Reta, Bajri and Boulder (Minor Mineral) from the River Bed of Dabka River by M/s Uttaranchal Forest Development Corporation, located in Tarai West Forest Division, Ramnagar, District Nainital, Uttarakhand (223.0 ha).

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category B or Activity 1(a) as the mining lease area is less than 100 ha.

3. PP has submitted that Environmental Clearance was granted vide Letter No. J-11015/359/2009-IA.II(M) dated 15.04.2011 wherein at Para 6 of EC letter it has specifically mentions that, *"The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and hereby accords environmental clearance..........for a period of 10 years or till the forestry clearance whichever is earlier, subject to implementation of the following conditions and environmental safeguards."* PP submitted that MoEF&CC vide its letter F. No. 8-61/1999-FC (pt-II) dated 15.02.2013 granted Forest Clearance for a period of 10 years and is valid till 15.02.2023. Since, EC is also valid for a period of 10 years i.e. till 15.04.2021, therefore, PP has requested for extension of validity of EC coterminous with the validity of Forest Clearance i.e. 15<sup>th</sup> February, 2023 for hassle free operations and applied for extension of validity of EC vide its Proposal No. **IA/UK/MIN/8695/2011 dated 18.11.2020** and the proposal was considered in the 24<sup>th</sup> EAC meeting held during 9<sup>th</sup> -11<sup>th</sup>December, 2020.

4. Based on the discussion held and documents submitted by PP Committee **recommended** the proposal M/s Uttarakhand Van Vikas Nigam KhananRamnagarDabka for amendment w.r.t. the extension of validity of EC coterminous with the validity of Forest Clearance i.e. 15<sup>th</sup>February, 2023 subject to submission of the following:

(i) As mentioned in the ECLetter No. J-11015/359/2009-IA.II(M) dated 15.04.2011 location of the project within Shivalik elephant reserve and also location of elephant corridor within the core and buffer zone of the mine near pailgarh,PP need to submit NBWL Clearance.

- (ii) NOC from the Statutory bodies as required to be obtained.
- (iii) RO Compliance report.

(iv) All other Term and conditions stipulated in the Environment Clearance letter dated 15.04.2011.

(2.8): Collection of Minor Mineral (Reta, Bajri and Boulder) from the River Bed of Kosi River by M/s UttarakhandVan Vikas Nigam KhananRamnagarKosi located in Tarai West Forest Division, Ramnagar, District Nainital, Uttarakhand (254.0 ha)– Extension of validity of EC.[Proposal No: IA/UK/MIN/8711/2011 File No: J-11015/360/2009- IA.II(M)]

The proposal of M/s Uttarakhand Van Vikas Nigam KhananRamnagarKosiis for Amendment w.r.t. the extension of validity of EC coterminous with the validity of Forest Clearance i.e. 15<sup>th</sup>February, 2023. The EC was granted vide Letter No. J-11015/360/2009-IA.II(M) dated 13.04.2011 for Collection of Reta, Bajri and Boulder (Minor Mineral) from the River Bed of Kosi River by M/s Uttaranchal Forest Development Corporation, located in Tarai West Forest Division, Ramnagar, District Nainital, Uttarakhand (254.0 ha).

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category B or Activity 1(a) as the mining lease area is less than 100 ha.

3. PP has submitted that Environmental Clearance was granted vide Letter No. J-11015/360/2009-IA.II(M) dated 13.04.2011 wherein at Para 6 of EC letter it has specifically mentions that, *"The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and hereby accords environmental clearance.......for a period of 10 years or till the forestry clearance whichever is earlier, subject to implementation of the following conditions and environmental safeguards."* PP submitted that MoEF&CC vide its letter F. No. 8-61/1999-FC (pt-I) dated 15.02.2013 granted Forest Clearance for a period of 10 years and is valid till 15.02.2023. Since, EC is also valid for a period of 10 years i.e. till 13.04.2021, therefore, PP has requested for extension of validity of EC coterminous with the validity of Forest Clearance i.e. 15<sup>th</sup> February, 2023 for hassle free operations and applied for extension of validity of EC vide its Proposal No. **IA/UK/MIN/8711/2011 dated 21.11.2020** and the proposal was considered in the 24<sup>th</sup> EAC meeting held during 9<sup>th</sup> -11<sup>th</sup> December, 2020.

4. Based on the discussion held and documents submitted by PP Committee **recommended** the proposal M/s Uttarakhand Van Vikas Nigam KhananRamnagarKosi for amendment w.r.t. the extension of validity of EC coterminous with the validity of Forest Clearance i.e. 15thFebruary, 2023 subject to submission of the following:

(i) As mentioned in the EC Letter No. J-11015/360/2009-IA.II(M) dated 13.04.2011that the Jim Corbet National Park is located within buffer zone of the mine at a distance 6.2 km NW from the mine lease boundary and also

location of Shivalik elephant reserve within the core zone, PP need to submit NBWL Clearance.

(ii) NOC from the Statutory bodies as required to be obtained.

(iii) RO Compliance Report.

(iv) All other Term and conditions stipulated in the Environment Clearance letter dated 13.04.2011.

S. No.	Member Name	Member Address	Designation	9 <sup>th</sup> December 2020	10 <sup>th</sup> December 2020
1	Dr. S. R. Wate	Add. 148/149, Nagar Vikas Society, Narendra Nagar, Nagpur-440 015,Maharashtra	Chairman	YES	YES
2	Dr. Ajay Deshpande	Building A-26, Flat-403, Happy Valley Homes, Manpada, Ghodbunder Road, Thane (West)– 400 610,Maharashtra	Member	NO	YES
3	Shri B Ramesh Kumar	H-No. 6-1-134/6, Balram Compound, Padmarao Nagar, Secundrabad500025,Andhra Pradesh	Member	YES	YES
4	Prof. Ramakrish na Rao	50-120-9/1, Tulasi Mani Regency North Extension, Seethammadhara, Visakhapatnam-530 013, Andhra Pradesh.	Member	YES	YES
5	Shri Santosh Gupta	Flat No. 405, Block –B, Gaur Green Vista, NyayKhand -1, Indrapuram, Ghaziabad-201 014	Member	YES	YES
6	Dr. (Ms.) Asha Rajvanshi	Wildlife Institute of Inida, Chandrabani, Dehradun-248 001	Member	NO	YES
7	Shri G.P. Kundargi	Plot No. 32, MOIL Vatika, Chicholi Road, Fetri, Nagpur 441501, Maharashtra	Member	YES	YES
8	Dr. A.K. Malhotra	C-6, SubhavnaNiketan, Road No. 41, Pitampura, Delhi- 110034	Member	YES	YES
9	Dr. Gurdeep Singh	Centre of Mining Environment, Department of Environmental Science & Engg. Indian Institute of Technology (Indian School of Mines), Dhanbad-826 004	Member	YES	YES

## List of member of Expert Appraisal Committee Participated through VC

10	Dr. Parimal Chandra Bhattacharjee	A/3 Asiyana Housing Complex Maligaon, Guwahati-781 011, Assam	Member	YES	YES
11	Prof. Mukesh Khare	Department of Civil Engineering, IIT, Delhi	Member	NO	NO
12	Mr. V. K. Soni	Government of India, Ministry of Earth Sciences, India Meteorological Department, MausamBhawan, LodiRoad, New Delhi – 110 003	Member	NO	NO
13	Sh. Pankaj Kulakshethra	Regional Controller of Mines, IBM Block D, SecondFloor, Indira Bhavan, Civil Lines, Nagpur – 440001	Member	NO	NO
14	Sh. Aftab Ahmend	Representative of DGMS, DMS, Room No. 201-203, II Floor, B- Block, CGO-II,,Hapur Rd, Kamla Nehru Nagar, Ghaziabad, Uttar Pradesh 201 002	Member	NO	NO
15	Shri Yogendra Pal Singh	2 <sup>nd</sup> Floor, Vayu Block, Indira Paryawaran Bhawan, MoEF&CC, Jor Bagh, New Delhi-110003	Member Secretary-I	YES	YES

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