

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

SUMMARY RECORD OF 17th MEETING OF THE COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 17th 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 **May, 28-29, 2020 and 1st June, 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) Deliberation & Circulation on the Minutes of the 16th EAC Meeting held during May, 5-6, 2020:

1. The minutes of 16th Meeting of EAC held during 5-6 May, 2020 was placed before the members of the Committee. The committee confirmed the minutes.

2. Further certain amendments requested by respective project proponents in the Minutes of 16th EAC Meeting held during 5-6 May, 2020 were brought to the notice of the committee for consideration and approval and the committee approved the following modifications in the said MoM, namely: -

- I. **In the Itemno. 2.1, in respect of Integrated Barsua- Taldih-Kalta Iron Ore Mining (ML-130), Beneficiation and Pelletisation Plant Project of M/s Steel Authority of India Limited, located in Village Tantra and within Toda RF, Tehsil Koira, District Sundargarh, Odisha - Amendment in Environmental clearance for change in product mix and operation by including excavation and dispatch of non-ore fines / slimes keeping total production within permitted EC capacity of 8.05 MTPA under para 7(ii) of EIA Notification**

The following request for amendment in MoM of 16th EAC is submitted by the project proponent:

Sl	As per MoM of 16th EAC Meeting in Para 10 of Page 5	Amendment in EC sought / needed
1	Reclaim tailings at the rate of 1 MTPA from the tailings pond at	Excavation of iron ore from Barsua Block at 3.50 MTPA

	Barsua and dispatch by road to Public Siding located at distance of 2.7 km for dispatch by rail or directly by road to the buyers keeping the total dispatch from the Barsua below 3.5 MTPA.	including a provision of excavation of maximum upto 1 MTPA tailings from the tailings pond at Barsua for selling. The excavated tailings will be transported through internal road over 2.1 km to the stacking yard and then to Barsua Public Siding by public road over 0.6 km or any other nearby railway sidings.
2	Dispatch of sub-grade iron ore fines at the rate of 0.5 MTPA each from Taldih and Kalta by road or road & rail dispatch to the buyers keeping the total dispatch from Taldih & Kalta to 2.05 MTPA and 2.50 MTPA respectively.	Excavation of iron ore from Taldih & Kalta Blocks at 2.05 MTPA and 2.50 MTPA respectively including provision of excavation and dispatch of sub-grade iron ore fines maximum upto 0.5 MTPA from Fines Stocks from each block for selling. The excavated sub-grade iron ore fines will be dispatched by road / road & rail.
3	The entire 2.05 MTPA iron ore produced at Taldih will be trucked directly to Barsua Private / Public Sidings till construction of road from Taldih to Barsua Beneficiation Plant.	Transportation of entire 2.05 MTPA iron ore produced at Taldih Block by road to SAIL's Barsua Siding / Public Sidings.
4.	Continuation of the following amended provisions of EC amendment dated 30.03.2016 (valid up to 30.03.2021) for further two years i.e. up to 31.03.2023. (i) Permission to change iron ore production (ROM) from three blocks viz. Barsua, Taldih and Kalta in ML-130 lease from 2.5, 4.25 and 1.3 MTPA to 3.5, 2.05 and 2.5 MTPA respectively, keeping the total iron ore (ROM) production restricted to 8.05 MTPA as specified in the earlier environmental clearance.	Continuation of the already amended provisions of EC amendment dated 30.03.2016 (valid up to 30.03.2021) for further two years i.e. up to 31.03.2023, which are reproduced as under: (i) Permission to change iron ore production (ROM) from three blocks viz. Barsua, Taldih and Kalta in ML-130 lease from 2.5, 4.25 and 1.3 MTPA to 3.5, 2.05 and 2.5 MTPA respectively, keeping the total iron ore (ROM) production restricted to 8.05 MTPA as specified in the earlier environmental clearance.

(ii) Permission to operate existing beneficiation plant at the rate of 4.5 MTPA instead of 2.5 MTPA.	(ii) Permission to operate existing beneficiation plant at the rate of 4.5 MTPA instead of 2.5 MTPA.
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The committee deliberated on the each of the request and **recommended** as follows:-

Sl	As per MoM of 16 th EAC Meeting in Para 10 of Page 5	Amendment in EC sought / needed	Recommendation of the committee	Remarks
1	Reclaim tailings at the rate of 1 MTPA from the tailings pond at Barsua and dispatch by road to Public Siding located at distance of 2.7 km for dispatch by rail or directly by road to the buyers keeping the total dispatch from the Barsua below 3.5 MTPA.	Excavation of iron ore from Barsua Block at 3.50 MTPA including a provision of excavation of maximum upto 1 MTPA tailings from the tailings pond at Barsua for selling. The excavated tailings will be transported through internal road over 2.1 km to the stacking yard and then to Barsua Public Siding by public road over 0.6 km or any other nearby railway sidings.	Excavation of iron ore from Barsua Block at 3.50 MTPA including a provision of excavation of maximum upto 1 MTPA tailings from the tailings pond at Barsua for selling. The excavated tailings will be transported through internal road over 2.1 km to the stacking yard and then to Barsua Public Siding by public road over 0.6 km or any other nearby railway sidings.	Agreed as the flexibility in production mix is 7(ii) (b) is allowed as long as no increase in pollution load. In the instant case also no increase in pollution load
2	Dispatch of sub-grade iron ore fines at the rate of 0.5 MTPA each from Taldih and Kalta by road or road & rail dispatch to the buyers keeping the total dispatch from Taldih & Kalta to 2.05 MTPA and 2.50 MTPA respectively.	Excavation of iron ore from Taldih & Kalta Blocks at 2.05 MTPA and 2.50 MTPA respectively including provision of excavation and dispatch of sub-grade iron ore fines maximum upto 0.5 MTPA from Fines Stocks from each block for selling. The excavated sub-grade iron ore fines will be dispatched by road / road & rail.	Excavation of iron ore from Taldih & Kalta Blocks at 2.05 MTPA and 2.50 MTPA respectively including provision of excavation and dispatch of sub-grade iron ore fines maximum upto 0.5 MTPA from Fines Stocks from each block for selling. The excavated sub-grade iron ore fines will be dispatched by road / road & rail.	Agreed as the flexibility in production mix is 7(ii) (b) is allowed as long as no increase in pollution load. In the instant case also no increase in pollution load
3	The entire 2.05 MTPA iron ore produced at Taldih will be trucked directly to Barsua Private / Public Sidings till	Transportation of entire 2.05 MTPA iron ore produced at Taldih Block by road to SAIL's Barsua Siding / Public Sidings.	The entire 2.05 MTPA iron ore excavated at Taldih will be trucked directly to Barsua Private / Public Sidings till construction of road	Not agreed as the permission was accepted earlier was

	construction of road from Taldih to Barsua Beneficiation Plant.		from Taldih to Barsua Beneficiation Plant.	till construction of road from Taldih to Barsua Beneficiation Plant
4.	<p>Continuation of the following amended provisions of EC amendment dated 30.03.2016 (valid up to 30.03.2021) for further two years i.e. up to 31.03.2023.</p> <p>(iii) Permission to change iron ore production (ROM) from three blocks viz. Barsua, Taldih and Kalta in ML-130 lease from 2.5, 4.25 and 1.3 MTPA to 3.5, 2.05 and 2.5 MTPA respectively, keeping the total iron ore (ROM) production restricted to 8.05 MTPAs specified in the earlier environmental clearance.</p> <p>(iv) Permission to operate existing beneficiation plant at the rate of 4.5 MTPA instead of 2.5 MTPA.</p>	<p>Continuation of the already amended provisions of EC amendment dated 30.03.2016 (valid up to 30.03.2021) for further two years i.e. up to 31.03.2023, which are reproduced as under:</p> <p>(i) Permission to change iron ore production (ROM) from three blocks viz. Barsua, Taldih and Kalta in ML-130 lease from 2.5, 4.25 and 1.3 MTPA to 3.5, 2.05 and 2.5 MTPA respectively, keeping the total iron ore (ROM) production restricted to 8.05 MTPA as specified in the earlier environmental clearance.</p> <p>(ii) Permission to operate existing beneficiation plant at the rate of 4.5 MTPA instead of 2.5 MTPA.</p>	<p>Continuation of the already amended provisions of EC amendment dated 30.03.2016 (valid up to 30.03.2021) for further two years i.e. up to 31.03.2023, which are as under:</p> <p>(iii) Permission to change iron ore production (ROM) from three blocks viz. Barsua, Taldih and Kalta in ML-130 lease from 2.5, 4.25 and 1.3 MTPA to 3.5, 2.05 and 2.5 MTPA respectively, keeping the total iron ore (ROM) excavation restricted to 8.05 MTPA as specified in the earlier environmental clearance.</p> <p>(iv) Permission to operate existing beneficiation plant at the rate of 4.5 MTPA instead of 2.5 MTPA.</p>	Agreed with minor correction in the language

II. In the item No. 2.2 in respect of New Umrangshu Limestone Mine (Mine Lease area – 417.50 Ha; Production Capacity of 7.77 MTPA) of M/s. Calcom Cement India Limited at Village- New Umrangshu, Tehsil – Umrangshu, District – Dima Hasao (North Cachar Hills), Assam

The following request is submitted by the project proponent:

S n	Referenc e in MoM & descripti on	Correction/Modifi cation desired	Justification/Re marks	Supporting Documents
1	<p>Point no 1 of MoM, Line no. 5th – 6th Page no 12: “----- <i>The latitudes and longitudes of the mine lease area lies between 25°31’18.00” N to 25°32’25.20” N, 92°47’25.20” E to 92°48’30.24” E.</i>”</p>	<p>“The latitudes and longitudes of the mine lease area lies between 25°31’28.222” to 25°32’41.825” N, 92° 47’ 41.1” to 92°48’ 52.559” E.”</p>	<p>There are minor deviations in seconds after DGPS survey carried out during FC. The map showing ML area along with details of DGPS pillar co-ordinates of ML has been uploaded under point no 4 (f) of Form-2.</p>	<p>i. Form-2 (point no 4c & 4d) ii. Slide no 18- Project Location, of PPT shared/circulated & presented during EAC meeting. iii. Brief Summary (Para no 1) iv. DGPS map authenticated by Directorate of Geology and Mining, Govt. of Assam.</p>
2	<p>Point no 23 of MoM, Line no. 2nd - 3rd Page no 16: “----- <i>---. one number of village falling in the ML area require R&R, which has</i></p>	<p>“There is no village habitation falling within ML area and R&R is not required.” Or “ML area falls in one revenue village and there is no habitation within ML hence, R&R does not arise.”</p>	<p>Form 2 (point no 27)-It has been mentioned that ML area falls in one village and there is no household, PDF, PAF within the proposed ML boundary. There was no “Not-Applicable” option in Form-2 and it was a mandatory to fill. It may be noted that there is no village within ML</p>	<p>i. Site Inspection Report of DFO dated 14.08.2018 which is part of Forest Clearance proposal. ii. Certificate granted by The Principal Secretary (N) N.C. Hills Autonomous Dist. Council,</p>

S n	Referenc e in MoM & descripti on	Correction/Modifi cation desired	Justification/Re marks	Supporting Documents
	<i>been completed .”</i>		area. The entire ML area is forest land and the area is devoid of any human habitation/ dwelling hence, Rehabilitation & Resettlement (R&R) Plan is not applicable to the project.	Haflong vide Memo dated 14.08.2013 and vide Memo dtd 19.06.2018 stating “Provisions of FRA 2006 are not applicable as the said land was leased on 27.11.1992 and has remained in possession of AIDC Ltd and now with Calcom Cement India Ltd. Further there are no Scheduled Tribes or other Forest Dwellers on the said land nor any encroachment. The North Cachar Hills Autonomous Council, Haflong has not given any rights to any other person.”

After verification of the supporting documents and deliberation on each point, the recommendation of the committee is as follows:-

Sn	Reference in MoM & description	Correction/Mo dification desired by PP	Correction/Mod ification Recommended by EAC	Remarks
1	Point no 1 of MoM, Line	“The latitudes and longitudes	The latitudes and longitudes of the	Committee suggested to

Sn	Reference in MoM & description	Correction/Modification desired by PP	Correction/Modification Recommended by EAC	Remarks
	no. 5 th – 6 th Page no 12: “----- The latitudes and longitudes of the mine lease area lies between 25°31’18.00” N to 25°32’25.20” N, 92°47’25.20” E to 92°48’30.24” E.”	of the mine lease area lies between 25°31’28.222” to 25°32’41.825” N, 92° 47’ 41.1” to 92°48’ 52.559” E.”	mine lease area lies between 25°31’18.00” N to 25°32’25.20” N, 92°47’25.20” E to 92°48’30.24” E.” (as per the EMP) and 25°31’28.222” to 25°32’41.825” N, 92° 47’ 41.1” to 92°48’ 52.559” E.”(as per the DGPS survey)	indicate the both the values as per EMP and DGPS survey
2	Point no 23 of MoM, Line no. 2nd - 3rd Page no 16: “----- one number of village falling in the ML area require R&R, which has been completed.”	“There is no village habitation falling within ML area and R&R is not required.” Or “ML area falls in one revenue village and there is no habitation within ML hence, R&R does not arise.”	ML area falls in one revenue village and there is no habitation within ML area. Therefore, R&R is not applicable	Agreed based on the documents and affidavit submitted by PP

2.0 Deliberation on the proposals as per the Agenda of 17th EAC

2.1: Kakra-Panna Limestone mine of M/s Jayacem Central Limited located at Villages Kakra, Kamtana, Saptai, Judi, Devri Purohit & Devra, Tehsil Amanganj, District Panna, Madhya Pradesh (ML area 1594.34 Ha; Normative Capacity 4.00 MTPA; Peak capacity 4.08 MTPA) – Consideration for Environmental Clearance. [IA/MP/MIN/130137/2016; J-11015/190/2016-IA.II(M)]

1. The proposal of M/s Jaykaycem Central Limited is for Mining of Limestone to produce - Normative Capacity: 4.0 MTPA, Maximum Achievable

Capacity: 4.08 MTPA) from Kakra-Panna Limestone Mine located at Villages Kakra, Kamtana, Saptai, Judi, Devri Purohit & Devra, Tehsil Amanganj, District Panna of State Madhya Pradesh (ML area —1594.34 Ha). The applied area forms a part of Survey of India topo-sheet no. 45E/15 (G43B15) (mine area) and 45/15 (G43B15), 45E/16, 451/3 (G43C3), 451/4 (G43C4) (study area). The proposed site and study area is covered in parts of Survey of India Toposheet No. 54 P/15 & 63 D/3 within latitude 24° 19' 2.99"N - 24° 20' 2.02"N and Longitude 79° 57' 30.02"E - 79° 58' 42.25"E, whereas mining lease area is covered in parts of Survey of India Toposheet No. 54 P/15 & 63 D/3 bordered by latitudes from: 24°19' 46.6" to 24°22' 15.3" N and longitude from 79 0 56' 15.5" to 79 0 59' 38.2" E.

2. After detailed deliberations on the project proposal, the committee observed the following: -

- i. The Original Application 3/2020 in the matter of Brij Kishore Pathak Vs Ministry of Environment, Forest & Climate Change and Others has been filed before National Green Tribunal, Bhopal with a prayer to conduct fresh Public hearing. The project proponent through e-mail dated 20th May, 2020 informed that the NGT vide its order dated 8th May, 2020 dismissed the plea stating that *'Taking note of the consideration the overall facts and circumstances and for the aforesaid reasons we do not find any merit in this original application. Consequently it is dismissed with no order as to cost'*.
- ii. The status of the case no. 12/2019 in Taluk Courts, as mentioned in Form-II needs to be provided.
- iii. As per the PARIVESH, the name of the applicant is Sh. Nikhil Chandra Misra and letter of authorization to Mr. Aditya Pratap Singh was signed by Sh. Anil Kumar Agrawal, covering letter was signed by Mr. Aditya Pratap Singh. Therefore, it was observed that there is no link between applicant and authorized signatory on record.
- iv. Schedule-I Species are existed in the study area however PP did not submit the Authenticated List of Schedule-I species List.
- v. It was mentioned that external dumping in an area of 1.06 ha. However, as per the extant rules, external dumping is not allowed. Committee desired to know how the quantum of external dumping will be managed by re-organizing the internal dumping / dumping within the ML.
- vi. As per the EMP at page No.s 2.47 and 2.56, the blasting is done by plaster shooting. However as per the PPT, the controlled blasting will be done. Whereas in the brief and PPT it was mentioned that controlled blasting and the use of rock breaker for primary breaking of boulders in quarries near village settlements will be adopted and the materials will be loaded and sent to Crusher by dumpers and excavator combination. The committee observed that there are variations in the

data between the EIA/EMP; Form-2; and Brief submitted / PPT before the committee.

- vii. No time bound action plan for issues raised during the public hearing along with budget provision and activities of CER related to the issues raised during the PH
- viii. Authenticated map showing the distance from Panna Tiger reserve and is the ML area falling in Tiger corridor is not available.
- ix. The noise impacts on the villages, village populations, blasting methodology, modelling studies report, plaster shooting has not been properly addressed.
- x. Safety measures for the traffic on the roads connecting villages during blasting, village, surrounding water bodies has not been properly addressed.
- xi. 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.
- xii. Protection measures against the river and nalla including the design of the embankment and approved design has not been given
- xiii. Location of Crushers, material balance of crushing plants has not been given.
- xiv. Whether the mining is in one shift or two shift, not clear
- xv. Wildlife in buffer area, any impacts, safety from the water body, 10km radius maps,
- xvi. SC direction of grassing compliance is not provided.

3. The committee after deliberation and observations made above, recommended the proposal to **return in present form** and advised to make the application by addressing the ToRs prescribed inter alia including the observations made by the committee and the stage wise mine development plans at 5-year interval, clearly showing rivers, safety distances, villages, roads, mine lease, water bodies, embankments, OB dumps, plantations etc. showing critical distances for drawing the appropriate mitigation measures.

2.2. Sukurangi Chromite Ore Mining Project of M/s. Orissa Corporation Ltd with enhancement of production capacity of chromite ore from 0.13 MTPA to 0.3 MTPA in the mine lease area of 382.709 Ha located at village(s) Sukurangi, Saruabli and village limits of Ostapal, Kamarda and Talangi, Teshil - Sukinda, District-Jaipur, Odisha – Reconsideration for specific conditions

[(File No: J-11015/348/2015-IA. II (M) & J-11015/409/2008-IA. II(M); Proposal No: IA/OR/MIN/8903/2007 & IA/OR/MIN/30726/2015]

1. The proposal of M/s Odisha Mining Corporation is for Sukurangi Chromite Ore Mining Project with enhancement of production capacity of chromite ore from 0.13 MTPA to 0.3 MTPA in the mine lease area of 382.709 Ha located at village (s) Sukurangi, Saruabli and village limits of Ostapal, Kamarda and Talangi, Teshil - Sukinda, District-Jaipur, Odisha. The deposit is covered under Survey of India toposheet no. 73 G/16 at bounded between latitudes 21°02'18.85" & 21°03'46.98" North and Longitude 85°47'43.77" & 85°49'21.74" East.

2. The proposal was considered as agenda item no. 2.5 in the 12th EAC meeting held on 19th December, 2019 and recommended for grant of EC. The matter was thereafter examined in the Ministry and it has observed that there are some issues which need to be re-considered by the EAC and relevant specific conditions may be prescribed before grant of EC by the Regulatory Authority.

3. The Member Secretary informed the Committee about the issues viz. requirement of wildlife conservation plan, change if any in the review of mining plan, setting of the dump outside the mining lease area, backfilling proposal, re-grassing of the excavated mining pit, short term and long term mitigative measures to avoid impact of hexavalent chromite (Cr⁶⁺) and requirement of forest clearance.

4. The deliberation of EAC and response of PP on the above mentioned issues are as follows:

i) Grazing Land/Community Land:

Observation of EAC:*The Committee observed that PP previously submitted that the ML area 382.709 Ha comprises of 267.210 ha is forest land, 74.599 ha agricultural land, 31.947 ha is waste land, 4.691 ha is grazing/community land, 3.753 ha surface water bodies and 0.509 ha other land (settlement). PP also submitted that revised Form-2. The Committee asked the PP about the state government policy w.r.t to grazing land. Whether there is any mining proposed in the grazing land. If yes, then whether there is any proposal for providing equivalent additional land for grazing.*

PP vide its letter dated 29.05.2020 submitted that there is no proposal for mining in the grazing land located inside Sukurangi ML. OMC will provide equivalent additional land for grazing if the grazing land in ML is used for mining in future. The plan showing the location of the grazing land within Sukurangi ML area and the corresponding kml file is also provided by PP.

Observation of EAC:*The Committee is of the view that for any proposal for mining in grazing land at later stage the PP needs to first obtain the permission from MoEF&CC through an amendment in EC. At this stage no mining in the grazing land is to be done.*

ii) Modified Scheme of Mining:

Observation of EAC: *The Committee observed that PP in the modified scheme of mining inter-alia mentioned that “the waste will be hauled out of the quarries to the designated external dumping areas, located in a non-mineralized zone. Out of 45.825 million cubic meters of waste proposed to be generated from the Sukurangi lease up to conceptual stage, only 17.85 Mm³ can be accommodated inside the Sukurangi lease. The balance 27.975 Mm³ needs to be further accommodated outside the lease hold area of Sukurangi lease during the conceptual period. Permission for the same will be duly acquired from the respective statutory agencies and subsequently the mining plan will be again modified”.*

The Committee is of the view that dumping of waste outside the mining lease area is not permitted by Hon’ble Supreme Court. Further, Supreme Court in its order dated 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, inter-alia directed that “the mining lease holder shall after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.”. The Ministry also issued an O.M. No 22-34/2018-IA.III dated 16.01.2020 in this regard.

The Committee asked the PP that how the waste dump will be managed and how the compliance of Hon’ble SC Order will be made. Whether PP has any backfilling plan.

PP vide its letter dated 29.05.2020 submitted that the mining lease over 382.709 ha has been executed on 20.09.1980 in favour of OMC to produce chromite ore. The total mineable reserve of chromite ore as per the Modification of Review of Mining Plan (RMP) approved by IBM on 23.01.2019 is estimated at 6.55 million tons and the average stripping ratio is computed to be 1:6.18 (tonne/cu.m). Therefore, in order to produce the total mineable reserve. of chromite ore the quantity of overburden to be generated from Sukurangi ML area as per the RMP approved by IBM shall be [OB generation (2019 - 2024) = 9.270 Mm³; 2024 -Conceptual = 34.965 Mm³; Total OB generation = 44.235 Mm³]. 17.85 Mm³ can be accommodated inside Sukurangi ML. **The remaining 26.385 Mm³ of waste will be hauled out of the quarries to the designated external dumping areas, located in a non-mineralized zone outside the ML.**

Regarding dumping of waste outside the ML area, the Ministry of Mines, Govt. of India has given clarification vide their letter No.16/67/2016-M.VI dt 25.05.2016 and subsequently advised by the Department of Steel & Mines, Govt. of Odisha vide letter No.5042/SM dt 16.06.2016.

In accordance with the orders of Supreme Court of India, OMC has initiated the process for amalgamation of the earmarked dump area over 168.948 ha with its adjoining SouthKaliapani and Sukurangi chromite ML vide letter No.5675/OMC/2010 dt 16.05.2020. The dump area will receive the

overburden to be generated from both the mining leases. To comply the pre-condition of amalgamation, OMC has obtained Stage-I forest clearance over 168.948 ha of forest land as a first step and the conditions stipulated therein are under compliance by OMC and State Forest Department for grant of stage-II forest clearance.

Considering the average stripping ratio, dumping of waste inside Sukurangi ML can be accommodated up to FY 2026-27 (i.e. during next plan period 2024-2029). Thus, hauling of 26.385 Mm³ of overburden from Sukurangi ML to the earmarked dump site (now outside the ML) will be needed after FY 2026-27. The amalgamation is expected within this period to continue the operation. After amalgamation, all statutory clearances shall be obtained for continuation of mining operations from the composite amalgamated ML.

Further, as per Hon'ble Supreme Court's order dated 8.01.2020 in W.P. (Civil) No 114/2014 and subsequent O.M. No 22-34/2018-IA.III dated 16.01.2020 by MoEF & CC the condition of re-grassing the mining area and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. shall be undertaken by OMC. An undertaking by OMC to abide by the order of Hon'ble Supreme Court of India and Ministry's Office Memorandum dt 16.01.2020 is also submitted.

Chromite ore body as per the exploration results continues even up to a depth of more than 1000 m. Mining by opencast method is not economically and technically feasible due to incompetent strata. The ore is not getting exhausted as a result of which IBM is not permitting any backfilling. The page No.91 of the RMP document approved vide letter No. MS/ FM/37-ORI/BHU/2018-19 dt 23.01.2019 may kindly be referred for clarity.

Observation of EAC: *The Committee is of the view that dumping only inside the mine lease area (17.85 Mm³) may only be considered at this stage provided it is in non-mineralized zone or re-handled in case of dumping in mineralized zones and waste should not be dumped outside. Due to change in stripping ratio or any other reason, in case sufficient space remain available within the mining lease area on non-mineralized zone then PP may obtain amendment in EC for dumping waste quantity above 17.85 Million M³ or PP may apply afresh after amalgamation of mining lease for grant of EC.*

iii) **Review of Modified Scheme of Mining:**

Observation of EAC: *The Committee observed that Public hearing was conducted on 9.11.2018 wherein the modified review of mining plan approved on 04.06.2018 was placed but PP also reported that Review of Mining plan for Sukurangi Chromite mines along with progressive mine closure plan was approved by IBM vide letter No. Ms/FM/37-ORI/BHU/2018-19 dated 23.01.2019 i.e. after the PH. The PP did not submit the copy of the same, and it is difficult to ascertain whether any changes have been made in the mining plan or not.*

The Committee asked PP whether any changes have been made in mining plan approved on 23.01.2019 vis a vis mining plan which was placed in public hearing, Committee also asked to submit the copy of approved plan dated 23.01.2019.

PP in its reply dated 29.05.2020 submitted that the Modified Review of Mining Plan (MRMP) for the plan period 2018-19 approved by IBM on 04.06.2018 was placed before the Public Hearing meeting conducted on 09.11.2018. In any Mining Plan the land use is approved till the conceptual period and at every five-year span there is a scheme of mining duly approved by IBM.

In our case the Review of Mining plan (RMP) for SukurangiChromite mines along with Progressive Mine Closure Plan was approved by IBM vide letter No. Ms/FM/37-ORI/BHU/2018-19 dated 23.01.2019 for the period of 2019-24. In both the cases the land use in conceptual stage remains unchanged.

Sl. No.	Heads	Conceptual land use MRMP (2018-19)	Conceptual land use RMP (2019-24)
1.	Excavated area (Ultimate pit)	141.0904	141.09
2.	Waste Dump	67.9798	67.98
3.	Mineral storage/Sub grade	18.91	18.91
4.	Infrastructure	16.81	17.18
5.	Roads	1.0596	1.0596
6.	Safety Zone	53.307	53.31
7.	Untouched land (Tanent, Village Road & Nala)	83.5222	83.55
Total		382.709	382.709

iv) Conservation Plan for Schedule-1 Species:

Observation of EAC: Committee observed that the list of schedule-1 species authenticated by DFO vide its letter dated 19.02.2018 shows that there are 10 Schedule 1 Species viz. *MellivoraCarpensis* (Ratel); *Panthera Pardus* (leopard), *Melursusursinus* (Sloth Bear); *Elephasmaximus* (Indian elephant); *Moschiolaindica* Synonym *Tragulsmeminna* (Mouse Deer); *Maniscrassicaudata* (Pangolin); *Canis lupus pallipes* (Wolf); *Varanusbengalensis* (Bengal Monitor Lizard); *Python molures* (Python); and *Pavocristatus* (Peacock). But conservation plan is not prepared for all the species.

PP also mentioned in the EIA Report that “Though some of the above schedule I species (like *MellivoraCarpensis*-(Ratel); *Maniscrassicaudata*-Pangolin); *Canis lupus pallipes*-Wolf); *Python molures*-Python) mentioned above are not specifically mentioned in the approved wildlife conservation plan, but the approved wildlife conservation plan basically focuses on habitat improvement,

the wildlife management plan will also work for all the above mentioned species.”

In addition to this PP did not prepare the conservation plan for Panthera Pardus (leopard). It is also to be mentioned here that conservation plan was approved in 2009 i.e. it is more than 10 year old and latest list of schedule-1 species was authenticated by DFO on 19.02.2018.

The Committee asked the PP that specific condition in this regard is mentioned in the ToR then what is the reason for not preparing the conservation plan for all the schedule-1 species and why the action should not be initiated against the consultant for not complying with the ToR condition.

PP in its reply dated 29.05.2020 submitted that the Site Specific Wildlife Conservation Plan (SSWCP) pertaining to Sukurangi Chromite Mines has been approved by the Principal Chief Conservator of Forests (WL) and Chief Wildlife Warden, Odisha vide letter no. 4415 dt. 21.07.2009 with a total financial outlay of Rs. 154.00 lakhs. OMC vide letter No. 6188/OMC/F&E/2020 dt. 29.05.2020 has requested the Principal Chief Conservator of Forests (WL) and Chief Wildlife Warden, Odisha to revisit the approved SSWCP of 2009 by including all Schedule-I species as authenticated by DFO, Cuttack on dt. 19.02.2018 and revise the financial outlay accordingly.

Observation of EAC: The Committee is of the view that PP vide its letter dated 29.05.2020 requested chief wildlife warden to ask DFO to revise conservation plan. But the understanding of the EAC is that conservation plan for all the Schedule-1 Species is being prepared by PP through its consultant and the same needs to be submitted for the approval of the CWLW and CWLW may approve or suggest some modification. Therefore, Environmental Clearance should be subject to submission of Conservation Plan for all schedule-1 species and proof of its submission to CWLW.

v) Plantation& Backfilling :

Observation of EAC: The Committee observed that dumping of waste inside Sukurangi ML can be accommodated up to FY 2026-27 (i.e. during next plan period 2024-2029).The Committee observed that the validity of the mining lease is till 19.09.2030 and PP only proposed a plantation of 53.307 Ha in next 5 years and for the remaining period of lease validity plantation will be done on 223.32 Ha. The issue is regarding maintenance of planation after lease expiry.

PP in its reply dated 29.05.2020 submitted that Chromite is a strategic mineral and around 98% of the total reserve of our country occurs in Sukinda valley and the current proposal is a part of it. The total mineable reserve of chromite in Sukurangi mines is estimated at 6.55 million tons (46.33 % Cr2O3) as per the RMP approved by IBM on dt 23.01.2019. At the present approved rate of production (i.e. 0.13 MTPA) the mine life is estimated to be

51 years and at the proposed capacity of 0.30 MTPA the mine life will be 22 years. Although the validity of the ML is up to 19.09.2030, there is a provision of extension of lease period 20 years more as per Mineral (Mining by Government Companies) Rules, 2015.

So far as the reclamation of mined out areas and other disturbed area due to mining activities within the ML is concerned, a bank guarantee has been submitted as financial assurance to IBM under per Rule-27 of MCDR, 2017 against reclamation before mine closure.

Two external' dumps (WD 1 & WD 3) are present within the ML area. WD 3 over 7.98 ha has been covered totally by plantation. WD 1 is active now and will continue till 2021-22. The waste dumps WD 2, WD 4 and WD 5 will come up subsequently. The plan showing the location of all the existing and proposed waste dumps within Sukurangi ML is also submitted.

Observation of EAC: *The Committee is of the view that that early plantation should be done so that by the time PP leaves the mining lease area the plants are self-sustaining. It is suggested that 50% of the plantation to be carried out in the next 5 years and accordingly the budget should be earmarked and kept in a separate bank account.*

vi) EC Conditions:

Observation of EAC: *Committee asked the PP to clarify on increase in forest area of 89.45 ha as compared to EC granted during 2010 and proposal submitted now. The Committee observed that the EC was granted on 18.02.2010 for 1.3 Lakh TPA subject to “ Necessary forestry clearance under the Forest (Conservation) Act, 1980 for an area of 177.76ha forestland involved in the project shall be obtained before starting mining operation in that area. Till such time mining activities shall be restricted to an area of 41.34 ha already broken up forestland for which approval under Section-2 of the Forest (Conservation) Act, 1980 was granted by the Ministry of Environment and Forests on 05.02.2001. Environmental clearance is subject to grant of forestry clearance”.*

PP in its reply dated 29.05.2020 submitted that Mining activities in Sukurangi ML were confined to 41.34 ha of broken up forest area till dt 21.07.2011 when approval under section 2 of FC Act, 1980 was conveyed by MoEF over 104.79 ha including the broken up forest area. The copy of the stage-II Forest clearance over 104.79 ha is also submitted. Stage-I Forest clearance over 162.42 ha of balance forest land involved in the ML has been granted by MoEF & CC vide letter No.8-22/2016-FC dt 14.09.2017, the copy of which is also submitted.

PP also submitted that OMC was maintaining the following land classification involved in Sukurangi ML till 26.08.2015 as per the certified copy issued by the Tahasildar, Sukinda. In accordance with the instruction by the Department of Revenue and Disaster Management, Govt. of Odisha vide letter

No.GE (GL)-S-76/2010-43968/R & DM dt 24.10.2011, OMC requested the Tahasildar, Sukinda to provide information on status of land as on and after 25.10.1980 to ascertain the total forest land in the ML to obtain forest clearance. The details are as follows:

Details	Previous (in Ha)	Revised (in Ha)	Difference (in Ha)
Forest land:	177.76	267.21	Increase of 89.45
Non-forest land:	204.949	115.499	Decrease of 89.45
Total:	382.709	382.709	No Change

Observation of EAC: *The Committee is of the view although PP has obtained the Forest Clearance for 267.21 Ha (104.79 Ha FC-Stage II and 162.42 Ha FC Stage-1). The Committee also observed although land use pattern was changed but PP did not obtain the amendment in EC for the same. Therefore, it is suggested that PP shall submit an undertaking to the effect that information provided in EIA/EMP report and other submission made to the EAC & Ministry are factually correct, no mining has been carried out in the forest area without obtaining the Forest Clearance and any change in land use pattern in future will be reported to MoEF&CC and necessary amendment will be obtain in EC, in case at any stage if any information provided by Project Proponent is found to be incorrect or misleading then the EC granted may be revoked forthwith at the risk & cost of PP, and Ministry may take necessary action as per law.*

vii) The Committee asked the PP about the Short Term Measure & Long term measures to be taken in order to get rid from the adversity of Cr (VI) contamination.

PP in its reply dated 29.05.2020 submitted the following:

Short Term measures:

- Surface run-off is treated in the ETP of adjoining mines before discharge into natural water body.
- Storm water accumulated in the quarry during monsoon is pumped out and treated in the ETP of adjoining mines before discharge in to natural water course.
- The quarry has not intersected ground water table till now. There is a proposal to install ETP within Sukurangi ML to treat the effluent water and surface run off.
- Regular monitoring of ground and surface water to assess the hexavalent chromium content. The data generated is displayed in OMC's website on monthly basis.
- One online monitoring system has been installed on downstream of nearby nala and data submitted regularly to SPCB server.

Long Term Measures:

- OMC has commissioned IMMT, CSIR, Bhubaneswar in conducting a pilot study for phytoremediation of hexavalent chromium from part of OB dump at adjoining South-Kaliapani Chromite Mines over an area of 10 ha through selected indigenous species. Among the different approaches to the restoration of heavy metals contaminated soils in situ, special attention is drawn to the technologies of phyto-remediation (green and clean technologies). In addition, high-biomass production and rapid growing plants such as tree and grass species i.e. lemon grass, vetiver, poplar, jatropha and willow are being exploited for the dual purpose of energy production and phyto-remediation.

5. Based on the discussion held and document submitted the Committee **recommended** the proposal of M/s. Orissa Corporation Ltd for grant of Environmental Clearance for enhancement of production capacity of chromite ore from 0.13 MTPA to 0.3 MTPA Sukurangi Chromite Ore Mining Project (ML Area 382.709 Ha) located at village(s) Sukrangi, Saruabli and village limits of Ostapal, Kamarda and Talangi, Teshil - Sukinda, District-Jaipur, Odisha subject to submission of i) undertaking as proposed above and submission of conservation plan for all schedule-1 species with proof of submission to chief wildlife warden. In addition Standard EC conditions in pursuant to Ministry's O.M No. No. 22-34/2018-IA.III dated 08.01.2019 & 16.01.2020 the Committee also prescribed the following Specific conditions for this project:

- 1) Waste should be dumped on the earmarked sites within the mining lease area and no waste should be dumped outside the lease area. The quantity of waste to be dumped inside the mining lease area should not be more than 17.85 million M³. In case due to change in stripping ratio or any other reason, if sufficient space remains available within the mining lease area on non-mineralized zone, then PP may obtain amendment in EC for dumping waste quantity above 17.85 Million M³ or PP may apply afresh after amalgamation of mining lease for grant of EC.
- 2) PP shall start the plantation and cover at least 50% of the proposed area (i.e. 111.66 Ha) under plantation in the next 5 years. The density of the plantation should not be less than 2500 saplings/Ha. The species to be selected for the plantation should be in consultation with local forest department or any other expert agency engaged for the same. The PP shall keep the record of saplings planted, survival rate, area covered under plantation, location etc. In addition to this gap filling needs to be done to as and when require for maintaining the density of plantation. The PP shall submit the drone images of area before and after the plantation. PP shall carry out pilot study for phytoremediation of hexavalent chromium through IMMT, CSIR, Bhubaneswar. The budget earmarked for the plantation shall be kept in separate bank account and audited annually. PP shall submit the detail such as photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation and outcome of the pilot study etc. to the

Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

- 3) Approval/permission of CGWA/SGWA shall be obtained before drawing ground water for the project activities. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
- 4) PP shall fulfill the Commitment made during PH within next 5 years which includes i) providing direct & indirect employment as per requirement in phased wise manner (budget Rs 2.5 lakh), ii) Batches of 20-30 persons will be trained on regular interval (budget Rs 2.5 Lakh), iii) construct the Model schools as per the CBSE standard + 2 college with the budget of 4 crore, iii) scholarship programmes shall be taken up in regular basis (budget Rs 2.4 Lakh), iv) Arranging specialist doctor to the local CHC (Budget Rs 5.0 Lakh), v) 2% of profit will be spent under CSR for peripheral development, vi) development of local market (budget Rs 8 Lakh), vii) increasing frequency of water spraying in Tomka-Mangalpur road (budget Rs 10 Lakh), Plantation activities (Budget 54.73 Lakh), Solar Street lighting and distribution of LED bulbs to villages (Budget Rs 5.0 Lakh), Drinking water and mobile toilet facility for truck drivers (Budget Rs 5.0 Lakh), to build a sport complex for youth (budget 71.25 Lakh) and Nodel village will be established at Kaliapani and Sukrangi (227.02 Lakh).
- 5) Budget proposed for **Corporate Environment Responsibility (CER)** shall be ₹ 32.02 Lakhs, which includes a) ₹ 2.5 Lakhs for Employment to locals (₹ 0.5 Lakh from 2019-20 to 2023-24) , b) ₹ 2.50 Lakhs for Skill development for local SHGs (₹ 0.5 Lakh from 2019-20 to 2023-24), c) ₹ 2.50 Lakhs for Computer training, Scholarships (₹ 0.5 Lakh from 2019-20 to 2023-24), d) ₹ 4.50 Lakhs for Creation of employment opportunity (₹ 1.0 Lakh from 2019-20 to 2022-23 & ₹ 0.5 Lakh for 2023-24), e) ₹ 5.0 Lakhs for Health care services Medical camps, ambulance (₹ 1.0 Lakh from 2019-20 to 2023-24), f) ₹ 2.50 Lakhs for Pollution Control (₹ 0.5 Lakh from 2019-20 to 2023-24), g) ₹ 2.50 Lakhs for Plantation (₹ 0.5 Lakh from 2019-20 to 2023-24), h) ₹ 2.50 Lakhs for Solar Street lighting, distribution of LED, bulbs to villagers (₹ 0.5 Lakh from 2019-20 to 2023-24), i) ₹ 2.50 for Drinking Water & sanitation (₹ 0.5 Lakh from 2019-20 to 2023-24), and j) ₹ 5.02 for Peripheral development (₹ 1.0 Lakh from 2019-20 to 2022-23 & ₹ 1.02 Lakh for 2023-24). The amount proposed under this head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and details of implementation of CER activities along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, photographs & Geo-location of the infrastructures/facilities developed, etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

- 6) Budget proposed under **Environmental Management Plan (EMP)** shall be ₹ 2130 Lakh (Capital) & ₹ 190 Lakh (recurring/annum) which includes i) Rs 25.0 Lakh (Capital) & Rs 30.0 Lakh (recurring) for Surface drainage (garland drains, settling its, retaining wall etc.) & dust suppression system (timeline 1st year), ii) Rs 7.0 Lakh (recurring) for Environment Monitoring, iii) Rs 4 Lakh (Capital) (time line 1 year) & Rs 3 Lakh (recurring) for **Occupational safety which includes Procurement of safety appliances**, iv) Rs 4 Lakh (recurring) for Green Belt Development, v) Rs 1794 (Capital) for Net Present Value (NPV) Payment, vi) Rs 153.0 Lakh (Capital) for Compensatory Afforestation, vii) Rs 154.0 Lakh (capital) (timeline 10 years) Wildlife Conservation Plan, and viii) Rs 146.0 Lakh (Recurring cost) for Socio-economic welfare measures in nearby village which is likely to be revised every year. The amount (except occupational health) proposed under this head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed environment monitoring report along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, sampling reports, photographs & Geo-location of the infrastructures/facilities developed, details of persons engaged in Environment Management Cell etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 7) Budget earmarked under **Occupational Health plan** is Rs 4.0 (Capital) & Rs 3 Lakh (Recurring) which includes Procurement of safety appliances. The amount proposed under this head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed environment monitoring report along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, sampling reports, photographs & Geo-location of the infrastructures/facilities developed, details of persons engaged in Environment Management Cell etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 8) PP shall set up an Environmental Management Cell comprises of persons having qualification and experience in the field of environment along with supporting staff. The details of the same needs to be submitted to the Ministry within 3 months of the grant of EC.
- 9) The project proponent shall give an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. before grant of ToR/ EC. The undertaking inter-alia include commitment of the PP not to repeat any such violation in future.
- 10) In case of violation of above undertaking, the ToR/Environmental Clearance shall be liable to be terminated forthwith.

- 11) The Environmental Clearance will not be operational till such time the Project Proponent complies 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 .
- 12) State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- 13) The PP shall implement the short term and long term measures proposed to be taken in order to get rid from the adversity of Cr (VI) contamination, needs to be implemented and status report of the same along with benefit occurred needs to be submitted to Regional Office of MoEF&CC annually.

2.3 Daitari Iron Ore Mining Project of M/s Orissa Mining Corporation Limited located in Village Talapada, Tehsil Harichandanpur&Sukinda, District Keonjhar & Jajpur, Orissa – Amendment in EC

[Proposal No. IA/OR/MIN/7061/2007; File No. J-11015/1003/2007-I.A.II(M)]

The proposal of M/s Orissa Mining Corporation Limited is for Amendment in Environmental Clearance granted vide letter no. J-11015/1003/2007-I.A. II (M) dated 22.09.2010 w.r.t. grant of temporary permission for two years for completing the installation of conveyer belts and rail heads for Daitari Iron Ore Mining Project located in Village Talapada, Tehsil Harichandanpur & Sukinda, District Keonjhar & Jajpur, Orissa. The EC was granted for production of iron ore to three Million TPA in the mine lease area of 1812.99 ha.

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 Mining lease period over 1018.3085 ha has been extended upto 26.01.2036 vide State Government order no. III (A)SM-05/2012(pt)521/SM dated 19.01.2016.

4. The Environmental Clearance was initially granted to M/s. Orissa Mining Corporation Limited by MOEF&CC for Daitari Iron Ore Mining Project located in Village Talapada, Tehsil Harichandanpur & Sukinda, District Keonjhar & Jajpur, Orissa with production capacity of 3.0 Million TPA of iron ore vide letter no. J-11015/1003/2007-I.A. II (M) dated 22.09.2010.

5. The Member Secretary informed the Committee that initially the EC was granted for the project vide letter no. J-11015/1003/2007-I.A. II (M) dated 22.09.2010 wherein the operating para of the EC letter it has mentioned that *“Approximately 10000 TPD of iron ore will be transported through 3.8 KM long downhill closed conveyor belt upto the stock pile at Baliparbat and the sized ore from Baliparbat will be dispatched by the rail.* However, no such restriction was mentioned in the specific and general condition of the EC letter. After grant of EC during one of the inspection by Indian Bureau of Mines they have notice that the mode of transportation is by road in place of conveyor belt as proposed by PP in the EC letter. Due to this the Regional Controller of Mines, IBM vide its letter dated 20.01.2016 brought the matter into the notice of MoEF&CC, forwarded the justification provided by PP and requested to verify the matter. The Ministry after examining the matter vide its letter dated 7.04.2016 requested PP to apply for amendment in EC. The proposal was considered in EAC meeting held during **April 25-26, 2016** and committee deferred the proposal for want of requisite information. On submission of information the proposal was re-considered in the Expert Appraisal Committee in its Meeting held during **May 23-24, 2016** wherein the PP submitted a detailed report on environmental implication of road transportation along with mitigation measures. **The Committee based on the information submitted and discussion held recommended the proposal for grant of amendment in EC for transportation of 2 MTPA of Iron ore through by Conveyor Belt and balance 1 MTPA through road only for five years from the date of issuance of amendment.**

6. The matter was thereafter examined for violation and finally i) letter was issued on 31.03.2017 to the Secretary, Department of Environment, Govt. of Odisha to initiate action under section 15 & 19 of EPA, 1986, ii) **direction under section 5 of EPA, 1986 was given to PP on 31.03.2017 to complete the installation of conveyor belts as well as rail heads as envisaged in the EC dated 22.09.2010 within 2 years from the issue of this letter. Further, M/s Orrisa Mining Corporation shall not carryout ore transportation by road after two years from the issue of these directions**”and iii) Amendment in EC was granted vide Lr dated 31.03.2017 wherein a temporary permission of two years for completing the installation conveyor belts and rail heads was granted. As there was ambiguity in the EC amendment letter the PP vide its letter dated 22.04.2017 requested Ministry to re-consider the amendment order granted dated 31.03.2017 and allow OMC for transportation of 1.0 MTPA of Iron Ore by road for a period of five years in line with the recommendation of EAC. The Ministry vide its letter dated 16.05.2017 clarified the PP that the transportation permission is valid for 2 years and within this period conveyer belt and rail heads needs to be installed.

7. The Member Secretary informed the Committee that on pronouncement of Common Cause Judgment dated 2.08.2017 the Ministry vide letter dated 16.10.2017 requested Department of Steel & Mines, Govt. of Odisha to provide the details of the demand raised by the State Government against M/s OMC Ltd. The Ministry vide letter dated 16.10.2017 requested Department of Environment & Forest, Govt. of Odisha to provide status of action taken under section 15 & 19 of EPA, 1986. The Ministry vide letter dated 16.10.2017 also requested PP & Regional Office Bhubaneshwar to provide the Status of Installation of Conveyor Belt.

8. Meanwhile, PP made an application vide Proposal No. IA/OR/MIN/7061/2007 dated 22.11.2018 for seeking amendment in the said Environmental Clearance w.r.t. grant of temporary permission for two years for completing the installation of conveyor belts and rail heads for Daitari Iron Ore Mining Project. The matter was examined in the Ministry and as no reply was received from PP a reminder was sent on 11.12.2018 wherein PP was requested to provide details within 15 days. The Ministry also send a reminder vide letter dated 11.12.2018 to Department of Environment & Forest, Govt. of Odisha to provide status of action taken under section 15 & 19 of EPA, 1986 within 15 days. The Ministry also send a reminder vide letter dated 11.12.2018 to Department of Steel & Mines, Govt. of Odisha to provide the details of the demand raised by the State Government against M/s OMC Ltd, within 15 days. The proposal then placed in EAC meeting held during **27-28 June, 2019** wherein the Committee **deferred** the proposal and asked the Ministry to take appropriate direction and action.

9. The PP thereafter vide letter no. 14620 OMC/F&E/2019 dated 16.09.2019 submitted the i) Work Completion chart of proposed Diatari conveyor belt, ii) Forest Clearance (FC) status of Diatari Conveyor belt, iii) Copy of Work order awarded in favour of L&T, iv) Dispatch certificate certified by Dy. Director of Mines, Jajpur v) Production certificate certified by Dy. Director of Mines, Jajpur, vi) Latest EC Compliance report of MoEF&CC, and vii) Copy of Forest Clearance of Diatari ML.

10. As suggested by EAC, the matter was thereafter examined in the Ministry and details are as follows:

PP vide letter no. 4998/OMC//F&E/2019 dated 18.03.2019 submitted response for Ministry's letter dated 11.12.2018 along with the copy of Department of Environment & Forest and Department of Steel & Mines response to Ministry's letter dated 16.10.2017 and 11.12.2018. However, copy of the letters are not available in office record.

PP's response: (i) The closed conveyor belt for transportation of iron ore up to Bailparbat is proposed to be installed in the forest area over 106.016 ha. (ii) Stage-I FC for the said area has been obtained and compliance to Stage-I FC stipulation submitted by OMC which is under active scrutiny by APCCF (Nodal), Bhubaneswar since 24.12.2018. (iii) The installation shall be commenced after obtaining Stage-II for the said area.

Department of Steel & Mines' Response: Letter No. 1620/SM dated 06.03.2019. The information regarding demands raised by the State Government against M/s OMC u/s 21(5) for undertaking production in the lease area of Daitari Iron Ore mines in excess of approved limit of production under EC, FC & MP/CTO and payments made by OMC against such demand as per the order dated 02.08.2017 passed by the Hon'ble Supreme Court in W.P (C) no. 114/2014. Against such demand, M/s OMC Ltd. has paid the entire demand raised towards violation relating to FC and EC within 31.12.2017 as per the said order dated 02.08.2017 amounting to Rs.754,41,18,753/- [Rs.737,12,42,092 (for EC) + Rs.17,28,76,661 (for FC)]. The demand raised towards violation of MP/CTO amounting to Rs. 36,95,53,235/- has also been paid along with interest.

Department of Forest and Environment's Response: Letter No. ENV-I-83/2018/5059/F&E dated 08.03.2019. The Criminal Case No.2 (C) CC-8/2014 has been filed before the Court of J.M.F.C Jaipur Road against the mining lease of Daitari Iron Ore Mining Project of M/s. The Odisha Mining Corporation Limited to take cognizance of offence U/s 15 of the Environment (Protection) Act, 1986. As reported by the Collector, Jaipur in his letter No. 44 7 dated 18.02.2019, the case is Sub-Judice.

Observation of EAC: *The current status of Criminal Case is not submitted by the PP.*

The RO, MoEF&CC Bhubaneswar vide letter no.101-335/15/EPE dated 21.06.2019 submitted the compliance report for Ministry's EC letter dated 22.09.2010 and EC amendment letter dated 31.03.2017. The compliance report mentioned that the project authorities have complied or are in process of complying with the conditions stipulated by the Ministry. In this context, information/action plans have been sought on following points:

- (i) It has been observed that dust suppression system such as fixed water sprinklers were not installed at mineral storage area expect water sprinkling by mobile tanker in the area. It is required to install the fixed water sprinklers all along the haul roads and mineral transportation area including the mineral storage area.

(ii) It is required to take appropriate mitigative measures to prevent pollution of the KusaiNadi in consultation with the State Pollution Control Board.

(iii) It is required to conduct door to door sample survey within the impact zone to access the family based need of the tribals and it should be appropriately addressed in the CSIR activities to be undertaken in the area. An action plan in this regard should be prepared and submitted.

(iv) It is required to provide the action plan along with its implementation status for conservation of flora and fauna found in the study area to be submitted to Regional Office, Bhubaneswar.

(v) It is required to provide the details regarding the date of financial closures and final approval of the project by the concerned authorities and the dated of start of land development work.

In addition, the compliance report on EC amendment letter dated 31.03.2017 mentioned that "one closed conveyor belt for transportation ore from mine to Baliparbat stack yard has been installed earlier. It has been informed that the conveyor was located in the forest area for which FC approval has been taken for diversion of 249.9683 ha for extension area (mining infrastructure and township) vide clearance no.8-02/2013-FC dated 27.08.2014. It has also been observed by the RO office that the second closed conveyor belt for transportation of iron ore is proposed to be installed in the forest area over 106.016 ha. The Stage-I FC for the said area has been obtained and the compliance to the Stage-I FC stipulations submitted by OMC is under scrutiny by DFO, Keonjhar (Wildlife) Division since 08.11.2018. The installation shall be commenced after obtaining Stage-II FC for the said area.

Observation of EAC: *The Committee PP may explore the possibility of expanding the capacity of the existing conveyor belt.*

PP submitted that the total mine lease area is 1812.99 ha, however, the M/s. OMC vide letter dated 09.01.2012 requested the State Government for surrender of the area over 794.6815 ha. The State Govt. vide letter 07.09.2012 accepted the proposal for surrender of area over 794.6815 ha and the lease area reduced to 1018.3085 ha. PP further submitted that the Department of Steel & Mines Department, Govt. of Odisha vide letter no. III(A) SM-05/2012(PT)/52/SM dated 19.01.2016 extended the validity of lease period up to 26.01.2036. The same has been executed as supplementary lease deed on 16.05.2016.

Observation of EAC: *The EC was granted on J-11015/1003/2007-IA. II (M) dated 22.09.2010. The lease area was surrendered on 7.09.2012, the amendment in EC for transportation was granted on 31.03.2017. But PP did not obtain amendment for change in land use due to reduction in the mining lease area.*

PP submitted past production details from Deputy Director Mines, Jaipur Road vide letter no. nil dated 24.01.2018 for the year of 1967-68 to 2017-18, which revealed that after getting the EC dated 22.09.2010, the PP is carrying out the mining activity within the EC capacity. PP further submitted the affidavit dated 12.07.2018 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. Before grant of TOR/EC pertaining to Daitari Iron Ore Mining project of OMC.

Observation of EAC: *The Committee observed that the past production details is not till 2019-20. Further, there is restriction on transportation of Mineral and PP submitted the letter No. 1435 dated 11.09.2019 wherein the dispatch figures from April-2017 to August-2019 is provided. PP did not submit the authenticated production & dispatch figures till 31.03.2020.*

As mentioned above two years' permission given to OMC for transportation of ore by road (1 MTPA) which ended on 30.3.2019. Presently, PP submitted that Stage-I FC obtained for forest land proposed for construction of conveyor belt and after getting Stage-II FC the installation will commence. PP further submitted that the OMC has issued LOI to M/s. Larsen & Toubro Ltd for the project "Design, Engineering, Supply, Construction, Erection, Commissioning & Performance Guarantee test of a new 1000 TPH ore handling plant with 3200 TPH mechanized Wagon loading system including related railway infrastructure for iron ore mine at Daitari. Based on this, PP requested the Ministry for extending the permission {transportation of minerals (1 MTPA) by road} for a further period of three years from 31.03.2019.

11. On examination of information submitted by the PP the Ministry observed that i) as per the EC amendment letter dated 31.03.2017 and Direction issued under Section 5 vide letter dated 31.03.2017, PP needs to complete the installation of conveyor belts and rail heads in the Daitari Iron Ore mine within 2 years from the issue of letter Le. up to 30.03.2019. However, based on the PP's submission and RO MoEF&CC's compliance report, it is observed that the PP not completed the installation of conveyor belts and rail heads in the Daitari Iron Ore mine. Furthermore, it is unclear that as on date

whether PP is carrying the minerals through road or not, ii) RO MoEF &CC's observed minor non-compliances and sought information/action plans for the same. Furthermore, the EC dated 22.09.2010 was granted to The Orissa Mining Corporation Limited; on 25.01.2012, the name of the company has been changed to The Odisha Mining Corporation Limited. However, the EC is not transferred in the name of The Odisha Mining Corporation Limited and PP is carrying out the mining activity till date.

12. Like other similar projects wherein the extension was sought for transportation of mineral through road and which involves significant impact on the environment which needs to be appraised by the EAC. Therefore, it was decided to seek certain information from PP and thereafter proposal may be placed in EAC. Accordingly, Ministry vide its letter dated 08.11.2019 sought certain information which has been replied by the PP vide its letter No. 157 OMC/F&E/2020 dated 03.01.2020 (uploaded on PARIVESH on 04.01.2020). The proposal is now placed in EAC meeting held during 28th May 2020. The information submitted by PP is as follows:

Sl. No. of Letter	Document/Information sought	Compliance by OMC
5 (i)	Copy of Stage-I FC document.	<p>MIL Area:</p> <p>Stage-II FC obtained for 95.60 ha</p> <p>The stage-II Forestry Clearance has been accorded for an area of 95.60 ha by MoEF&CC (FC Division) vide letter no. 8-164/97-FC dated 25th/27th January 2005, copy enclosed.</p> <p>Stage- I FC for balance 746.3325 ha forest land involved in the project is applied vide Proposal no. FP/OR/MIN/9112/2015. The proposal is under consideration by MoEF&CC, Govt. of India, copy enclosed.</p> <p>Proposed Conveyor Corridor:</p> <p>Stage- I Forest Clearance has been granted over 106.016 by MoEF&CC vide letter dt. 27.09.2017 for the proposed conveyor corridor, copy enclosed.</p>

		The compliance to Stage-I FC has been recommended by State Government to MoEF&CC, Govt. of India on dt. 15.11.2019.
5 (ii)	On 25.01.2012, the name of the company has been changed to The Odisha Mining Corporation Limited. However, the EC is not transferred in the name of The Odisha Mining Corporation Limited and PP is carrying out the mining activity till date. PP needs to submit clarification and proof submission of application for transfer/name change of EC in the name of "The Odisha Mining Corporation Limited".	<p>On enforcement of 'The Orissa (Alteration of Name) Act, 2011' the name of the State Orissa has been substituted by Odisha as per amendment of article 164 of the Constitution.</p> <p>The transfer of EC has not been envisaged as "The Orissa Mining Corporation Limited", the name reflected in the grant order of EC is a wholly owned State PSU and "The Odisha Mining Corporation Limited" is one and the same, subject to legal procedure of the State.</p> <p>The copy of Affidavit and fresh certificate of incorporation consequent upon change of name on dt 25.01.2012 is enclosed.</p>
5 (iii)	RO MoEF&CC's observed minor non-compliances and sought Information/action plans for the existing EC conditions, PP needs to submit updated certified R.O MOEFCC Compliance Report for the existing EC.	<ul style="list-style-type: none"> • Site visit / monitoring by MoEFCC's Eastern Region Office, Bhubaneswar was carried out on 23.03.2019. • Certified compliance report in respect of Daitari Iron Ore Mining Project of OMC was issued on 21.06.2019. • Conclusion by R.O. in certified compliance report: "OMC have complied/in process of complying most of the conditions stipulated by the Ministry". Further, RO sought information/action plan on five points. • OMC has complied the observations raised by RO and sent updated status on 13.11.2019. The point-wise updated compliance to the observations by ERO is enclosed.
5 (iv)	PP not completed the installation of conveyor belts and	No mineral transportation is being done by road beyond 31.03.2019. In this regard, State Mines and Geology has given a

	<p>rail heads in the Daitari Iron Ore mine. So, it is unclear that as on date whether</p> <p>PP is carrying the minerals through road or not. PP needs to submit a certificate from the State Mines and Geology that no minerals have been transported through road beyond 31.03.2019.</p>	<p>certificate, the copy of the same is enclosed.</p>
5 (v)	<p>Explanation and Clarification for transportation of mineral through the road network beyond 31.03.2019.</p>	<ul style="list-style-type: none"> • As per EC amendment letter dated 31.03.2017, out of 3 MTPA iron ore production: <ul style="list-style-type: none"> ✓ Evacuation of 2.0 MTPA by existing conveyor belt system and 1.0 MTPA by road (for 2 years) • Installation of proposed conveyor gallery will take another 3 years' time: <ul style="list-style-type: none"> ✓ On getting Stage-II Forest Clearance, the formalities of handing over the forest land, tree felling etc. will take more than a year to commence the construction activity. ✓ Thereafter, the construction work of conveying system will take at least 2 years' time for its completion. <p>(Stage-I Forest Clearance has been granted over 106.016 by MoEF&CC vide letter dt. 27.09.2017 for the proposed conveyor corridor. The compliance to Stage-I FC has been recommended by State Government to MoEF&CC, Govt. of India on dt. 15.11.2019.)</p> <p>The detailed timelines for commencement of ore transportation by conveyor and rail is mentioned along with relevant enclosures.</p>
5 (vi)	<p>PP has to demonstrate what</p>	<p>Around 200 persons shall get direct employment and around 100 persons will be</p>

	environmental and social benefits that project can bring to the local area through the activities that it wants to continue beyond 31.03.2019	benefitted indirectly once the road transportation resumes.
5 (vii)	PP needs to submit detailed study report in support of no damage to the environment by current practices and measures taken by the PP that it proposes to improve environment quality for further consideration.	The study report in support of no damage to the environment by current practices and measures taken by OMC to improve environment quality is enclosed.

13. Based on the discussion and held and document submitted the Committee observed that Ministry already provided an opportunity to PP by amending the EC for transportation of mineral by road. Direction was also issued under section 5 of EPA, 1986 to PP for installation of conveyor belt. Committee also felt that there is a lack of seriousness as-

- i. PP did not responded to the communication of the Ministry and only after reminders response was given;
- ii. Did not work out the possibility of increasing the capacity of already installed conveyor belt,
- iii. Amendment in EC for change of land use and name change was not done,
- iv. Regional Office also found non-compliances, and;
- v. Even after lapse of many years Forest Clearance was not obtained,
- vi. Penalty was imposed by State Government for illegal mining,
- vii. PP did not submit any proof to support that mining has only been carried out in the already broken up area and no additional forest land was not disturbed, in order to ascertain the violation.

The Committee therefore, **returned the proposal in present form** and is of the view that PP shall obtain FC and install conveyor belt or increase the capacity of existing conveyor belt to transport the mineral. In addition to this PP shall also submit the proof to support that the there is no violation of EC/FC and mining is carried out in already broken up area for which FC is available as per condition of last EC.

2.4 Mellacheruvu limestone Mine of M/s My Home Industries Limited, located at Village Mellacheruvu, Mandal-Mellacheruvu, District Nalgonds, Telanganain mine lease area of 141.644 ha. with production capacity of 1.95 MTPA –Amendment in EC. [Proposal No. IA/TG/MIN/58213/2007; File No. J-11015/113/2013-IA.II (M)]

1. The proposal of Mellacheruvu Limestone Mine is spread over an area of 141.644 hectare in village Mellacheruvu, Mandal-Mellacheruvu, District of Nalgonds, Telangana. The TOR was granted vide letter no. J-11015/113/2013- IA.II(M) dated 07.03.2014. The EC was granted vide letter J-11015/113/2013-IA.II (M) dated 22nd July 2015.

2. PP has applied for the amendment vide Proposal No. IA/TG/MIN/58213/2007 dated 08.08.2016. The proponent had requested the following amendment of Environment Clearance.

S.No.	Particulars	Description	Amendment Required
1.	Company Name	My Home Industries Limited	My Home Industries Private Limited
2.	Specific condition point No. iiiii	The mining operations shall be restricted to above ground water table and it should not intersect the ground water table.	The mining operations shall be restricted to above ground water table and it should not intersect the ground water table. Necessary permission from Central Ground Water Authority should also be obtained for working below groundwater table.

3. The proposal was deliberated in the EAC Meeting held during October 24-25, 2016. The Committee deliberated at length and rejected the proposal stating that it was premature for the proponent to request the amendment. The Project Proponent has to get the hydrogeological study done through some reputed agency. That study report will be submitted by PP to CGWA and the prior permission has to be obtained from the Central Ground Water Authority for intersecting the ground water table. A change in the mining plan is also to be carried out. The PP may again approach the Ministry for considering the amendment after completing above said actions.

The Committee further deliberated that for the change of name, the project proponent has to apply to the MoEF & CC as per provisions of Rule 11 of the EIA Notification, 2006 as amended from time to time.

4. In response to the same, PP vide its letter dated 21.01.2017 (uploaded on PARIVESH on 23.01.2017) inform the Ministry that they are submitting their application as per provisions of Rule 11 of the EIA Notification, 2006 for amendment in EC MOEFCC – F. No. J-11015/113/2013-IA-II (M) dated 22.08.2015 for change of Company name from “My Home Industries Limited”

to “My Home Industries Private Limited.” In this regard they submitted the following documents.

- a) Affidavit – My Home Industries Private Limited dated 21.01.2017
- b) A copy of the Certificate of Incorporation issued by Ministry of Corporate Affairs, Govt. of India.
- c) Proceeding of the ADMG vide No. 2776/M2/2004 dated 05.05.2016, Govt. of Telangana regarding change of name.

5. The Ministry vide its letter dated 17.02.2017 (uploaded on PARIVESH on 20.02.2020) informed the PP that in view of the deliberations made during EAC Meeting held during October 24-25, 2016, the requisite information is still not submitted by the PP w.r.t. *(i) Hydrogeological study done through some reputed agency and study report will be submitted by PP to CGWA and the prior permission has to be obtained from the Central Ground Water Authority for intersecting the ground water table. (ii) A change in the mining plan is also to be carried out.*

Further, the Ministry requested PP to submit the following documents for name change namely *(i) Undertaking form from transferee, (ii) NOC from My Home Industries Limited (iii) Mine Plan/ Scheme on the name of transferee (iv) EC Compliance report from RO, MOEFCC Chennai (v) Certified Production Details from department of Mines and Geology, (vi) Hydrogeological study done through some reputed agency (vii) Hydrogeological study done through some reputed agency and study report will be submitted by PP to CGWA and the prior permission has to be obtained from the Central Ground Water Authority for intersecting the ground water table.*

6. In response to above, PP on 08.03.2017 uploaded the same information as submitted previously on 23.01.2017 online on PARIVESH portal.

7. The committee after deliberations, observed that the project proponent has not carried hydrogeological study and also not submitted the prior permission from the CGWA for mining below ground water level. The committee suggested again to obtain the permission from the CGWA or SGWA for working below the ground water level first and then make application for amendment in EC. Regarding change of the name the committee recommended for change of the name from “My Home Industries Limited” to “My Home Industries Private Limited.”

2.5 Expansion of soapstone Mining Project of M/s Ratan Lal Deedwania located ‘in Village Sahroli, Tehsil Kotri, Gistrict Bhilwata, Rajasthan - Amendment in EC[Proposal No. IA/RJ/MIN/75413/2007]; [File No. J-11015/248/2006-IA.II (M)]

1. The proposal of M/s Ratan Lal Deedwaniya is for amendment in EC w.r.t. life of mine from 13 years to 37 years. The mine is located at village-Sahroli, Tehsil-Kotri, District- Bhilwara, Rajasthan in ML of 38.125 ha.

2. PP has applied for the amendment vide Proposal No. **IA/RJ/MIN/75413/2007 dated 14.06.2018**. The proposal was deliberated in the EAC Meeting held during July 19-20, 2018. The Committee noted that the Ministry has granted the EC vide letter no J11015/248/2006-IA.II(M) dated 18th May 2007 for production of 50,000 TPA of Soapstone involving the mine lease area of 38.125 ha. Lease is valid upto 29.01.2026 as per Govt. of Rajasthan letter dated 12.12.2015.

3. Based on the information submitted and presentation made by PP, the Committee deferred the proposal and sought the following requisite information/clarifications: -

- i) *The Committee also noted that it was a violation case at the time of issuance of EC in 2007 and accordingly the Ministry has requested State Govt. of Rajasthan (Secretary, Environment Department) to take necessary action as per the provisions of the E(P) Act, 1986; However, there is no communication received from the State Govt. about the action taken. In this regard, State Govt. of Rajasthan (Secretary, Environment) may be requested for the detailed action on the violation.*
- ii) *PP has not submitted the (i) certified production details from DMG since inception of mine; and (ii) CTE/CTO since inception of mine, to verify the compliances of the order of Hon'ble Supreme Court dated 02.8.2017 (Common Cause Vs Union of India & Ors.) in CWP No. 114/2014.*
- iii) *Details of approved mine plan/scheme of mining w.r.t. life of mine which increased from 13 years to 37 years.*
- iv) *The Committee is of the view that certified compliance report of earlier EC conditions may be requested from the Regional office of the MoEF&CC, Lucknow before further appraisal of the proposal.*

4. Accordingly, PP was informed to submit the requisite information vide letter dated 08.09.2018. In response to the same PP has now submitted information vide its letter dated 28.02.2020 as follows:

Point. No.	Details	Reply
i.	The Committee also noted that it was a violation case at the time of issuance of EC in 2007 and accordingly the Ministry has requested State Govt. of Rajasthan (Secretary, Environment Department) to take necessary action as per the provisions of the E(P) Act, 1986; However, there is no communication received from the State Govt. about the action taken. In this regard, State Govt. of Rajasthan	Noted

	(Secretary, Environment) may be requested for the detailed action on the violation.	
ii.	PP has not submitted the (i) certified production details from DMG since inception of mine; and (ii) CTE/CTO since inception of mine, to verify the compliances of the order of Hon'ble Supreme Court dated 02.8.2017 (Common Cause Vs Union of India & Ors.) in CWP No. 114/2014.	<p>(i) PP has provided production certificate certified from Mining Engineer, Bhilwara, Department of Mines & Geology, Rajasthan vide letter No. SKA/Bhil/Parya/2015/595 dated 22.03.2019 and letter no. SKA/Bhil/Parya/2015/504 dated 10.12.2019.</p> <p>(ii) PP has submitted that CTE was granted on 20.07.2007. Also PP has provided all the copy of CTO since inception of mines till date to verify the compliances of the order of Hon'ble Supreme Court dated 02.8.2017 (Common Cause Vs Union of India & Ors.) in CWP No. 114/2014.</p>
iii.	Details of approved mine plan/scheme of mining w.r.t. life of mine which increased from 13 years to 37 years.	PP has submitted that Review of Mining Plan along-with Progressive Mines Closure Plan has been approved by Superintendent Mining Engineer,

		<p>Bhilwara, DMG, Government of Rajasthan vide letter No. KHA/BHIL/VRUT/C C1/BHIL/KHA/P-15/1995/1835 dated 24.05.2019. PP has further submitted that life of mine has increased from 13 to 37 years as mentioned in the approved mining plan.</p>
iv.	<p>The Committee is of the view that certified compliance report of earlier EC conditions may be requested from the Regional office of the MoEF&CC, Lucknow before further appraisal of the proposal.</p>	<p>PP has submitted a compliance report of earlier EC conditions certified from Member Secretary, Regional Office, Rajasthan State Pollution Control Board, Bhilwara vide Letter No. RPCB/RO/BHL/BM R-17/3154 dated 26.11.2019.</p> <p>PP has submitted that it has also made request for certified compliance to Regional office, MoEF&CC, Lucknow vide letter dated 04.09.2018 and reminder letter dated 18.09.2018.</p>

5. The EAC, after detailed deliberation, made following observation:-

- a) The Committee is of the view that proposal is category 'B' as mining lease area is less than 100 Ha but as it was deliberated by EAC in the absence of SEIAA in State of Rajasthan.

- b) The Committee also observed that the EC was granted vide letter no J11015/248/2006-IA.II (M) dated 18th May 2007 under para 12 of EIA Notification 2006 and the key issue is the life of mine mentioned in the operating para of EC letter wherein it has mentioned that life of mine is 13 years. Previously, there was some ambiguity in the validity of EC which was granted under para 12 or life of mine is less than 30 years. In the instant case also the life of mine was mentioned as 13 years and it appears that EC is valid till 17.05.2020. But this ambiguity was resolved by the Ministry vide its O.M No. No. 22-18/2019-IA.III dated 20.12.2019 wherein it has mentioned that the ECs granted under para 12(which is part of the EIA Notification 2006), are to be considered under EIA Notification 2006 only. Accordingly, the provisions of EIA Notification 2006 shall be applicable for the projects in which EC has been granted under para 12 of the EIA Notification 2006 including the validity of such EC unless expressly stated otherwise in the conditions of specific Environmental Clearance. In the instant case no restriction on validity of EC is mentioned in the specific condition. Therefore, the EC is valid till 30 years from the grant of EC or validity of mining lease whichever is less. In the instant case the lease is valid for 50 years from 30.01.1996 (i.e. up to 29.01.2046). But the EC is valid for 30 years (i.e. up to 17.05.2037) from the dated of grant which is 18.05.2007.
- c) The Committee observed that as reported by PP there is no change in peak production capacity and lease area and only due to re-assessment of the reserves the life of mine has increased. The Committee also observed that Ministry has issued O.M. No. 22-44/2018-IA.III dated 14.05.2020 regarding change in calendar plan and sequence of mining.
- d) Regarding violation of Common Cause Judgment dated 2.08.2018 and S.O. 804(E) dated 14.03.2017 the PP has submitted the past production details duly authenticated by mining department. PP also submitted the Annexure-III of the agenda item as per which after grant of EC dated 18.05.2007 the production is well within the EC Capacity and there is no violation of S.O.804(E) dated 14.03.2017. Further, the PP has exceeded the base production of 1993-94 (1335 tone) in year 1995-95 (2701 tons) without obtaining EC under EIA 1994, therefore it appears to be in violation of Common Cause Judgment and Ministry may ask the state government to take necessary action as applicable. In addition to this PP is required to submit the affidavit in pursuant to Ministry's O.M No. 3-50/2017-IA.III (Pt) dated 30.05.2018 for compliance of Common Cause Judgment dated 2.08.2017 and all the statutory requirement.
- e) The Committee observed that PP has also made request for certified compliance to Regional office, MoEF&CC, Lucknow vide letter dated 04.09.2018 and reminder letter dated 18.09.2018 but the same was not provided. However, submitted compliance report of earlier EC conditions certified from Member Secretary, Regional Office, Rajasthan State Pollution Control Board, Bhilwara vide Letter No.

RPCB/RO/BHL/BMR-17/3154 dated 26.11.2019. The Committee is of the view that Ministry vide O.M No J-11013/46/2019-IA. I(M) dated 2.09.2019 clarified that monitoring report for Category B shall be submitted to concerned SEIAA and SEIAA vide notification S.O.637(E) dated 28.02.2014 empowered to take action of non-compliance of EC Conditions. In the instant case SPCB did not report any major non-compliance of EC conditions.

6. Based on the discussion held the Committee **recommended** the proposal for grant of amendment in EC for increase in life of mine from 13 years to 37 years with same capacity, same Lease area, no change in mining process and overall compliance of EC. The other terms & conditions of the EC granted vide Lr No. J-11015/248/2006-IA. II (M) dated 18th May 2007 shall remain the same and EC is valid till **17.05.2037**. However, the general condition shall be replaced with Standard EC Conditions as per Ministry's O.M No. No. 22-34/2018-IA.III dated 08.01.2019 & 16.01.2020.

2.6 Limestone (minor mineral) mining project by Shri Dal Chand Sharma, located in Village Bhawanda, Tehsil Khimsar, District Nagaur, Rajasthan (MLA:100 ha & M.L. No 15/99) - Amendment in EC dated 18.06.2010. [Proposal No. IA/RJ/MIN/54835/2010]; [File No. J-11015/992/2007-IA.II (M)]

The Proposal of Smt. Suraj Kaur w/o Late (Shri) Dal Chand Sharma is for amendment in EC dated 18.06.2010 w.r.t. specific conditions no. A. (viii) to that there would be no concurrent backfilling possible at this stage, so existing waste/over-burden will be backfilled at the end of life of mine. The mine is located in Village Bhawanda, Tehsil Khimsar, District Nagaur, Rajasthan in MLA of 100 ha.

2. The proposal is **deferred** as the project proponent did not attend the meeting.

2.7 Gudipadu Limestone Mine (ML area 454.59 ha; increase limestone production from 1.0 to 4.7 MTPA with Total Excavation of 4.85 MTPA (Limestone: 4.7MTPA + Top Soil: 0.15MTPA)) of M/s BMM Cements Limited at Gudipadu Village, Yadiki Madal, Ananthapur District, Andhra Pradesh - Terms of reference. [IA/AP/MIN/150902/2020; J-11015/231/2012.IA.II(M)]

The proposal of M/s BMM Cements Limited is for Gudipadu Limestone Mine (ML area 454.59 ha; increase limestone production from 1.0 to 4.7 MTPA with Total Excavation of 4.85 MTPA (Limestone: 4.7MTPA + Top Soil: 0.15MTPA)). The mine is located near Gudipadu Village, Yadiki Mandal, Anantapur District, Andhra Pradesh and is located between 77°58'12"-78°00'15" East longitude and 15°05'03"- 15°07'16" North latitude and at an average elevation of 400 m above MSL. The site is a part of Survey of India Toposheet no 57 E/16 & 57 I/4. Mine area is located in seismic zone - I/ which is seismically least active zone.

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, this mining project falls under **Category 'A'** Project or activity 1(a) as the mining lease area is more than 100 Ha. The PP applied online vide proposal No. IA/AP/MIN/150902/2020 dated 04.04.2020 and submitted the Form-1, Pre-feasibility Report.

3. PP submitted that that the **mining lease** over an area of 1123.32 acres (454.59 hectares) falling in various survey nos. of Gudipadu village, Yadiki Mandal, Anantapur District, Andhra Pradesh was granted for a period of 20 years vide Industries and Commerce (MINES.III) Department, Govt of Andhra Pradesh Lr. Memo. No. 338/M.III(I)/2010-6 dated 26.05.2012 for a period of 20 years in favour of M/s. B.M.M. Cements Limited for their "captive purpose" and subject to submission of Approved Mining Plan, CTE from APPCB, Prior EC from GoI under S.O. 1533, dated 14.09.2006.

4. PP submitted that Gudipadu Limestone Mine is the **captive mine** being operated by BMM for which **EC has been obtained** vide Letter No. J-11015/231/2012-IA-II(M) dated 12-12-2014 for 1.0 MTPA of Limestone production in an area of 454.59 ha, located near Gudipadu village, Yadiki Mandal, Anantapur District, Andhra Pradesh State.

5. PP submitted that the subject proposal was earlier submitted to MOEFCC vide application number IA/AP/MIN/70547/2017 dated 25th October, 2017. The proposal was considered in the EAC meeting held on 27th November, 2017. "The committee noted that in the Form-1 submitted by the Proponent the name of the applicant and company is mentioned as M/S Sagar Cement Limited but the proposal submitted is for M/s BMM Cement Ltd. The Committee after due deliberation deferred the proposal and asked the PP to resolve the anomaly before it is considered by EAC."

6. PP in its letter dated 01.04.2020 has further submitted that BMM Cements Limited is a wholly owned subsidiary of M/s Sagar Cements Ltd. Now, PP has herewith submitted the application afresh in the name of BMM cements Limited. In this connection, PP has submitted Form-I duly filled in, Terms of Reference and Pre - Feasibility Report for approval of the Terms of Reference (TOR) as per the EIA Notification SO 1533 dated 14th September 2006 and subsequent amendments.

7. PP submitted that the mining lease is a non-forest land and **No sensitive areas or National parks are located within 10 km of the mine area.** Yadiki RF and Owk RF are the reserved forests located within the 10 km radius at 8.1 km & 6.4 km in W and N respectively. Out of the total mining lease area of 454.59 Ha, 52.96 Ha is Govt. Barren rocky land and balance 401.63 Ha is private patta land owned by BMM Cements Limited.

8. PP has submitted that **Mining Plan** Approval for enhanced production is under process. The mining is by opencast mechanized mining, employing DTH drilling for blast holes, after blasting the mineral is loaded into the tippers using hydraulic excavator. Gudipadu Limestone Mine is spread over an area of 454.59 Ha. with proven mineral reserves of 163.422 Million Tonnes which will last for 35 years with proposed production capacity of 4.7 MTPA.

The limestone produced is crushed in the mine for transport to cement plant through closed belt conveyor. No waste generation is anticipated. During the life of the mine about 3.27 million cu. m of soil will be generated and will be used for afforestation purposes in barrier zones of 7.5 m width boundary, road and seasonal stream.

Observation of EAC: The Committee asked about the transportation route, mode of transportation, embankment and installation of crusher. The PP vide its letter dated 29.05.2020 submitted that a parallel conveyor to the existing conveyor will be laid for transportation of limestone at increased capacity of 4.7 MTPA. PP submitted a crusher of 1200 TPH will be installed within the mining lease area. PP submitted that embankment will be formed all around the mining pit as safety measures. Embankment will be moved along the pit edges as per the progress of mine.

9. PP also submitted the **past production details** for the period from 2015-16 to 2019-20 (upto 25.02.2020) duly certified by the Department of Mining and Geology, Govt. of A.P vide Lr. No. 3615/M1/2007 dated 26.02.2020.

Observation of EAC: The Committee observed that the dispatch figure is well within the EC capacity. The Committee also asked the PP about the production figures. The PP submitted that production and dispatch figures are same and no stock of mineral is being maintained. The Committee is of the view that PP shall submit both production and dispatch figures duly authenticated by DMG.

10. An area of 26.63 Ha along the mine lease boundary, barrier zone for road and seasonal stream will be afforested under **Greenbelt development**.

Observation of EAC: The Committee observed that PP has taken an effort for the plantation activities but still there is a scope of improvement as density of plantation is low. The PP agreed to complete the plantation along the lease boundary including gap plantation within this year. The Committee suggested that seedlings not less than of height of 2 meters should be planted and species such as *eucalyptus* should be strictly avoided.

11. Present **water requirement** is 45 m³/day. Additional requirement for proposed expansion will be about 55 m³/day. Therefore, the total Water requirement for the mine at 4.7 MTPA limestone productions will be about 100 m³/day for dust suppression, plantation and domestic purposes. Presently water requirement is met from bore wells and after development of the mine pit, the pit water will be used. PP submitted that for mining operations the ground or surface water will not be used and **Mining operations will not intersect with ground water table**. Waste water generated from domestic uses will be treated in septic tank followed by soak pit.

Observation of EAC: Whether PP has obtained permission from CGWA for withdrawal of ground water or not. PP vide its letter dated 29.05.2020 submitted that initially when the mine was opened in 2015 the requirement

for water was met from ground water for which permission was obtained from State Ground Water Department and later on water requirement was met from rain water collected in the mining pit. PP submitted for this expansion proposal there is no requirement of ground water and water requirement will be met from rainwater collected in the mine pit.

12. PP submitted that there is **no litigation** pending against the project and/or land in which the project is proposed to be set up.

13. PP submitted that the estimated **project cost** for the limestone mine will be about Rs. 10 crores. After this expansion, the mine will provide direct employment to about 15 people, in addition there will be indirect employment to many more people, in the form of contractual jobs, business opportunities, service facilities etc. This will enhance the economic status of the area.

14. Based on the discussion held and document submitted the Committee **recommended** the proposal for grant of Term of Reference for proposal of M/s BMM Cements Limited for increase limestone production from 1.0 to 4.7 MTPA with Total Excavation of 4.85 MTPA (Limestone: 4.7MTPA + Top Soil: 0.15MTPA) from Gudipadu Limestone Mine (ML area 454.59 ha) located near Gudipadu Village, Yadiki Mandal, Anantapur District, Andhra Pradesh. In addition to standard ToR conditions the Committee also prescribed the following additional Term of Reference:

- 1) The total excavation (minerals, waste, top soil) to be excavated needs to be brought out clearly in production and development plan. The mineable reserves, blocked reserves need to be mentioned along with life of mine. PP should add an annexure in the mining plan clearly showing the year-wise production and development plan (tabular format) till the end of life of mine. The location of mineral stacking, dumping sites, plantation and other infrastructures needs to be brought out clearly in the mining plan. PP needs to bring out the waste to be generated during the entire life of mine and where it will be dumped/backfilled. In addition to this there are some small blocks as per KML file which do not belong to PP and do not form the part of the mining lease. Therefore, the mining plan needs to be prepared in such a way to leave a safety barrier of 7.5 meters and to provide the approach roads for these blocks. There is a road passing just adjacent or may be inside the mining lease in the southern part. Therefore, in the mining plan a safety barrier of at least 50 meters or as per mining lease condition whichever is more needs to be left for the protection of the road.
- 2) PP should submit an undertaking by way of affidavit as required as per Ministry's O.M No 3-50/2017 -IA. II(M) dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

- 3) PP should provide in the EIA Report details of all the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after grant of EC.
- 4) PP should submit the revenue plan for mining lease, revenue plan should be superimposed on the satellite imaginary clearly demarcate the Govt. land, private land, agricultural land etc.
- 5) PP should submit the real-time aerial footage & video of the mining lease area and of the transportation route.
- 6) PP should submit the detailed plan in tabular format (year-wise for life of mine) for afforestation and green belt development in and around the mining lease. The PP should submit the number of saplings to be planted, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. In addition to this PP should show on a surface plan (5-year interval for life of mine) of suitable scale the area to be covered under afforestation & green belt clearly mentioning the latitude and longitude of the area to be covered during each 5 years. The capital and recurring expenditure to be incurred needs to be submitted. Plantation plan should be prepared in such a way that 80% of the plantation to be carried out in first 5 years and for the remaining years the proposal for gap filling, area which is not ready/owned in next 5 years for the plantation, and dump which would be created established after 5 years etc. needs to be submitted. Plantation of species such as eucalyptus and non-local species may be avoided. Plantation should also be done on the foundation of the crusher area. The seedling of height not less than 2 meters to be selected and accordingly cost of plantation needs to be decided.
- 7) PP should submit the quantity of surface or ground water to be used for this project. The complete water balance cycle need to be submitted. In addition to this PP should submit a detailed plan for rain water harvesting measures to be taken. The PP should submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted.
- 8) PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged for implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.
- 9) PP should submit the year-wise, activity wise and time bound budget earmarked for EMP, occupational health surveillance & Corporate

Environmental Responsibility needs to be submitted. The capital and recurring expenditure to be incurred needs to be submitted.

- 10) PP should submit the measures/technology to be adopted for prevention of illegal mining and pilferage of mineral.
- 11) PP should submit the detailed mineralogical and chemical composition of the mineral and percentage of free silica from a NABL/MoEF&CC accredited laboratory.
- 12) PP should clearly show the transport route of the mineral and protection and mitigative measure to be adopted while transportation of the mineral. The impact from the center line of the road on either side should be clearly brought out supported with the line source modelling and isopleth. Further, frequency of testing of Poly Aromatic Hydrocarbon needs to be submitted along with budget. Based on the above study the compensation to be paid in the event of damage to the crop and land on the either side of the road needs to be mentioned. The PP should provide the source of equations used and complete calculations for computing the emission rate from the various sources. In addition, it has observed that there are other mining leases and cement plant in the vicinity of the mining lease. Therefore, a cumulative impact study needs to be done which clearly shows the total limestone extraction in area, cement plant capacity, impact of the mining and cement plant, Ground level concentration in worst case and control case scenario,
- 13) PP should clearly bring out that what is the specific diesel consumption (Liters/Tonne of total excavation & mineral) and steps to be taken for reduction of the same. Year-wise target for reduction in the specific diesel consumption needs to be submitted.
- 14) PP should bring out the awareness campaign to be carried out on various environmental issues, practical training facility to be provided to the environmental engineer/diploma holders, mining engineer/diploma holders, geologists, and other trades related to mining operations. Target for the same needs to be submitted.
- 15) The budget to be earmarked for the various activities shall be decided after perusal of the Standard EC Conditions published by the Ministry.
- 16) The PP should ensure that only NABET accredited consultant shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that accreditation of consultant shall be valid during the collection of baseline data, preparation of EIA/EMP report and during the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and PP and consultant are fully accountable for the same.

- 17) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.
- 18) All the certificates viz. Involvement of Forest land, distance from protected area, list of flora & fauna should be duly authenticated by Chief Wildlife Warden & Forest Department. The Certificate should bear the name, designation, official seal of the person signing the certificate and dispatch number.

2.8 Limestone Mine {Block 3B2, Applied ML Area- 470.00 ha} with Limestone Production Capacity of 3.8 Million TPA, Waste and Topsoil: 4.887 Million M³ Per Annum by M/s JSW Cement Ltd. located near Village- Sarasani, Tehsil- Nagaur, District: Nagaur, Rajasthan- EC Regarding. [File No.: IA-J-11015/125/2018-IA-II(M); Proposal No.: IA/RJ/MIN/80856/2018]

1. The proposal of M/s JSW Cement Ltd. is for Mining of Limestone for production of 3.8 Million TPA of Limestone, 4.887 Million m³ per Annum of waste and topsoil from mining area of 470.00 Ha located at Village- Sarasani, Tehsil- Nagaur, District: Nagaur, Rajasthan. The applied area forms a part of Survey of India topo-sheet no. 45E/15 (G43B15) (mine area) and 45/15 (G43B15), 45E/16, 451/3 (G43C3), 451/4 (G43C4) (study area). The lease is located at following latitude and longitudes: Latitude: 27°15'7.0" N to 27°13'57.1" N Longitude: 73°53'14.5" E to 73°55'40.5"E, seismic zone-II.

2. Based on the discussion held and document submitted by the PP, the Committee deferred the proposal. The committee after detailed deliberations desired the following information/ documents for further consideration of the proposal:

- i. Though it was mentioned that an affidavit is enclosed, as per Ministry's O.M No 3-50/2017 -IA. II(M) dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017, in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors., with the Final EIA/EMP report, it was not found in the report. Therefore, the affidavit shall be submitted.
- ii. The approval from the Chief Wildlife Warden for the conservation plan for Schedule-I species found in the study area shall be submitted.
- iii. NoC from CGWA for ground water withdrawal of 200 KLD shall be submitted.
- iv. Action plan substitution of grazing land with along with location of the compensatory land and budget provision shall be provided.

- v. The details on action plan for exploration; backfilling/ reclamation plan; life of mine as on date as per the approved mine plan; Green belt / plantation need to be submitted.
- vi. PP shall submit the plan for re-handling of waste and have this activity consider for impact prediction shall be indicated.
- vii. Location of the crusher: It was informed that the crusher will be located outside the ML area in the adjoining lease of the same proponent. In case of the non-execution of the proposed plan, the alternate action plan for locating the crusher inside the ML shall be clearly brought out.
- viii. PP shall clearly indicate the time bound action plan for skill development as per the issues raised in PH.
- ix. Details of khasra/survey number shall be submitted.

3. Therefore, the proposal is **deferred** for the above information.

2.9. Transfer of EC from “M/s Bhagwan Dass Chandna” to “M/s Gulab Chand Kocher” for enhancement of production of white clay from 4506 tonnes per annum (TPA) to 25,000 TPA. The total mine lease area of the project is 42.31ha.

[IA/RJ/MIN/11302/2005; J-11015/281/2005-IA.II(M)]

The Proposal of “M/s Gulab Chand Kocher is for transfer of EC issued vide Letter No. J-11015/281/2005-IA.II (M), dated 26th March, 2007 from “M/s Bhagwan Dass Chandna” to “M/s Gulab Chand Kocher”.

2. The project proponent did not attend the meeting. The committee also observed that the instant proposal is for transfer of EC under clause 11 of EIA Notification, 2006. Therefore, the project proponent may make the application in Form-7 for transfer of EC under clause 11 of EIA Notification, 2006 instead of EC amendment clause. Therefore, the proposal is **returned in the present form.**

2.10 Bunder Diamond Block – 364 Ha (Forest Land) - 5.00 MTPA of Kimberlite Ore Production with Total Excavation of 25.04 MTPA & 5.00 MTPA Ore Processing Plant of M/s Essel Mining & Industries Ltd., - Terms of reference. [IA/MP/MIN/147198/2020; J-11015/23/2020-IA.II(M)]

1. The proposal of M/s Essel Mining & Industries Ltd. is for Bunder Diamond Block – 364 Ha (Forest Land) - 5.00 MTPA of Kimberlite Ore Production with Total Excavation of 25.04 MTPA (5.00 MTPA Of Kimberlite Ore + 3.70 MTPA Of Soil + 16.34 MTPA of Overburden Waste) & 5.00 MTPA Ore Processing Plant (Beneficiation Process) of M/s Essel Mining & Industries Ltd. located in Buxwaha Protected Forest, Sagoria Village, Buxwaha Tehsil, Chhatarpur district, Madhya Pradesh. The mine is part of Survey of India topo

sheet No. 54 P/7 and bounded by Latitudes between 24°18'28.85"N to 24°20'4.89"N and Longitudes between 79°16'52.61"E to 79°18'6.98"E. The area falls under Seismic zone - I and is seismically least active zone.

2. After detailed deliberations on the proposal, Since the proposed project forms part of contiguous stretch of forest from the Panna Tiger Reserve and may likely be a part of larger Panna landscape conservation area, the site of proposal involves ecological sensitivity. Though the clearance from other agencies are generally not pre-requisite for issuance of ToR, in the instant case, the committee is of the opinion that the project proponent may get the Stage-I of forest clearance and the wildlife clearance, if applicable, first or may obtain the NoC for issuance of ToR from the CWLW and NTCA and then may approach for the ToR. **Therefore, the proposal is returned in the present form.**

2.11 Betla Graphite Quartz & Felspar Mines of M/s Parijat Mining Industries (India) Private Limited at Plot No. 291(P), 292, 283-286, 289, 296, 319, Village- Betla, District-Latehar, Jharkhand (Area-7.216 Ha) – Amendment in EC for validity extension. [J-11015/24/2020-IA.II (M); IA/JH/MIN/134015/2019]

1. The proposal of M/s Parijat Mining Industries (India) Private Limited is for Amendment w.r.t. extension of validity period in Environmental Clearance granted vide letter no. EC/SEIAA/2013-14/24/2013/854 dated 01.05.2015 for Betla Graphite Quartz & Felspar Mines of M/s Parijat Mining Industries (India) Private Limited at Plot No. 291(P), 292, 283-286, 289, 290, 319, Village- Betla, District-Latehar, Jharkhand (Area-7.216 Ha).

2. Project proponent has requested for deferment of the proposal vide his letter number PM 1/2020-2L/05/003, dated 25th May, 2020. Therefore, the proposal is **deferred** on account of the project proponent did not attend the meeting.

2.12 Mining of beach sand minerals of M/s. Indian Rare Earths Limited for mining of beach sand minerals with enhancement in production capacity from 2, 37,150 TPA to 7, 50,000 TPA in NK Block IV EE Ilmenite mine with the total mine lease area of 180 ha located at Alappad, Panmana and Ayanivelikulangara villages in Karunagapally Taluk, Kollam, Kerala – Reconsideration of EC

[New File No: J11015/227/2015-IA-II (M); New Proposal No:IA/KL/MIN/25461/2014;IA/KL/MIN/109526/2008; Old File No:11-36/2008-IAIII; Old proposal No: IA/KL/MIN/85725/2008]

1. The proposal of M/s Indian Rare Earths Limited is for mining of Beach Sand Minerals viz: ilmenite, Rutile, Zircon, Sillimanite, zirflor and brown ilmenite with enhancement in production capacity from 2, 37,150 TPA to 7, 50,000 TPA in NK Block IV EE Ilmenite mine. The total mine lease area is 180 ha, located at Chavara, Alappad, Panmana and Ayaneivelikulangara villages

of Kollam District, Kerala. The latitudes and longitudes of the mine lease area lies between 09°00'55.97" to 09°02'3.80" N, 76° 31'17.19" to 76° 30'29.90"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) as the mining lease area is greater than 100 ha.

3. The Terms of Reference for the proposed expansion of mining quantity from 2,37,150 TPA to 7,50,000 TPA (ROM) in the existing Mining Lease area of 180 ha was considered in the EAC meeting held during 24-26 June 2015 and the ToR was granted by Ministry vide letter No. J-11015/227/2015/IA-II dated 11.08.2015 for undertaking detailed EIA study and it was valid up to 10.08.2018. Followed by proposal for extension of ToR validity was considered in the EAC meeting held during 22-23 January 2019 and the ToR validity was extended for a period of one year from 11.08.2018 to 10.08.2019 vide letter no. J-11015/227/2015/IA-II dated 12.02.2019. The PP submitted the EIA/EMP Report to Ministry for seeking environmental clearance and the proposal was considered in the EAC meeting held 27-28th June, 2019.

4. The EC was initially granted to M/s. IREL on 01.03.2011 with production capacity of 2,37,150 TPA and ML area of 180 ha for mining of Beach Sand Minerals viz: Ilmenite, Rutile, Zircon, Sillimanite, Zirflor and brown Ilmenite. CRZ clearance was also issued in 2011(CRZ and EC combined).

5. Kerala Coastal Zone Management Authority in its 96th Meeting held on 07.07.2018 recommended the proposal for expansion subject to no mechanical mining in CRZ 1B. PP submitted that the total mine lease area of project is 180 ha which comprises of CRZ IA, CRZ IB, CRZ III and CRZ IV areas. PP also submitted the recommendation from Kerala Coastal Zone Management Authority (KCZMA) vide letter no: 2933/A1/2018/KCZMA dated 22.10.2018. The KCZMA letter mentioned that the *"KCZMA in its 96th meeting vide agenda no.96.03.14 discussed the matter in detail and decided to recommend the proposal of M/s Indian Rare Earth Limited to Ministry of Environment, Forest and Climate Change for considering the CRZ clearance for mining of heavy mineral sand subject to the condition that no mechanical mining will be allowed in CRZ IB. In the circumstance, the above proposal of Indian Rare Earth Limited, Chavara, Kollam is forwarded for your consideration subject to the condition that no mechanical mining will be allowed in CRZ IB."*

6. PP has submitted that the total mining lease area of 180 ha includes 132 ha of private agriculture land and homestead and 48 ha Government land including canal and lake. The Govt. of Kerala, vide letter no. G.O (Rt.) No. 746/07/ID, dated 08/06/07 granted lease to M/s IREL for the period of 20 years and the lease has been executed on 07.06.2011 for the term of 20 years.

7. The modified mining plan with progressive mine closure plan in respect of NK Block IV EE Ilmenite Mine over an extent of 180 ha was approved by Department of Atomic Energy, Atomic Minerals Directorate for Exploration and Research, Government of India, Hyderabad vide letter no.

AMD/MRG/IREL-Chavara/MMP/180 Ha dated 15th November 2018. The Modified Mining Plan and Progressive Mine Closure Plan is approved in respect of minerals such as Ilmenite, Rutile, Zircon, Monazite, Lexuoxene and Silimanite, respectively.

8. The project proponent (PP) submitted that the method of mining is open cast inland mining or by using dredge or excavators. Inland mining will be done by using dredge. The dredge has a working length of 30 meters and width of 14m. The separation is through physical process and no chemicals are used. The semi mechanized mining includes refilling of mined area using tailings from pre concentration plant and mineral separation plant. The mining will proceed from the southern boundary of the plot. The pond will progress as a strip parallel to the lease boundary. The excavation during the first two years will be 2,37,150 tons of raw sand and for the coming three years it will be 7,50,000 tons.

9. PP submitted that the depth of ground water level near mining lease area in pre & post monsoon are found to be 1.2 to 1.5 mbgl & 1.4 to 1.7 mbgl respectively. PP has further informed that the water required for the Spiral Separators in the Dredge and Wet Upgradation Plant (DWUP) will be made available from the artificial pond itself in which the DWUP floats and the water is being recycled back to the pond.

10. PP submitted that afforestation will be carried out in total of 104.295 ha area which includes green belt plantation in 5.82 ha and 98.475 ha area in the excavation/quarry post mining. PP submitted that the plantation will be done @80 saplings per hectares of land. A provision of Rs. 50.00 lakhs is estimated for development of green belt as suggested in the EMP. Three locations in the estuarine portion are recommended for mangrove afforestation. After mining only about 80% rejects is available for refilling. It is proposed to make up this 20% by dredging the sides of T.S canal and thereby canal widening for conversion to wetland and lake. The ecology of these areas has to be monitored every year. It is submitted in the EIA report that as a management measure NIIST suggests the formulation mangrove afforestation for an area about 2.17 Ha. In the current project there is limited scope for development of green belt as the company is proposing to return back the land to owners after mining.

11. PP submitted that the proposed site is not part of any national park, wildlife sanctuary, natural reserve or biosphere reserve. No forest land too is being encroached. Hence, no compensatory afforestation is required.

12. PP submitted that the study area comprises of terrestrial habitat as well as aquatic. The aquatic habitat comprised of sea beaches, canals and wetlands. The sea beach though a part of the terrestrial habitat is described along with the aquatic habitat considering that a part of the project site is on the beach. The large area covered by the wetlands and the canal, considerable extent of the study area is covered by water. During the survey none of the threatened plant species are noticed. Altogether 107 plant species were identified in the buffer zone which includes herbs, shrubs and trees. In the

core zone 63 species of plants were recorded. There was no forest area located in the area of survey. No endangered species or threatened species or plants included in the Schedule I of wild life protection act of 1972 were observed during the survey. Animals included in Schedule I of Wildlife Protection Act 1972 were not observed in the study area. No endangered or endemic animals observed during the ecological survey.

13. Primary Baseline data on Ambient Air Quality, Water Quality, Noise level, Soil, Flora & Fauna has been collected for non-monsoon season starting from February-May 2017 of the core and buffer zone. The present air quality has been monitored and the results for PM 10, SO₂, NO_x shows these parameters are under the limit prescribed by CPCB. Noise quality of the environment has also been evaluated and the result shows that all the values were within the limits. Various impact models include Envitran's Fugitive Dust Modelling Pro for air quality modelling, hemispherical model equations for noise modelling and GIS applications for land use are depicted for prediction of impacts due to mining and related activities. PM₁₀ concentration might increase in future during the full-fledged mining operations. This can be remedied by adapting the EMP measures suggested in the report. Due to the full-fledged mining activities, there will be additional truck movement of 46 trips. This will increase the traffic congestion and risk associated in the panchayat road connecting the mine lease with the NH. For the control of traffic, an alternate traffic management plan for carrying the minerals to the Chavara IREL plant has been suggested. The surface and ground water characteristics have been established through field monitoring data at 13 locations generated during the study with respect to physicochemical characteristics and pollutant levels and the same has been compared with quality criteria for drinking water. The results showed limited increase in the water quality parameters above the prescribed limit. The Ground water contour map generated indicates that the flow/movement of water is predominantly towards South West and to the eastern side of the lease. Various remedial measures for overcoming this problem has been suggested in Environmental Management Plan chapter. PP submitted that it has developed an effective Environmental Management Plan for mitigating the impacts observed in all respective environmental field relevant to this project. For dust suppression remedial measures like usage of alternate road /water way/road widening / pumping of concentrate was suggested. For suppressing of dust on the roads, the consultant suggests the use of 35% calcium chloride (dust suppressants) on the haul roads between mine lease and the panchayat road. Construction of Groins are suggested to mitigate sea erosion.

14. The Project Proponent reported that Public Hearing for Proposed Project was conducted at 3.00 p.m. on 22.05.2018 at F.K.M. Auditorium, Tehsil Karunagappally, Chavara. The advertisement for public hearing was published on 22.04.2018, correction regarding change in venue was advertised on 12.05.2018 in the Kol edition of following Newspapers – Malayala Manorma (Malayalam), Mathrubhoomi (Malayalam) & The New Indian Express (English). The Public hearing was presided over by Sri. K.R. Manikandan, Additional District Magistrate, Kollam. The issues raised during

public hearing include environment impact study clarification, salt intrusion affecting farming and drinking water scarcity, land issues, building demolition, coastal degradation etc.

15. PP reported that 3 nos. of villages fall under Rehabilitation and Resettlement with 753 no. of households (PDFs/PAFs). R&R is in progress. PP submitted that the R & R scheme has been formulated after tripartite discussion between district administration, affected people and project authorities. The scheme has been approved by district authorities. First, the consent from the land owner is obtained for carrying out the Mining operations. Then the surface right from the land owner is obtained by paying the compensation based on agreement with the district administration, land owner representatives and Project Proponent. The details of the compensation to be paid on the basis of land value (Rs) per cent, building value as per the latest KPWD schedule of rates, the difference in building value will be paid at the time of return of the land, Tree values as per the Tahsildar report. Apart from the above; shifting and goodwill charges, a minimum compensation for extent of land less than one cent, Apart from the above, the land owners who have parted their land to IREL for carrying out the mining operations will be given compensation on rotational basis @ Rs 1000/- per land owner for every 4.5 tonnes of raw sand mined, the land will be mined and refilled to the near topography and the same extent will be returned to the land owners within 3 years of registration of land and other infrastructure facilities like Electricity, water line, road etc. will also be restored to the same status.

16. The Project Proponent submitted that the budget earmarked for Environmental Management Plan (EMP) shall be ₹ 0.46 Crores (Capital) & ₹ 1.13 Crores (recurring/annum).which includes i) Rs 16.0 Lakh (Capital) & Rs 10 Lakh (recurring) for Meteorology including wave monitoring, ii) Rs 10.00 Lakh (recurring) for Topography maintenance, iii) Rs 10.00 Lakh (recurring) for Coastal Protection, iv) Rs 15.00 Lakh (Capital) & Rs 5.00Lakh (recurring) for Water , v) Rs 5.0 Lakh (recurring) for Ecological Survey vi) Rs 15.00 Lakh (Capital) for Mangrove and wetland development, vii) ₹10.00 Lakh (recurring) for Green belt development, ₹18.00 Lakh (recurring) for Occupational Health & Biological Monitoring, ₹10.00 Lakh (recurring) for Radiation Survey, ₹10.00 Lakh (recurring) for Organisation Setup including salary (Only for additional man power), ₹5.00 Lakh (recurring) for Training and meeting etc of the organizational Setup, ₹5.00 Lakh (recurring) for Socio-economic development schemes. Amount proposed under EMP shall be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed report along with proof of activities viz. photographs (before & after with geolocation date & time), purchase documents, sampling reports, photographs & Geo-location of the infrastructures/facilities developed etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

17. PP has submitted that the main factors of occupational health in Chavara Beach sand project are noise and radiation. Safety of employees during operation and maintenance etc shall be as per mines rules and

regulations. To avoid any adverse effects on the health of workers due to various pollutants, the following measures relating to safety and health which are practised in Chavara project shall be continued in proposed 180 ha expansion programme also:

- i. Provision of rest shelters for mine workers with amenities like drinking water
- ii. All safety measures like use of safety appliances, safety awards, posters, slogans related to safety etc.
- iii. Training of employees for use of safety appliances and first aid.
- iv. Regular maintenance and testing of all equipment as per manufacturers' guidelines.
- v. Periodical Medical Examination (PME) of all workers by a medical specialist so that any adverse effect may be detected in its early stage.
- vi. The budget earmarked for occupational health & Biological Monitoring is Rs. 18 Lakhs (recurring).

18. PP submitted the past production details from Director of Mining and Geology, Government of Kerala vide letter no. nil dated 20.06.2019 which revealed that the PP has mined out within the EC capacity. PP submitted the affidavit dated 19.06.2019 in compliance of Ministry's OM dated 30.05.2018 in respect of the order of Hon'ble of Supreme Court dated 02.8.2017 in W.P.(C) No. 114/2014. PP submitted an undertaking vide letter dated 17.06.2019 in compliance to TOR conditions certifying that the EIA report has been prepared by CSIR-NIIST which include EIA coordinator, Functional Area Experts (FAE), Empanelled expert and Team members. The study has addressed the relevant TORs and the included and subsequently submitted for appraisal are factually correct as per our knowledge and belief.

19. Project Proponent submitted that the total cost of the project is 10.00 Crore and during operations project will provide permanent employment to 09 persons and temporary employment to 241 persons.

20. PP has earmarked 1.50crores towards Corporate Environment Responsibility for periodical sea wall maintenance and for other concerns raised during the public hearing.

21. The proposal has been deliberated in the EAC meeting held during 27-28th June, 2019 and the Committee deferred the proposal and made the following observations:-

- i. PP submitted the resettlement and rehabilitation plans which are generic and not adequate. PP needs to submit the revised R & R plan with budget plans for year wise accession of lease and displacement

(i.e. number of people, houses, cattle and cultivation land etc.) involved.

- ii. PP presented the water quality data, however, the details of radioactive elements present in the water are not provided. PP needs to submit the water quality data for potential presence of radioactive elements and minerals present in the water.
- iii. The specific condition (iii) of EC dated 01.03.2011 mentioned that the “50 mts all along the canal shall be maintained as buffer and shall not disturb at all maintained”. The compliance report mentioned that the “PP is carrying out mining very close to the canal and not maintain 50 m buffer as per EC. However, PP informed that Inland Waterways Authority of India has conveyed No Objection to dredge at the canal. PP should get the condition amended”. The Committee mentioned that there is a non-compliance reported by RO MoEF&CC and the PP has put their contrary view highlighting the ambiguity in understanding of dredging and mining. Accordingly, the Committee advised the Ministry to verify the factual situation and take appropriate action accordingly.
- iv. PP submitted the air quality data for PM10, SOx and NOx but not provided the PM2.5 values. PP needs to redo the air quality modeling and submit the revised data.
- v. In Public hearing issues, it is mentioned that salt intrusion in Vellanathuruthu as a result of mining has adversely affected farming and also caused drinking water scarcity. PP submitted that detailed hydrogeology survey has been conducted; however, the analysis results are generic and not adequate. Furthermore, the PP not submitted the details of laboratory conducted the hydrogeological study and their valid accreditation certificate. PP needs to submit the revised final hydrogeological study report and the valid accreditation certificate for the laboratory.
- vi. PP informed to the Committee that the company name has been changed from Indian Rare Earth Limited to IREL (India) Limited on 15.03.2019, but, there is no change in ownership of the company. Accordingly, the Committee suggested that the PP may submit fresh application for grant of EC in the name of IREL (India) Limited. The Committee also advised the Ministry to examine the case appropriately in respect of required documents for amendment in existing EC.
- vii. PP submitted that the land required for mining activity is not completely acquired by IREL. PP needs to submit the status of the land acquired and time needed to acquire remaining land.
- viii. PP submitted that the construction of seawalls on regular basis by the State Irrigation Department/IREL is already in practice. PP

needs to submit the details of constructions made and their type with budgetary provision allocated.

- ix. PP needs to comply to all conditions stipulated by Kerala Coastal Management Authority vide their letter No.2933/A1/2018/KCZMA dated 22.10.2018
- x. A comprehensive EMP study shall be conducted for migratory birds, if any, present in the mine lease area.
- xi. PP requires to submit the detailed marine and estuarine environment studies and coastal erosion in buffer zone of the study and suggested mitigation measures therein.
- xii. PP needs to submit land breakage details of the total mine lease area.
- xiii. PP need to monitor the ground water quality and submit the results of the same.
- xiv. PP submitted inadequate information on the Form 2 of the Parivesh Portal.
- xv. PP should submit the past production details as per the annexure-III of agenda of this EAC meeting.
- xvi. PP had informed the Committee that the company name has been changed from Indian Rare Earth Limited to IREL (India) Limited on 15.03.2019, but, there is no change in ownership of the company. Accordingly, the Committee suggested that the PP may submit fresh application for grant of EC in the name of IREL (India) Limited. The Committee also advised the Ministry to examine the case appropriately in respect of required documents for amendment in existing EC.
- xvii. The specific condition (iii) of EC dated 01.03.2011 mentioned that “50 meter all along the canal shall be maintained as buffer and shall not be disturb at all maintained”. The compliance report mentioned that the “PP is carrying out mining very close to the canal and has not maintain 50meter buffer as per EC. However, PP informed that Inland Waterways Authority of India has conveyed No Objection to dredge the canal. PP should get the condition amended”. The Committee mentioned that there is noncompliance reported by RO MoEF&CC and the PP has put their contrary view highlighting the ambiguity in understanding of dredging and mining. Accordingly, the Committee advised the Ministry to verify the factual situation and take appropriate action accordingly.

22. PP submitted the following information on 29.06.2019. Accordingly the proposal was considered in the EAC in its meeting held during July 30-31, 2019 wherein PP submitted the following:-

- i. PP also made submission on their R&R plan for the affected households and families situated in the proposed mine lease area. The details of model adopted for R&R plan was deliberated with special emphasis on the rehabilitation model, the benefit sharing model till the life of mine. The committee observed that the proposed model, which is also in implementation, is very conducive and social friendly without much compromise with the livelihood and living condition of the affected populace. To explore the replication potential of the adopted model in other parts of Country, the committee felt to make a field visit to the site to have interaction with the affected family and the observe the limitation and benefits of the model.
- ii. PP informed that there is only change in name of the company and the management remains the same. However, as per suggestion of earlier meeting of EAC, necessary application for change in name of the company in existing EC and ToR has been made and the same is under process at the MoEF&CC end. Therefore, PP submitted that EAC may consider the proposal for grant of EC for expansion, subjected to the change in name in the EC and ToR letter by ministry.

23. The Committee, after deliberation on the presentation and submission made by the PP, further desired the following information / clarification:

- i. The Committee observed that the PP submitted the fresh EC application in the old name, such as Indian Rare Earth Limited. PP responded that there is no option for change in the name from Indian Rare Earth Limited to IREL (India) Limited. Thus, the Committee suggested the Ministry to look into matter. However, the Committee considered the application in present form for consideration.
- ii. PP should also submit application for amendment in the existing EC specific conditions (iii), to overcome the ambiguity arising due to recovery of minerals from waste material of dredging material carried out by IWAI, and in compliance to the observation reported by RO MoEF&CC in their compliance report.

24. Additionally, the committee recommended a field visit by the sub-committee of EAC for ascertaining the potential of replication of the R&R model in other projects. The sub-committee visited the site on 28.12.2019.

25. In response to the Additional Details Sought by EAC, PP submitted the additional information / clarification vide its letter No. IREL/CH/MNG/IVEE/2019 dated 11.11.2019. The information is as follows:

Sl. No.	Additional information / clarification	Details by PP
(i)	No Objection certificate (NOC) from M/s Indian Rare Earths Limited.	PP has submitted Affidavit no.30AA 463686 dated 31.10.2019 stating that the name of the Company has changed from Indian Rare Earths Limited to IREL (India) Limited with effect from 15.03.2019 and there is no change of transfer of the ownership of the company and also submitted the no objection from Indian Rare Earth Limited for change of name in the EC No 11-36/2008-IA.III dt 01.03.2011.
(ii)	Lease document in name of IREL (India) Limited	PP has intimated Department of industries, Government of Kerala about the change in name of the Lessee (Company). The acknowledgment receipt of intimation by industries Department, Government of Kerala vide mail dated 29.10.2019 is submitted by PP.
(iii)	Approved Mining Plan in name of M/s. IREL (India) Limited.	PP has intimated Atomic Minerals Directorate for exploration and Research, Government of India about the change in name of the Lessee (Company). The acknowledgment receipt of intimation by AMDER, Government of India vide mail dated 06.11.2019 is submitted by PP.
(iv)	Undertaking in way of the affidavit by M/s IREL (India) Limited stating that PP shall comply with all the conditions as imposed in the EC No. 11-36/2008- IA.III dated 01.03.2011	PP has submitted Affidavit dated 31.10.2019stating that PP shall comply with all the conditions as imposed in the EC No. 11-36/2008- IA.III dated 01.03.2011
(v)	Affidavit/ Undertaking stating that No court cases and litigation on the above Mine lease area is pending.	PP has submitted Affidavit dated 31.10.2019stating that No court cases and litigation on the above Mine lease area is pending.
(vi)	PP need to submit the details	PP has submitted details of CSIR-

	of Laboratory conducted hydro geological study and their valid accreditation certificate.	NIIST lab and accreditation certificate.
(vii)	PP submitted that there are no migratory birds in the 180 Ha. ML area, certificate by Department of Aquatic Biology and Fisheries, University of Kerala. PP need to submit the copy of certificate.	PP submitted the letter dated 25.07.2019 from Department of Aquatic Biology & Fisheries, University of Kerala certifying that “IRE mine rease IV EE of the outer circle of the figure intersects Astamudi lake in the south which has about s7 species of birds including six that are migratory”.
(viii)	PP need to monitor the ground water quality for radioactive parameters and submit the results of the same.	“The Pre operational radiological monitoring of the proposed mining area of IREL Chavara at Vellanathuruthu region was carried out by Health Physics unit (HPU) of IREL Udyogamandal and Manavalakurichi during September-October 2017. External gamma radiation monitoring and analysis of well water and soil samples were carried out. The radiation field in the proposed site ranged from 0.4 – 2.7 μ Gy/h depending on the monazite content in the soil. The gross alpha activity in the soil samples ranged from 3.9-8.9 Bq/g and the gross beta activity ranged from 1.9-6.3 Bq/g. The gross alpha activity in the well water samples ranged from 0.007-0.016 Bq/lit and the gross beta activity ranged from 0.034 - 0.109 Bq/lit.”
(ix)	PP should also submit application for amendment in the existing EC dated 01.03.2011 specific conditions (iii), to overcome the ambiguity arising due to recovery of minerals from waste material of dredging material carried out by IWAI, and in compliance report vide letter no. EP/12.1/2010-11/26/	PP has submitted proposal on PARIVESH vide Proposal No. IA/KL/MIN/124785/2019 dated 11.11.2019 for amendment in EC.

	Kerala.	
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26. PP submitted that the proposal for amendment in Environmental Clearance w.r.t. specific condition (iii) for the buffer zone along the canal was applied online vide proposal no. IA/KL/MIN/124785/2019 dated 11.11.2019 in parivesh portal and the same was considered in the EAC in its meeting held on April, 20-21, 2020 wherein the committee After detailed deliberations on the submissions of the project proponent, the committee recommended for amendment in environmental clearance for mining along the canal by leaving 10 m safety zone till the study conducted by the PP on impact on breeding of aquatic fauna, as the canal is sea backwater, through a reputed organization. Further the committee is of the opinion that horizontal hydrostatic force at 3 m depth is 2943 KN. The horizontal force at 3 m from the sand is 11772 KN which is more than the hydrostatic pressure. Taking the factor of safety as 3, a buffer zone of 10 m shall be left to protect the canal. The PP may obtain further amendment based on the outcome of the study on impact on fauna and safety of canal. Till such time, the mining is allowed up to 10 m from the either bank of the canal subject to conditions given below:-

- i. Mining shall be carried out after leaving a barrier of 10 m on both sides of the canal bank (riparian area) on both sides to avoid distraction of fragile riparian ecology and river bank weakening.
- ii. After refilling and leveling, plantation shall be carried with native and leguminous species.
- iii. The mining and refilling will be done simultaneously and there shall not be gap of more than 100 m between the mining phase and refilling area along the length of the canal at any given point of time so as to strengthen and consolidate the canal bank by simultaneous refilling.
- iv. No water shall be discharged to canal. Periodical monitoring of water turbidity in TS canal during mining operations shall be taken up. The multiplication of natural or anthropogenic pressures on the turbidity of water shall be mitigated by stopping sand mining during bad weather.
- v. Proper distance shall be maintained between active Mining area and the area where the ecological restoration is taken up.

27. Based on the field visit report conducted by sub-committee the proposal was considered in the EAC in its meeting held on 30-31 May, 2020 and 1st June, 2020, accordingly the Committee present the field visit report along with the following recommendations:

- i. Proper fencing of the area should be provided for avoiding unauthorized entry and people & cattle falling into the 2-3 meters pits field with water.

- ii. The mining could be done in more systematic manner and advised to project authorities should prepare a map of 180ha lease area indicating the time line of excavation and probable time of handing over the land to the owners so that they can plan for the future plan to be adopted.
- iii. The mineral is a strategic mineral and require proper security and surveillance. CCTV camera needs to be installed; truck transporting the mineral should have GPS tracking system. The trucks/dumpers should be leak proof while transporting. Adequate care to be taken by the transporting agency not to spill the mineral on the roads.
- iv. TCLP analysis to be done for pre and post mining for soil at least once to check the presence of hazardous materials if any as per constituents of Schedule II of Hazardous & others waste (Management & Trans boundary Management) rules, 2015.
- v. PP shall take necessary steps to avoid the fugitive dust spreading while refilling the sand. The roads should be cleared by the project authorities which are covered with sand during transportation.
- vi. Permission of factory should have a concrete plan of house-keeping in order to conserve mineral.
- vii. Proper greening of the area with a green belt plan should be developed and submitted to MoEF&CC.
- viii. The Employees area to be assigned appropriate works as the expenditure is mainly wage payment.
- ix. The Committee is of the view that although mineral is strategic but mining is simple in terms of mechanization, no drilling and blasting, simultaneously back filling of the mined out area and area already mined in other mining sites is developed properly.

28. After detailed deliberation the Committee **recommended** the proposal for grant of EC for mining of Beach Sand Minerals viz: ilmenite, Rutile, Zircon, Sillimanite, zircon and brown ilmenite with enhancement in production capacity from 2, 37,150 TPA to 7, 50,000 TPA in NK Block IV EE Ilmenite mine. The total mine lease area is 180 ha, located at Chavara, Alappad, Panmana and Ayaneivelikulangara villages of Kollam District, Kerala by the M/s IREL (India) Limited with the following Specific Conditions subject to obtained by the Comments/ Opinion/ Recommendation of the CRZ division and name change.

Specific Conditions:

- i. No mechanical mining will be allowed in CRZ IB

- ii. Proper fencing of the area shall be provided for avoiding un-authorized entry of people and cattle falling into the 2-3 m pits filled with water.
- iii. The mining shall be done in systematic manner and the project authorities shall prepare a map of 180ha lease area indicating the time line of excavation and probable time of handing over the land to the owners, so that they can plan for the future utilization.
- iv. Surveillance through installation of CCTV; GPS tracking system for truck transporting the mineral; leak and pilferage proof of the trucks/dumpers shall be made.
- v. The PP shall carry out the TCLP analysis during pre and post mining for soil to check the presence of hazardous materials, if any as per constituents of Schedule II of Hazardous & Others Waste Management Rules, 2016.
- vi. PP shall take necessary steps to avoid the fugitive dust spreading while refilling the sand. The roads shall be regularly cleaned by the project authorities for clearing of sand.
- vii. Proper house-keeping of premises in order to conserve mineral shall be maintained.
- viii. Proper greening of the area with a green belt plan should be developed and submitted to MoEF&CC.
- ix. Concurrent back filling of the mined out area and area already mined in other mining sites is developed properly.
- x. The budget earmarked for Occupational Health is Rs 18.0 Lakh. The capital cost shall be spent before commencement of mining operation and recurring cost annually. The amount proposed under this head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed report along with proof of activities viz. photographs (with geo-location date & time), purchase documents, test reports, photographs & Geolocation of the infrastructures/facilities developed etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- xi. As committed by the Project Proponent that the budget shall be earmarked for Environmental Management Plan (EMP) of Rs.16.00 Lakh (Capital) &Rs.113.00 Lakh (recurring/annum) which includes i) Rs.16.0 Lakh (Capital) & Rs.10 Lakh (recurring) for Meteorology including wave monitoring, ii) Rs.10.00 Lakh (recurring) for Topography maintenance, iii) Rs 10.00 Lakh (recurring) for Coastal Protection, iv) Rs 15.00 Lakh (Capital) & Rs 5.00Lakh (recurring) for Water , v) Rs 5.0 Lakh (recurring) for Ecological Survey vi) Rs.15.00

Lakh (Capital) for Mangrove and wetland development, vii) Rs.10.00 Lakh (recurring) for Green belt development, Rs.18.00 Lakh (recurring) for Occupational Health & Biological Monitoring, Rs. 10.00 Lakh (recurring) for Radiation Survey, Rs 10.00 Lakh (recurring) for Organization Setup including salary (Only for additional man power), Rs.5.00 Lakh (recurring) for Training and meeting etc., of the organizational Setup, Rs.5.00 Lakh (recurring) for Socio-economic development schemes. Amount proposed under EMP shall be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed report along with proof of activities viz. photographs (before & after with geolocation date & time), purchase documents, sampling reports, photographs& Geo-location of the infrastructures/facilities developed etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

- xii. Personnel Protective Equipment (PPE) shall provide to all the personnel engaged at crusher, transfer points and other potential dust generating sources.
- xiii. Regular surveillance on Silicosis shall be carried through regular occupational health checkup of 1/3 of the persons every year. 8. No ground water intersection shall be made without prior approval from CGWA.
- xiv. No blasting shall be carried using the NONELs and fly rock control measures.
- xv. An amount of Rs. 1.50 Cr allocated for the CER shall be spent periodical sea wall maintenance and for other concerns raised during the public hearing.
- xvi. Mining shall be carried out after leaving a barrier of 10 m on both sides of the canal bank (riparian area) on both sides to avoid distraction of fragile riparian ecology and river bank weakening.
- xvii. After refilling and levelling, plantation shall be carried with native and leguminous species.
- xviii. The mining and refilling will be done simultaneously and there shall not be gap of more than 100 m between the mining phase and refilling area along the length of the canal at any given point of time so as to strengthen and consolidate the canal bank by simultaneous refilling.
- xix. No water shall be discharged to canal. Periodical monitoring of water turbidity in TS canal during mining operations shall be taken up. The multiplication of natural or anthropogenic pressures on the turbidity of water shall be mitigated by stopping sand mining during bad weather.

- xx. Proper distance shall be maintained between active Mining area and the area where the ecological restoration is taken up.
- xxi. No Construction work shall be carried out in Coastal Regulation Zone area.
- xxii. No religious places shall be disturbed without the Consent of locals.
- xxiii. TLCP analysis of both mined and tail materials can be done to check the presence of Hazardous materials and report shall be submitted along with the six monthly monitoring reports.
- xxiv. There shall be no waste disposal in to the coastal area.

2.13 Expansion in Production from 4.0 MTPA to 15.0 MTPA of Thakurani Iron Ore Mining Project of M/s Sarda Mines Pvt Ltd from the mine lease area of 947.046ha (943.926ha Forest Land+ 3.120 ha Non forest land) located in Village(s) Soyabali & Balitaand in the Thakurani Reserve Forest, Tehsil Barbil, District Kendujhar, Orissa. - reconsideration for Amendment in EC w.r.t. extension of validity of EC till 13.08.2021 coterminous with the validity of lease. [FileJ-11015/1176/2007-IA.II(M); Proposal No. IA/OR/MIN/124339/2019]

1. The proposal of M/s SARDA Mines Pvt Ltd (SMPL) is for extension validity of EC granted vide Lr.No. J-11015/1176/2007-IA. II(M) dated 29th October, 2008 for expansion of Production from 4.0 MTPA to 15.0 MTPA of Thakurani Iron Ore Mining from the mine lease area of 947.046 ha (943.926ha Forest Land+ 3.120 ha Non forest land) located in Village(s) Soyabali&Balitaand in the Thakurani Reserve Forest, Tehsil Barbil, District Kendujhar, Orissa.

2. EAC has deliberated the proposal in the EAC meeting held during 19-20, December, 2019 and desired that

- i. Ministry may seek legal opinion on Validity of EC of 15 MTPA, grated vide letter dated 29.10.2008 in due consideration of Special condition (ii) of limited validity till 2014, and subsequent clarification provided to PP by Ministry vide letter no. 5.01.2015.
- ii. PP needs to clarify as whether the amendment is being sought for EC of 2008 or the terms & conditions of 2004 for both- lumps and fines since EC is not valid beyond 2014 due to FC clearance non-availability
- iii. Applicability of provisions of Ministry notification S.O. 1530(E) dated 6.04.2018 to deal with EC under EIA-1994 needs to be examined by IA-Policy

- iv. Applicability of violation notification 804 (E) on the instant proposal. PP is required to submit the production details as per annexure III of Agenda of the meeting, for verification.
 - v. Whether the committee can consider the proposal of expansion on data which is more than 3 years old and whereas a final decision of competent authority has been communicated.
3. The legal opinion given by the Advisor (Legal) of the Ministry of Environment, Forest and Climate Change has been circulated to all the members for kind perusal.
4. Additionally, EAC opined that, to expedite the process and to avoid any unnecessary delay, concurrently, PP may be requested to submit following information/ documents:
- i. Certified past production details as per Annexure III of the Agenda, from DMG- Orissa
 - ii. CER as per the provision of ministry OM. F.No. 22-65/2017-IA.III dated 19th June 2018
 - iii. An undertaking to comply with all decision /order of Hon'ble Supreme Court in the matter "Common Cause Vs Union of India in compliance to the Ministry OM F.No.3-50/2017-IA.III(Pt.) dated 30th May, 2018.
 - iv. Decision of Hon'ble Supreme Court to allow mining operation.
 - v. Decision of Hon'ble Supreme Court on the issue ownership, as required from PP in the ministry letter dt. 15.01.2015
 - vi. Status on compliance of NEERI recommendation
5. The project proponent has uploaded the reply to ADS on 27th April, 2020. The information submitted by the PP and the observation of EAC on the same are as follows: -

i. Certified past production details as per Annexure III of the Agenda, from DMG- Orissa

PP submitted that *"the Annual Returns for the period for the period from 2007-08 to 2013-14 verified by Indian Bureau of Mines and State Government in Form H(s) are attached as Annexure-1. Based on that, the filled data as per format in the said Annexure-III is attached as Annexure-2. You may appreciate that the production of ROM was much below the rated capacity of the mine during the period from 2007-08 to 2013-14. It may be further authenticated by the letter dated 03.06.2014 of Indian Bureau of Mines where it had been clarified that 20.35 million tonnes*

iron ore was still left to be mined in the already approved mining area of 249.276 Ha with life of mine for further period of 1.36 years at rated capacity of 15mtpa ROM. (Copy of the letter attached as Annexure-3)”.

ii) CER as per the provision of ministry OM. F.No. 22-65/2017-IA.III dated 19th June 2018

PP referring to the Ministry Office Memorandum F.No. 22-65/2017-IA.III dated 19th June 2018 read with Office Memorandum F.No. 22-65/2017-IA.III dated 1st May 2018, *Corporate Environment Responsibility (CER) is imposed on all EC issued after 1st May, 2018. As envisaged in the EC granted vide No. J-11015/1176/2007-IA. II(M) dated 29.10.2008, the capital cost of the project was Rs.750 Crores, the capital cost of environment protect measures was Rs.628.75 lakhs and annual cost recurring towards environment protection measures was Rs.247.63 Lakhs. Since the present proposal is for expansion of the existing EC for extension of its validity period with same mine capacity with no change in mining process/ technology and so no additional project investment, the CER may not be applicable as per para (IX) of Office Memorandum. F.No. 22-65/2017IA.III dated 1st May 2018.*

However, it may be appreciated that before coming into force of said notification dated 19.06.2018, we have already done some major activities towards infrastructure creation for drinking water, sanitation, health, education and skill development. The head wise details of expenditure audited by our statutory auditor are attached as Annexure-4. Some photographs of the said activities are attached as Annexure-5. An undertaking to continue our drive towards CER is attached as Annexure-6.

iii. An undertaking to comply with all decision /order of Hon’ble Supreme Court in the matter “Common Cause Vs Union of India in compliance to the Ministry OM F.No.3-50/2017-IA.III(Pt.) dated 30th May, 2018.

PP submitted that *“Our undertaking to comply with all decision / order of Hon’ble Supreme Court in the matter “Common Cause Vs Union of India in compliance to the Ministry OM. F.No. 350/2017-IA.III(Pt) dated 30th May,2018 is attached as Annexure-7”.*

vi) Decision of Hon’ble Supreme Court to allow mining operation.

PP submitted that *“The Hon’ble Supreme Court vide its order dated 15.01.2020 in IA No.186810 of 2019 in W.P. (c) No. 114 of 2014 has allowed resumption of mining operations by SMPL subject to payment of the dues as assessed by CEC in its report dated 08.05.2019 and filing*

of an undertaking to comply with all the rules, regulations and other mandatory provisions for carrying out mining operations. Copy of the said Order is attached as Annexure – 8.”

On 28.01.2020, SMPL has deposited the payment of the dues as assessed by CEC in its report dated 08.05.2019 and given the requisite undertaking to the State Government. Copy of the letter along with payment details is attached as Annexure – 9.

Based on the approval of the Government, the Dy. Director of Mines, Joda Mining Circle vide letter No.280/Mines dated 31.01.2020, has allowed SMPL to resume mining operations in respect of Thakurani Iron Ore mine-Block B over 947.046 Ha. Copy of the letter is attached as Annexure – 10. Accordingly, SMPL has resumed its mining operations with intimation to the statutory and regulatory bodies in compliance to the provisions of MCDR 2017 and MMR 1961. Copy of the letter is attached as Annexure – 11.

v) Decision of Hon’ble Supreme Court on the issue ownership, as required from PP in the ministry letter dt. 15.01.2015

PP submitted that “The allegations related to owner related issues under violation of Rule 37 of MCR 1960 as brought about by CEC and Shah Commission were examined by a judicial committee of

Justice G.S. Singhvi and Justice A.R Dave, (retd. Judges of the Hon’ble Supreme Court) and submitted to the Hon’ble court on 26.10.2019. The report has completely exonerated SMPL from such allegations and found them devoid of merits. This report was favorably considered by the Hon’ble Supreme court and an order dated has been passed mandating the State of Odisha to take necessary action. The report of the judicial committee is attached as Annexure – 12 and the order of the Hon’ble Supreme court is attached as Annexure – 13.

vi) Status on compliance of NEERI recommendation

PP submitted that “A detailed point wise reply with regards to the NEERI recommendation is attached herewith as Annexure 14. In addition to the same, the PP would like to highlight the following: The project proponent has well complied the suggested ore transportation mode (SOTM), as it has installed 3000TPH closed belt conveyor system of length 1.8km for dispatch of iron ore from mine having the discharge end only at distance of 1.5km from Deojhar and PJPD railway sidings. A map showing ML boundary, pipe conveyor and Railway sidings as Annexure-14A. The mine roads are well maintained with fixed water pipeline for water

sprinkling besides mobile water tankers. It has well earmarked parking zone for parking of trucks. It has vehicle cleaning facility within the lease hold area. The mine has large capacity HEMMs matching with height and width of benches to have less machine population, more safety and to be fuel efficient. Some photographs are attached is attached as Annexure-15. The mine has established four ambient air quality monitoring stations and one of which online monitoring station. A separate environmental management cell with suitable qualified personnel has been step up under the control a Senior Executive who is reporting directly to the Head of Organization, organization chart is attached as Annexure-16.

6. During the EAC meeting the project proponent has made detailed presentation, *inter alia*, including Salient features; Status of Mining lease; Status of statutory approvals; Environmental Policy of company; environmental sensitivity present within 15 Km radius; leases in vicinity of the mine; list of 41 Mining leases falling in the 10 Km radius of the project; payment of compensation of Rs. 933.60 Crs vide transaction dated 28th January, 2020 in pursuant to the orders of Hon'ble SC dated 15th January, 2020; the environmental scenario in respect of AAQ, SWQ, GWQ, NQ based on the monitoring during December 2019 to February, 2020; reply to ADS made by the PP; etc.

7. Further, during the meeting PP informed the Committee that after grant of EC in 2008 the production was increased upto 7 MTPA. PP also informed that there was no violation, but it was not known to him that how excess production was considered in shah commission report & CEC Report. PP also informed that demand raised was also challenged and finally agreed to pay penalty in pursuant to Hon'ble Supreme Court Order dated 15.01.2020. PP also submitted that they have paid the penalty as per direction dated 15.01.2020 of Hon'ble Supreme Court.

8. Based on the reply to ADS submitted by the PP, legal opinion circulated by the Ministry, presentation by the PP and consultant before the committee, the committee made following observations: -

- i. As regards ADS queries, the committee reviewed the information and also, submissions made during presentation from technical angle.
 - a. The committee observed that the information sought by the committee was "*Certified past production details as per Annexure III of the Agenda, from DMG- Orissa*". The information submitted by the PP is duly filled Annexure III with data of the annual returns submitted by the PP to DGM and obtained through RTI Act in lieu of the Certificate from the DGM.

- b. The Committee also observed that Ministry has provided the Hon'ble Supreme Court Order dated 15.01.2020 wherein it has mentioned that *"M/s SMPL during the period 2001-02 to 2010-11 has produced 135, 34,703 tonnes of excess quantity/illegal production of iron ore in violation of the Environment Clearance granted by MoEF&CC."*
- c. Keeping the several complaints that have received to the committee and to check the veracity of the complaints, the committee asked to know the status of plantation carried in the project in the earlier EC. It was informed that 3,57,000 plants were planted in 50 Ha. The committee analysed the reported figure and observed that 7140 plants per hectare is reported. The committee felt that it is exorbitant figure and plantation of 7140 (with 85% survival as reported by PP 6069) is not practically possible on the field. Therefore, the committee is of the view that the compliance level that is reported by the PP and actual on the ground may have variation and needs filed verification by the competent authority.
- d. The committee is of the opinion that the CSR is undertaken under the Companies Act and CER is for the environmental measures in the surrounding area. The procedure followed by the committee in other projects which are appraised recently also do prescribed the CER and the PP is in agreement. However, in the instant case the PP did not agree for the CER and claimed that this can be imposed as the OM dated 1st May 2018 cannot be imposed on retrospective cases. The committee is of the opinion is that the instant proposal is expansion with prospective effect as the PP did not ground the expansion project earlier for other reasons.
- e. The committee would like to know the impact on the receptors including the sensitive receptors like schools, hospitals and other ecological important places due to the operation of the instant proposal of expansion, in the changed scenario of the different mines/projects/activities that may have closed / started operation / like to start operations, through the impact prediction modelling, to evaluate the worst case scenario and mitigation plans. However, the Project Proponent has informed that such study is not supposed to ask but they are ready to provide for the academic purpose. The committee, during the appraisal of proposals for reiterating the earlier recommendation cases recently also sought the similar study and the project proponent has provided the same to prove that even in the delayed timeline of the implementation of the project the predicted incremental GLC values taking into the consideration of the different mines/projects/activities that may have closed / started operation / like to start operations. The project proponent has

informed that several mines in the Odisha was closed due non-payment of fines under the orders of common cause vs UoI and only 40% of the mines were in operation. However, the scenario of the mines specific to the study area of the project based on the ground verification is not able to provide to the committee.

- ii. *PP during the meeting submitted that S.O. 804(E) dated 14.03.2017 is not applicable to their case as already an action has been initiated in pursuant to Ministry's O.M dated 12.12.2012 and 27.06.2013 including initiating the action under Section 19 of EPA, 1986. PP is of the view that as the action has already been taken on them as per above mentioned O.M.s, therefore S.O. 804(E) dated 14.03.2017 is not applicable in their case. PP also submitted that it is a settled principal of law that any violation can only be acted upon under existing laws only once. It is basic and fundamental principles of law that no one can be penalized for same violation more than once. Further, the notification was expired as the time period for applying under the same is six months for the date of issuance of the notification which was further extended by one month i.e. up to 13.04.2018.*

The Committee is of the view that Ministry has issued S.O.804 (E) dated 14.03.2017 and the notification is very clear about violation and some of the relevant para are as follows:

Para 12(2) In case the projects or activities requiring prior environmental clearance under Environment Impact Assessment Notification, 2006 from the concerned Regulatory Authority are brought for environmental clearance after starting the construction work, or have undertaken expansion, modernization, and change in product- mix without prior environmental clearance, these projects shall be treated as cases of violations.

Note: In the instant case although PP has obtained EC for higher capacity but the same was not operationalize due to want of forest clearance and expired on 31.03.2014.

Para 13 (3) "In cases of violation, action will be taken against the project proponent by the respective State or State Pollution Control Board under the provisions of section 19 of the Environment (Protection) Act, 1986 and further, no consent to operate or occupancy certificate will be issued till the project is granted the environmental clearance".

Para 13 (4) The cases of violation will be appraised by respective sector Expert Appraisal Committees constituted under subsection (3) of Section 3 of the Environment (Protection) Act, 1986 with a view to assess that the project has been constructed at a site which under prevailing laws is permissible and expansion has been done which can be run sustainably under compliance of environmental norms with adequate environmental safeguards; and in case, where the finding of

the Expert Appraisal Committee is negative, closure of the project will be recommended along with other actions under the law.

Para 13 (5) In case, where the findings of the Expert Appraisal Committee on point at sub-para (4) above are affirmative, the projects under this category will be prescribed the appropriate Terms of Reference for undertaking Environment Impact Assessment and preparation of Environment Management Plan. Further, the Expert Appraisal Committee will prescribe a specific Terms of Reference for the project on assessment of ecological damage, remediation plan and natural and community resource augmentation plan and it shall be prepared as an independent chapter in the environment impact assessment report by the accredited consultants. The collection and analysis of data for assessment of ecological damage, preparation of remediation plan and natural and community resource augmentation plan shall be done by an environmental laboratory duly notified under Environment (Protection) Act, 1986, or a environmental laboratory accredited by National Accreditation Board for Testing and Calibration Laboratories, or a laboratory of a Council of Scientific and Industrial Research institution working in the field of environment.

Para 13 (6) The Expert Appraisal Committee shall stipulate the implementation of Environmental Management Plan, comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefit derived due to violation as a condition of environmental clearance.

Para 14 “The projects or activities which are in violation as on date of this notification only will be eligible to apply for environmental clearance under this notification and the project proponents can apply for environmental clearance under this notification only within six months from the date of this notification” and

The Committee is of the view that the Hon’ble Supreme Court in its Order dated 15.01.2020 inter-alia mentioned that “M/s SMPL during the period 2001-02 to 2010-11 has produced 135, 34,703 tonnes of excess quantity/illegal production of iron ore in violation of the Environment Clearance granted by MoEF&CC. It appears from the order dated 15.01.2020 that even Hon’ble Supreme Court considered that the EC dated 29.10.2008 was not operational EC and also lost its validity on 31.03.2014. Further, period of violation is before 14.03.2017 and therefore, it attract the provision of S.O. 804(E) dated 14.03.2017. As per procedure laid down in S.O. 804(E) dated 14.03.2017, in addition to action under section 19 of EPA, 1986 there is a provision of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefit derived due to violation.

- iii. The Committee also observed that letter dated 15.01.2015 of the Ministry is subject to obtaining permission from the Hon'ble Supreme Court, but before this permission become operational the Ministry has issued S.O. 804(E) dated 14.03.2017 and PP was required to apply under the same. PP neither applied under this notification nor sought any clarification from Ministry regarding applicability of S.O. 804(E) dated 14.03.2017 in the instant case.
- iv. With respect to submission of PP, that *"It is basic and fundamental principles of law that no one can be penalized for same violation more than once. Further, the notification was expired as the time period for applying under the same is six months for the date of issuance of the notification which was further extended by one month i.e. up to 13.04.2018."* The Committee is of the following view that:
- the Committee observed that w.r.t violation (during the year 2001-02, 2002-03, 2003-04, 2005-06 and 2007-08) a show cause notice was issued to PP on 23.01.2014 with a copy to State Government. The State Government vide its letter No. Env-I-37/2012(pt) 5061 dated 12.03.2014 informed that a Criminal Case has been filed before the court of J.M.F.C Barbil vide case No. 2(c) CC No 24/2012 for excess production during 2001-02 & 2003-04. But has observed from the Hon'ble Supreme Court Order dated 15.01.2020 that even after 2003-04 there was excess production till 2010-11 and no action was taken for this under section 19 of EPA, 1986.
 - PP did not submit any court order to proof that penalty has been imposed in pursuant to action taken under section 15/19 of EPA, 1986 even for the violation during 2001-02 & 2003-04.
 - There is no ambiguity in the notification S.O. 804(E) as there is no mention in the notification that if any credible action has taken under the O.M. dated 12.12.2012 & 27.06.2013 is completed then there is no requirement of taking EC as per S.O. 804(E) dated 14.03.2017. Rather in the preamble of the notification it has mentioned that Hon'ble NGT has quashed the above mentioned O.M.s. In addition to this O.M.s dated 12.12.2012 & 27.06.2013 cannot prevails over notification which was issued under EPA, 1986.
 - Further, the Hon'ble Supreme Court has permitted the PP to operate the mines subject to submission of inter-alia *"...(ii) In addition, SMPL shall file an undertaking to comply with all the rules, regulations and other mandatory provisions for carrying out mining operations."* The Committee is of the view that obtaining EC is one the valid mandatory provisions for carrying out mining operations. In the instant case, as there is a violation prior to 14.03.2017 the PP was required to obtain EC as per provision of

S.O. 804(E) dated 14.03.2017 and without obtaining EC as per this notification PP cannot operate the mines.

- Whether PP can mine based on letter dated 15.01.2015 basis of Ministry's letter dated 15.01.2015. The Committee is of the view that when this clarification was issued it appears that it was understanding of the Ministry that EC granted under EIA 1994 is not restricted to 5 years only. But the deliberation on validity of EC granted under EIA 1994 was made by Hon'ble Supreme Court in W.P. 114 of 2014 in the matter of vs UoI (Judgment dated 2.08.2017) and in SLP(C) 32138 of 2015 in the matter of The Goa Foundation vs M/S Sesa Sterlite Ltd. And Ors (judgment dated 7.02.2018) wherein the Hon'ble SC considered that the EC granted under EIA 1994 is only valid for 5 years. Due this reason Ministry also issued notification S.O. 1530(E) dated 6.04.2018. The Committee is of the view that in aforementioned court cases the provision of S.O. 804(E) dated 14.03.2017 was not struck down or stayed by the Hon'ble Supreme Court. The Committee is of the view that it is a violation case and PP is required to obtain EC as per provision of S.O. 804(E) dated 14.03.2017 before continuing mining. In the instant case PP obtained the EC for higher capacity but the same was not operationalized due to want of forest clearance and expired on 31.03.2014. It is clear from the Hon'ble Supreme Court order that even after grant of last EC on 29.10.2008, PP has carried out mining in *excess quantity/illegal production of iron ore in violation of the Environment Clearance granted by MoEF&CC*. Therefore, it attracts provision of S.O. 804(E) dated 14.03.2017 and PP was required to apply under this notification. However, the Ministry may approach the Ld. ASG to Government of India who has represented MoEF&CC in the court case W.P. 114 of 2014 in the matter of Common Cause vs Union of India, if required.

v. The legal opinion obtained by ministry states that EC of 2004 is still valid and the expansion proposal can be considered accordingly. It also opines that the EC of 2008 cease to exist as only one EC (of 2004) can be in operation. In the event the EC of 2004 is valid and the case is to be considered as expansion, then consequentially, the procedure as stipulated in 2006 notification including scoping, public hearing, etc needs to be followed. The committee noted that the EC of 2004 was issued under 1994 notification, as per decision of Hon'ble SC, the validity of EC issued under 1994 notification is only 5 years. And therefore, there is need for clarity on the validity of EC for the project in the present scenario where PP has commenced mining operations at 4 MTPD capacity as per orders of Hon'ble SC.

8. Based on the discussion held, documents submitted by PP and the Ministry, the Committee is of the view that it's a violation case and this Committee is not empowered to appraise the violation proposals. The

Committee is of the view that as Hon'ble Supreme Court agreed for resuming mining operation subject to compliance of all mandatory requirements and as the proposal was already in consideration before S.O.804 (E) dated 14.03.2017, the Ministry may provide an opportunity to PP by considering the case by violation Committee as a lateral entry case. Being a violation proposal and as the validity of EC dated 29.10.2008 has already expired on 31.03.2014 this proposal of amendment in EC does not stands. **Therefore, the committee recommended for transfer the proposal to violation sector as a lateral entry for appraisal as a violation project.**

2.14 Proposal under the provision of Notification dated 06.04.2018 of Kaoni Gypsum Mining Project [ML No 01/02; 250.53 Ha] of M/s FCI Aravali Gypsum & Minerals India Ltd. Located in village Kanoni, Tehsil & District Bikaner, Rajasthan. for Gypsum Production of 50000 TPA & O.B. Handling 136191 m3- EC Regarding. [File No. J-11015/2/2019-IA-II(M); Proposal No. IA/RJ/MIN/86968/2018]; Consultant: Mantec Consultants Pvt. Ltd]

1. The proposal of M/s FCI Aravali Gypsum 86 Minerals India Ltd. is for Production of 50000 TPA Gypsum & O.B. Handling 136191 m3 from Kaoni Gypsum Mining Project [ML No 01/02; 250.53 Ha] Located in village Kanoni, Tehsil & District Bikaner, Rajasthan. The Project Proponent submitted that mining lease area falls under Survey of India Topo-Sheet No. 44 H/4 and between Latitude: N 28°09'14.11" to N 28°10' 9.76" N85 Longitude: E 73°04' 58.85" to E 73°06' 44.83".

2. The project proponent did not connect due to technical problem. Subsequently, the project proponent has requested through e-mail dated 1st June, 2020 to consider the project in the next meeting. Therefore the proposal is **deferred**.

2.15 Limestone mine with a production capacity of 3.3 MTPA (RoM) by M/s UltraTech Limited located at Moharai, Dagla, Asarlai, Tunkara, NimberaKhurd in Tahsil Jaitram and village Maishia in Tehasil Raipur, District Pali, Rajasthan – Amendment in Environmental Clearance for utilization of waste in construction of Integrated Cement Plant. [IA/RJ/MIN/150934/2020; J-11015/281/2011-IA-II(M)]

1. The proposal of M/s UltraTech Cement Ltd is for amendment in Environmental Clearance granted vide letter no J-11015/281/2011-IA.II (M) dated 2nd January, 2014 for Limestone Mine (ML Area 689.76 ha, ML No. 29/99) with Production Capacity of 3.3 Million TPA (ROM) located at Villages- Moharai, Dagla, Asarlai, Tunkara, NimberaKhurd in Tehsil- Jaitaran and Village - Meshia in Tehsil- Raipur, District - Pali (Rajasthan). Subsequent amendment was granted vide letter dated 24th February, 2016 w.r.t. reduction in ML area from 755.10 ha to 689.76 ha, Para 4 line 13 i.e. end of life of mine & waste generated. The ML area falls between Latitude: 26° 10' 18" to 26° 14' 44" N & Longitude: 74° 03' 52" to 74° 06' 41" E and is covered

by the Survey of India Topo sheet No. 45J/4. The Project is located 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 has submitted that Letter of Intent for ML area of 755.10 ha out of which 345.30 ha area is waste land, 59.77 ha is grazing land, 50 ha is agricultural land and 300.03 ha is un-irrigated land was issued in favor of M/s UltraTech Cement Ltd. vide letter no P-16/3/Mines/Group-2/2000 dated 27.07.2012. Accordingly, The Modified Mining Plan along with Progressive Mine Closure Plan was approved by IBM vide letter no 584(4)(3)(1257)/2012-RCOM-AJM dated 19.03.2013. Revised Letter of Intent for ML area of 689.76 ha, excluding Grazing Land has been granted by Govt. of Rajasthan vide letter no. P-16/ (3) Mine / Group2 / 2000 dated 21.04.2014 out of which 343.029 ha is waste land, 50.0 ha is agricultural land and 296.731 ha is un-irrigated land. The Modified Mining Plan has been approved by IBM vide letter no. 584(4) (3) (1461) /20124-RCOM / AJMER / 6175 dated 22.09.2014. Accordingly, EC was revised with ML area- 689.76 ha vide letter dated 24.02.2016. Thereafter, mining lease deed was granted in favor of M/s UTCL and Mining Lease deed was executed for 50 years on 17.03.2015. Approval if Review of Mining Plan along-with Progressive Mine Closure Plan has been approved by IBM vide letter no. 584(4) (3) (1804) /2019-RCOM-AJM dated 03.12.2019.

4. PP has submitted that the environmental clearance was initially granted to M/s UltraTech Cement Ltd by MOEF&CC for Limestone Mine (ML Area 689.76 ha, ML No. 29/99) with Production Capacity of 3.3 Million TPA (ROM) located at Villages- Moharai, Dagla, Asarlai, Tunkara, NimberaKhurd in Tehsil- Jaitaran and Village - Meshia in Tehsil- Raipur, District - Pali (Rajasthan) vide letter no J-11015/281/2011-IA.II (M) dated 2nd January, 2014. Subsequent amendment was granted vide letter dated 24th February, 2016 w.r.t. reduction in ML area from 755.10 ha to 689.76 ha and Para 4 line 13 i.e. end of life of mine & waste generated.

PP has further submitted that Consent to Establish has been obtained for production capacity 3.3 Million TPA (ML Area 689.76 ha, ML No. 29/99) vide letter no. F (Mines)/ Pali (Jaitaran) /79(1)/2015-2016/2722-2726 dated 06.10.2015. After that, Consent to Operate under Air and Water Act, was obtained for production capacity of 3.3 Million TPA (ML Area 689.76 ha, ML No. 29/99) vide letter no. F (Mines) / Pali (Jaitaran) /85(1)/2016- 2017/8702-8706 dated 06.12.2016 which is valid upto 30.11.2021.

5. M/s. UTCL had submitted the application for amendment in EC Letter for utilization of waste in construction of Integrated Cement Plant on MoEF&CC web portal on 31.05.2018. The proposal was earlier considered in EAC meeting held during 21-22 June, 2018 wherein the Committee asked the PP to modify the mining plan and take permission from State Government for utilization of waste. In compliance of the suggestion of EAC the PP vide letter

dated 12.04.2019 submitted the Letter No. Khaa/Sojat/STP/M. L/29/99/441 dated 28.12.2018 issued by mining officer wherein State Government agreed for utilization of waste, subject to inclusion of the same in the EC letter. PP also submitted the approval letter no 564(4)(3) (1751)/2018-Khakhani-ajm dated 23.08.2018 for modification in the mining plan. The proposal was considered in EAC meeting held during 29-30 May 2019 wherein the Committee deferred the proposal as PP did not submit the copy of modified mining plan. The Committee also suggested that Ministry may take comments of Policy Division. PP submitted information on 7.10.2019 and the matter was examined in the Ministry and it observed that for utilization of waste/OB Ministry has already issued O.M. No. No. Z-11013/49/2018-IA. II (M) dated 18.06.2018 as per which there is a requirement of EC for handling waste/OB and accordingly the proposal was placed in EAC meeting held during 27-28 November, 2019.

6. Based on the discussion held and document submitted the Committee observed that the modified mining plan is for the period 2018-19 & 2019-20 wherein under reclamation PP has proposed for the utilization of waste for plant construction. Further the quantity of waste generation in the plan period is mentioned as 408670 m³ and till the end of life is mentioned as 30.5 Million m³ but the PP has proposed to use 720000 m³ of waste for the construction purpose. This shows that waste utilization is extended beyond the modified mining plan period (2018-20). The Committee observed that amendment sought in the application w.r.t to waste quantity at the end of life is not matching with the mining plan and thus of the view that PP **should apply a fresh with correct information as per approved mining plan and details of change in waste quantity, management, waste utilization, land use and total excavation as compared to previous EC.** The Committee therefore returned the proposal in present form.

7. The PP now applied vide proposal NoIA/RJ/MIN/150934/2020 wherein the details of the change in configuration before and after the amendment is mentioned for mining machinery only. The PP again sought for the amendment for amendments in EC for utilization of waste. The Committee observed that PP only provided the comparison of mining lease area, production capacity, mining technology, water requirement, and waste generation in comparison with previous EC where there is no change. The only change proposed by PP is in waste utilization which was previously completed backfilling and now only 0.72 million m³ will be utilized for the construction of the proposed Integrated Cement Plant and remaining will be backfilled. The Committee feels that there may be other changes in land use also and asked the PP provide the details of the same if any. The vide its letter dated 1.06.2020 submitted the details and Committee observed that there are other changes viz. total waste generation, reserves, land use and total excavation (3.54 MTPA to 46.7 MTPA).

8. The Committee is of the view although there are other as per mining plan but the same is yet to be implemented. The present proposal is only for utilization of part of the waste material 0.72 million m³ [1st year 0.202 million

m3, 2nd year 0.344 million m3, and 3rd year 0.174 million m3] for the construction of cement plant. This waste material in-spite of going for dumping or backfilling will be utilized and PP has also obtained permission from State Government and included in the mining plan. The Committee therefore **recommended** the proposal for amendment in EC for utilization of 0.72 million m3 [1st year 0.202 million m3, 2nd year 0.344 million m3, and 3rd year 0.174 million m3] as a one-time permission keeping the total excavation of 3.54 MTPA (3.3 MTPA Limestone, O.B 0.19 MTPA & Mineral Reject 0.05 MTPA) in pursuant to earlier EC. But Committee also observed that there are changes which is not provided by the PP in the present application and for which PP need to apply afresh within one month. The Ministry may also take a view whether increase in total excavation will require fresh EC or not. The Committee also observed that it was very specifically mentioned in the last minutes of the meeting for the requirement of amendment but the same was not mentioned in the presentation and neither the consultant nor the PP informed the Committee about the same. Only after asking the information the same was provided. The Committee is of the view that Consultant should ensure in future that all the relevant information and critical issues related to project shall be brought into the notice of EAC for the appraisal and drawing the appropriate mitigation measures, failing which the Ministry may take appropriate action deemed fit. The Committee prescribed the following protective measure as specific conditions:

- 1) No public road will be used for transportation of waste.
- 2) The PP shall take appropriate mitigation measures during excavation and transportation of envisaged waste utilization, inter-alia, i) Compaction of Road; Avenue Plantation along the both side of the transportation road; Regular water spraying to suppress the fugitive dust emissions; avoid over loading of tipper/dumper and spillage of material; covering of tippers with tarpaulin; regular maintenance of transportation vehicles having confirming to PUC; record of dispatch of waste material and transit slips; regular monitoring of the fugitive emissions; Personal Protective Equipment to all the workers; establishment of Driving Management Center for training to all drivers about safe and environment friendly driving.

2.16 Serangdag Bauxite Mine Block-1 (with production capacity of 1.2 MTPA and ML area 257.923ha) by M/s Mineral Exploration Corporation Limited located at village Serangdag, TehasilSamari, District Surgaja, Chattisgarh – Amendment in Environmental Clearance regarding condition in respect of NBWL. [IA/CG/MIN/142364/2020; J-11015/198/2014-IA.II(M)]

1. The proposal of M/s Mineral Exploration Corporation Ltd. is for Amendment in Environmental Clearance granted vide letter no. J-11015/198/2014-IA.II (M) dated 05.11.2017 in respect of (i) Condition of NBWL Clearance in EC at Para 8 A; (ii) ML boundary Coordinates in EC to be replaced with DGPS ML boundary corner 25 Nos. coordinates; and (iii)

Production Capacity of 1.2 MTPA in EC at Subject Line of EC and para 1, 2 & 8 to be replaced with “Total Rock Excavation 1.2 MTPA”. Serangdag Bauxite Mine Block - 1 with production capacity of 1.2 Million TPA of M/s Mineral Exploration Corporation Ltd., is located at Serangdag village, Samari Tehsil, Balrampur District, Chhattisgarh. The mine lease area is 257.923 ha and the latitudes and longitudes of the site are from 23°20’07.99”N to 23°21’50.61”N and longitudes from 83°54’37.85”E to 83°54’40.12” E. The site is located on Survey of India Toposheet No. F44F15 F44F16 F45A3.

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 had earlier reported during grant of EC that the total Mining Lease area of 257.923 ha. Out of which 255.015 ha is Agriculture land, 0.631 ha is surface water body and 2.277 ha is Kuccha road. Project Proponent reported that there is no forest land involved in the mine lease area. Out of total MLA 94ha area shall be required for mining activity. The Mineral Resource Department, State Govt. of Chhattisgarh, vide letter dated 26.09.2005 has issued Letter of Intent for Mining of Bauxite ore in favour of M/s MECL for an area of 257.923 ha.

4. PP had earlier reported during grant of EC that the Mining Plan along with Progressive Mine Closure Plan has been approved by IBM, Nagpur vide letter dated 11.08.2006. The approximate total Mineable reserve is 19,87,680 tonnes. The method of mining is opencast semi-mechanised. Conventional shovel dumper combination of opencast mine will be deployed. The wastes generated in the form overburden, sizing and sorting of ore will be disposed of within mined out pit area. Manual sorting, sizing and blending of ROM Bauxite will be done to obtain saleable grade of Bauxite at the pit head. The potable water requirement at Mine site is 47.5 KLD. The source of water will be existing bore wells in the nearby village initially. The Project Proponent indicated that they would make their own bore wells in the MLA after commencing mining activities.

5. The environmental clearance was initially granted to M/s. MECL by MOEF&CC for Serangdag Bauxite Mine Block-1 with production capacity of 1.2 Million TPA of bauxite vide letter no. J- 11015/198/2014-IA.II (M) dated 05.11.2017. Environmental Clearance was granted with a specified condition No. A. (2)

“The Mahuadanr Wildlife Sanctuary is located at 8.3 Km from mine lease area. This Environmental Clearance is subject to obtaining requisite NBWL Clearance from the Standing Committee of National Board for Wildlife as applicable for this Mining project.”

6. PP reported that EC amendment was sought earlier vide their letter No. MECL/SMP/EC-Mod/2019/54 dated 09.01.2019 and Proposal No. IA/MIN/CG/23667/2014 on PARIVESH portal. The PP requested the following amendment in EC: -

- i. Condition of NBWL Clearance in EC at Para 8 A. The Mahuadanr Wildlife Sanctuary is located at 8.3 km from mine lease area. This Environmental Clearance is subject to obtaining requisite NBWL Clearance from the Standing Committee of National Board for Wildlife as applicable for this Mining Project
- ii. ML boundary Coordinates in EC to be replaced with DGPS ML boundary corner 25 Nos. coordinates; and

7. The proposal was discussed in EAC meeting held during 20-21 February, 2019. After deliberations, the Committee suggested that this is premature proposal for consideration of the amendment in this specific condition and returned the proposal in present form. Therefore, the Committee is of the view that as per the EC dated 05.01.2017, the PP needs to take NBWL clearance before mining activities, However, the PP has not still obtained the NBWL clearance. The Committee noted that the submission/reports submitted by PP/Consultant are not in proper order and not legible, even the photocopy of the pages is not made adequately. The Committee observed that uploading of Minutes for 2nd EAC Meeting held during February 20-21, 2019 Page 51 of 85 incomplete in-adequate information, not submitting the required documents, submitting the misleading facts during the appraisal of the proposal is an unprofessional behavior of the consultant. The NABET Accredited Consultant are entrusted to assist the Committee in taking a decision on the various environmental issues associated with the proposal. Thus, Committee is of the view that Consultant [M/s Ramky Enviro Services Private Ltd.] should be warned for the same.”

8. PP has now made a fresh application vide Proposal No. IA/CG/MIN/142364/2020 on 12.02.2020 for seeking amendment in the said Environmental Clearance as follows:

- i. Condition of NBWL Clearance in EC at Para 8 A.–Special Conditions Sl. No. 2, to be omitted (As per MoEFCC-Wildlife Div. letter No.F.No.6-62/2018 WL dt. 07/02/2020, NBWL Clearance not required)
- ii. ML boundary Coordinates in EC to be replaced with DGPS ML boundary corner 25 Nos. coordinates (As per Chhattisgarh State Govt. letter No. F 3-19/2002/12 dated 06/01/2020)
- iii. Production Capacity of 1.2 MTPA in EC at Subject Line of EC and para 1, 2 & 8 to be replaced with “Total Rock Excavation 1.2 MTPA” (As per initial application for TOR).

9. PP submitted the following letters/ documents in respect of amendment in condition regarding NBWL:

- i. A letter No 1099 dated 29.06.2017 issued by PCCF (Wildlife), Jharkhand, wherein it was mentioned that Field Director, Tiger Project Palamu has reported that the proposed mining area which fall in Chattisgarh State is at distance of 9.64 Km from nearest point of

Mahuandr santury and the mining site is not part of proposed ESZ of Mahauadar Wilflife Sanctuary.

- ii. A letter No. 2186 dated 28.03.2018 issued by PCCF (Wildlife), Chhattisgarh wherein it has mentioned that the ML does not come under proposed corridor and within 10 KM of the mining lease there is no movement of elephant. The ML is at a distance of 9.64 KM from the Mahuadanr Wildlife Sanctuary which is located in Jharkhand State and it is appropriate that action on wildlife clearance may be taken by PCCF(Wildlife), Jharkhand.
 - iii. Wildlife Division, MoEF&CC vide its letter no. 6-62/2018 WL, dated 7.02.2020 clarified that there is no requirement of NBWL Clearance for the project.
10. The Committee deliberated on each of the amendment sought by PP and its observation are as follows:

a) Condition of NBWL Clearance in EC at Para 8 A.–Special Conditions Sl. No. 2, to be omitted:

The Committee observed that based on the information submitted by the PP, the competent authorities have informed that the proposed mining lease falling outside the ESZ area of the Mahuadanr Wildlife Sanctuary. In order to confirm that the no mining has been carried as on date, the PP also agreed to submit the letter from the Department of Mining and Geology. The committee recommended based on the submissions of the PP.

b) ML boundary Coordinates in EC to be replaced with DGPS ML boundary corner 25 Nos. coordinates

PP submitted the letter dated 6.01.2020 wherein the DGPS coordinate of the lease boundary is provided which falls between latitudes 23°20'07.93" N to 23°21'50.61" N and longitudes from 83°54'22.96" E to 83°55'27.77" E. The committee observed that the displacement in the area due to DGPS coordinates is not significant from the environmental perspective. Therefore, the committee recommended for the amendment.

c) Production Capacity of 1.2 MTPA in EC at Subject Line of EC and para 1, 2 & 8 to be replaced with "Total Rock Excavation 1.2 MTPA".

The Committee observed that the Total Rock Excavation 1.2 MTPA is recommended.

2.17 Expansion of Rampara-Kukras,-BhetaliandAnandpara Limestone mining project of M/s Ambuja Cements Limited Located in Villages Rampara, Kukras,BhetaliandAnandpara, Tehsil: Veraval and Sutrapada, District: GirSomnath, Gujrat –Amendment in Environmental Clearance for Reserve enhancement due to subsequent exploration has increased

the life of mine to further 15 yrs @ 2 million TPA of limestone.
[IA/GJ/MIN/147006/2020; J-11015/221/2008-IA II(M)]

1. The proposal of M/s. Ambuja Cements Limited is for Amendment in mine life without changing in mining capacity and methodology in the Environmental Clearance granted vide letter no. J-11015/221/2008-IA.II(M) dated 04.03.2011 for Rampara-Kukras-Bhetali and Anandpara (RKBA) Limestone Mining Project located in village (s) Ramapara, Kukra, Bhetali and Anandpara, Tehsil(s) Veraval and Sutrapada, District Junagrah, Gujarat. The mine lease area is 310.329 ha and the latitudes and longitudes of the site are from 20°57'50.66" N to 20°56'46.32" N and longitudes from 70°31'17.18" E to 70°33'10.73" E. The lease area falls within the Geological Survey of India toposheet no. 41 L/9.

2. The PP submitted that Environment Clearance was first granted by Ministry vide letter no. J-11015/10/2004/IA.II(M) dated 25th April 2005 for 1.0 MTPA Limestone and mining operation commenced from 05/10/2005. Subsequently, due to additional requirements of production of Limestone from the mines the capacity was enhanced from 1 MTPA to 2 MTPA and EC was granted on 04th March 2011.

3. The PP submitted that the additional exploration, use of latest quality blending software & latest usage of low ash fuel in the cement plant has jointly contributed to increase the mineable reserve of 12.91 Million Tonne from this mine. With the present rate of production it has increased the life of the mine from existing 09 years to further 15 years @ existing 2 Million TPA of limestone production vide total production ROM is 2.45 Million TPA. The inter burden quantity of 0.45 Million TPA will be used for existing pit back filling and no waste dump will be created. The present Geological reserves of the mines is 29.35 Million Tonnes, so the anticipated mine life has increased to further 15 years w.e.f. 1/04/2020. This has been incorporated in new mine plan for the year 2020-25 and approved by IBM, Gandhinagar vide letter no 684(4)(1)/MP-251/2019-20-GNR dated 21/11/2019.

4. Mining lease validity is extended upto 04th September 2055 by Government of Gujarat, Industries & Mines Department vide letter no. MCR/1599/1619/CHH1 on dated 02/01/2020.

5. After detailed deliberations, the committee observed that though the mine was operating since 2005, the plantation along the mine boundary was not satisfactory. The committee is of the view that the performance of the PP in implementation of the environmental safeguards is poor. Further, the committee noted that there is no revised EMP has been made for the extended life of the project in light of the additional reserves. Permission from CGWA is also not available. Therefore, the committee **deferred** the proposal and desired to submit the following for further consideration of the proposal: -

- (i) Certified Compliance Report from Regional office of MoEF &CC.
- (ii) Permission from the CGWA.

- (iii) Copy of approved mining plan/scheme.
- (iv) Revised EMP, *inter alia*, including the action plan for mitigation measures for the extended life of the project, budgetary provision, action plan for green belt development, protection in respect of working near habitation, etc.

2.18 Proposal of M/s Shri Narendra Agarwal of mining project of Sambhariya Limestone (MLA – 103.0 Ha & ML No. 65/1994), Production- 6, 48,880 TPA(RoM), Near Village – Sambhariya, Tehsil – Bilara & District – Jodhpur, (Rajasthan) located near village- Sambhariya, Tehsil- Bilara, District- Jodhpur, Rajasthan. - Terms of Reference. [IA/RJ/MIN/140219/2020; J-11015/58/2016-IA.II (M)]

1. The Proposal of M/s Shri Narendra Agarwal is for Lime stone mining with production 6, 48,880 TPA of RoM in the area of 103.0 ha. The mine lease is located at near Village Sambhariya, Tehsil - Bilara, District - Jodhpur, Rajasthan. The Latitude and longitude of the mine lease area lie between 26° 19' 53.29" to 26° 19' 05.61" N and 73° 45' 26.08" to 73° 46' 22.42" E. The Minesite is covered under the Survey of India Topo-Sheet no. 45F/15, 11, 12 & 16.

2. The project falls under Schedule 1(a) of mining and is a Category- "A" project as per EIA notification 14th September 2006 (as amended) as the mining lease area is more than 100 Ha.

3. The PP applied online vide its proposal no. IA/RJ/MIN/140219/2020 dated 01.02.2020 and submitted the Form-1, Pre-feasibility Report.

4. PP submitted that the mining lease registration on 05.04.1985 for 10 year (05.04.1985 to 04.04.1995). Subsequently first renewal of lease was done for 20 years, by vide letter no. SME/Jodh/CC/MM/Jodh/ML/65/94/532 dated 23.12.1995 and lease executed on 26.07.1996. (05.04.1995 to 04.04.2015). There after State Govt. Order dated 01.03.2017 under RMMCR 2017 the lease period was extended from 20 years onward to 50 years from the date 05.04.1985 to 04.04.2035.

5. The PP submitted that M/s Shri Narendra Agarwal appears for Environment Assessment Committee to issue ToR Vide letter no. J-11015/58/2016-IA.II (M), dated 15.03.2016. The PP had Proposed Production of 6, 48,880 TPA (RoM) of Mineral Lime Stone vide Proposal No. IA/RJ/MIN/39691/2016, Dated-11.01.2016 but unable to complete the EIA/EMP Report & E.C Process within validity of ToR period, given by MoEF & CC. The PP has also applied for the validity for Extension of ToR for 1 year which will be expire on date 14.03.2020. Hence the PP has withdrawal their project and submitted fresh application for Term of Reference on 01.02.2020.

6. PP submitted that the Mining Plan with Progressive Mine Closure Plan has been approved vide letter No.

SME/JO/CC/Jodhpur/Minor/M.L/65/1994, date-03.11.2017. The mining will be done opencast mechanized method with drilling and blasting with the use of drill machines, and truck/ dumper used for loading and transportation of overburden and lime stone.

7. The total water requirement will be 7 KLD (1.5 KLD for drinking, 4 KLD for suppression and 1.5 KLD for Plantation). The ultimate depth of mining is 16 mbgl& proposed working will not intersect Ground water table. The nearest water body's is Luni River about 4.20 km in S direction from ML area. BangangaNadi about 12.0 km in SSW direction from ML area. LilriNadi about 8.50 km in SE direction from ML area.

8. The PP reported that there is no National Park, Wildlife Sanctuaries, Tiger Reserves fall within the study area (10 km radius of the mine boundary).

9. The PP submitted that the Project creates 35 people direct & 15 – 20 people indirectly employed with allied and related industries, such as transportation, maintenance, etc.

10. The PP submitted that the Estimated Project Cost for the proposed project is Rs. 65.45 Lac.

11. Based on the discussion held and document submitted the Committee **recommended** the proposal for grant of Term of Reference for proposal of M/sShri Narendra Agarwal is for Lime stone mining with production 6,48,880 TPA of RoM in the area of 103.0 ha. In addition to standard ToR conditions the Committee also prescribed the following additional Term of Reference:

- 1) The total excavation (minerals, waste, top soil) to be excavated needs to be bring out clearly in production and development plan. The mineable reserves, blocked reserves need to be mentioned along with life of mine. PP should add anannexure in the mining plan clearly showing the year-wise production and development plan (tabular format) till the end of life of mine. The location of mineral stacking, dumping sites, plantation and other infrastructures needs to bring out clearly in the mining plan. PP needs to bring out the waste to be generated during the entire life of mine and where it will be dumped/backfilled. In addition to this there are some small blocks as per KML file which is not belongs to PP and not forms the part of the mining lease. Therefore, the mining plan needs to be prepared in such a way to leave a safety barrier of 7.5 meters and to provide the approach roads for these blocks. There is a road passing just adjacent or may be inside the mining lease in the southern part. Therefore, in the mining plan a safety barrier of atleast 50 meters or as per mining lease condition whichever is more needs to be left for the protection of the road.
- 2) PP should submit an undertaking by way of affidavit as required as per Ministry's O.M No 3-50/2017 -IA. II(M) dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme

Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

- 3) PP should provide in the EIA Report details of all the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after grant of EC.
- 4) PP should submit the revenue plan for mining lease, revenue plan should be superimposed on the satellite imagery clearly demarcate the Govt. land, private land, agricultural land etc.
- 5) PP should submit the real-time aerial footage & video of the mining lease area and of the transportation route.
- 6) PP should submit the detailed plan in tabular format (year-wise for life of mine) for afforestation and green belt development in and around the mining lease. The PP should submit the number of saplings to be planted, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. In addition to this PP should show on a surface plan (5-year interval for life of mine) of suitable scale the area to be covered under afforestation & green belt clearly mentioning the latitude and longitude of the area to be covered during each 5 years. The capital and recurring expenditure to be incurred needs to be submitted. Plantation plan should be prepared in such a way that 80% of the plantation to be carried out in first 5 years and for the remaining years the proposal for gap filling, area which is not ready/owned in next 5 years for the plantation, and dump which would be created established after 5 years etc. needs to be submitted. Plantation of species such as eucalyptus and non-local species may be avoided. Plantation should also be done on the foundation of the crusher area. The seedling of height not less than 2 meters to be selected and accordingly cost of plantation needs to be decided.
- 7) PP should submit the quantity of surface or ground water to be used for this project. The complete water balance cycle need to be submitted. In addition to this PP should submit a detailed plan for rain water harvesting measures to be taken. The PP should submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted.
- 8) PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged for implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.

- 9) PP should submit the year-wise, activity wise and time bound budget earmarked for EMP, occupational health surveillance & Corporate Environmental Responsibility needs to be submitted. The capital and recurring expenditure to be incurred needs to be submitted.
- 10) PP should submit the measures/technology to be adopted for prevention of illegal mining and pilferage of mineral.
- 11) PP should submit the detailed mineralogical and chemical composition of the mineral and percentage of free silica from a NABL/MoEF&CC accredited laboratory.
- 12) PP should clearly show the transport route of the mineral and protection and mitigative measure to be adopted while transportation of the mineral. The impact from the center line of the road on either side should be clearly brought out supported with the line source modelling and isopleth.
- 13) PP should clearly bring out that what is the specific diesel consumption (Liters/Tonne of total excavation & mineral) and steps to be taken for reduction of the same. Year-wise target for reduction in the specific diesel consumption needs to be submitted.
- 14) PP should bring out the awareness campaign to be carried out on various environmental issues, practical training facility to be provided to the environmental engineer/diploma holders, mining engineer/diploma holders, geologists, and other trades related to mining operations. Target for the same needs to be submitted.
- 15) The budget to be earmarked for the various activities shall be decided after perusal of the Standard EC Conditions published by the Ministry.
- 16) The PP should ensure that only NABET accredited consultant shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that accreditation of consultant shall be valid during the collection of baseline data, preparation of EIA/EMP report and during the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and PP and consultant are fully accountable for the same.
- 17) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.
- 18) All the certificates viz. Involvement of Forest land, distance from protected area, list of flora & fauna should be duly authenticated by Chief Wildlife Warden & Forest Department. The Certificate should bear

the name, designation, official seal of the person signing the certificate and dispatch number.

2.19 Proposed Expansion of Limestone Mine (from 3.5 MTPA to 5.0 MTPA with total ML area of 363.44 ha limestone after expansion - 5.00 MTPA, Overburden-0.246 MTPA, Topsoil/Alluvium - 0.022 MTPA, Total excavation 5.268 MTPA) of M/s RCCPL Pvt. Ltd., located at Sadhera Village, Maihar Tehsil, Satna District, Madhya Pradesh - ToR. [IA/MP/MIN/126816/2010; J-11011/00/2008.IA.II(M)]

1. The proposal of M/s RCCPL Pvt. Ltd. is for enhancement of mine production capacity of Limestone from 3.5 MTPA to 5.0 MTPA within existing mine lease area of 363.44 ha located at Sadhera Village, Maihar Tehsil, Satna District, Madhya Pradesh State. The mine is located between 80°45' 50.05" E To 80°44' 29.85" E longitude and 24° 06' 54.34" N to 24° 08' 37.7" N latitude. The site is a part of Survey of India Toposheet no 63D/12 & 16. Seismically, this area is categorized under zone-II as per IS-1893 (Part-1)-2002.

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, this mining project falls under Category 'A Project or activity 1(a) as the mining lease area is more than 100 Ha. The PP applied online vide proposal No. IA/MP/MIN/126816/2019 and submitted the Form-1, Pre-feasibility Report.

3. Project Proponent has reported that the mining lease area of 363.44 ha is spread over the part of Sadhera Village, Maihar Tehsil, Satna District, Madhya Pradesh State.

4. PP has submitted that Environmental Clearance was obtained vide letter No. J-11011/700/2008-IA.II(I) dated 23.03.2011 for Integrated Cement Plant (Clinker 3.6 MTPA; Cement 5.0 MTPA) along with Captive Power Plant (75 MW) near Villages Bharauli & Itahara And Limestone Mines (Sadhera Mine, 35. MTPA, 539.561 ha) near Village Sadhera at Tehsil Maihar, District Satna, in Madhya Pradesh by M/s. Reliance Cementation Private Limited (Unit Maihar-I).

5. Further, EC for Expansion of Integrated Cement Plant (clinker 3.6 MTPA to 7.2 MTPA; Cement 5 MTPA to 10 MTPA) by Installation of Line-II of M/s. Reliance Cementation Private Limited at Villages Bharauli & Itahara District Satna, Madhya Pradesh was granted vide letter No. J-11011/375/2011-IA.II(I) dated 05.02.2015.

6. PP has now applied vide Proposal No. IA/MP/MIN/126816/2019 for enhancement of mine production capacity of Limestone from 3.5 MTPA to 5.0 MTPA within existing mine lease area of 363.44 ha located at Sadhera Village, Maihar Tehsil, Satna District, Madhya Pradesh State.

7. PP submitted that they have applied for the Certified EC compliance report to Regional Office, Bhopal, vide letter no RCCPL/SD/MoEF&CC

(WZ)/Sadhera Exp. Dated: 24.01.2020. Certified EC compliance application is under consideration by the Regional office at MoEF&CC at Bhopal.

8. After detailed deliberations, the committee observed that there is huge ambiguity in the status of plantation in general and particularly in safety zone, Rehabilitation and Resettlement related issues, and possession of land. Therefore, the committee desired the certificate compliance from the regional office of the Ministry for further consideration of the proposal and **deferred**.

2.20 BHILAPAR MANGANESE ORE MINE of SMT. SHUBHANGI AMOL NAGPURE C/o Sri. Sadique Ansari, (Maximum Production Rate 15000TPA; Lease Area: 19.259ha) located at Village Bhilapar, Tehsil Sausar, District Chhindwara, State: Madhya Pradesh – Environmental Clearance. [IA/MP/MIN/77234/2018; IA-J-11015/106/2018-IA-II(M)]

1. The proposal of M/s Smt. Shubhangi Amol Nagpure is for proposed production capacity of 15,000 TPA in the mine lease area of 19.257ha located at Khasra No.68,69,70,71,72/1,72/2,74/14,75,76,80,82,86 Village-Bhilapar, Tehsil Sausar, District- Chindwara, Madhya Pradesh. The project is located at latitude 21°35'30.41"N to 21°35'43.30"N, and longitude 78°56'11.63"E to 78°56'44.78"E. The area falls in the Survey of India Topo sheet 55K/14(OSM no.F44M14), 55O/2(OSM no.F44MN2), 55K/15(OSM no.F44M15) & 55O/3(OSM no.F44N3) marks the lease area with maximum contour is 406mRL and minimum contour is 399mRL.

2. After detailed deliberations, the committee observed the following
 - i. The Form-2 was not duly filled in
 - ii. Copy of ToR was not attached with Form-2 in the online portal
 - iii. The attachments uploaded on the portal are not legible.
 - iv. The public hearing proceedings were not properly uploaded online.
 - v. No authenticated list of Schedule-I species has been submitted;
 - vi. The conservation plan prepared for the schedule-I species is very generic in nature and did not get approve from the Competent Authority.
 - vii. It was reported that the Pench National park is located at a distance of the 5.75 Km from the mine lease boundary. However, there is no authenticated map showing the boundary of the ESZ, distance from the National park, whether the mining lease falling within the ESZ or not; etc. not been submitted. The authenticated map showing the boundary of ML, National Park and ESZ shall be submitted for drawing the requirement of the clearance from NBWL.
 - viii. The proposed mining in Block –II is bounded by the nallah in North, West and south directions. However, no protection measures against

the nallah has been clearly demarcated. The committee desired to demarcate the protection measures inter alia including the protection bund; plantation on the embankment; plantation all along the boundary of Mining lease area in the first year of mining operations; garland drains; retaining / Toe walls; etc. superimposed on the mine development plan along with the implementation time line and budgetary provisions.

- ix. As per the ToR conditions, the certificate from the DMG stating that no mining activity is carried by the PP shall be submitted along with the EMP. Though the PP informed that it has been obtained but it was not submitted along with the EMP uploaded online.
 - x. It was mentioned that the water requirement will be met from the Panchayat Bore well. However, copy of the approval has not been submitted.
3. Therefore, the committee recommended for **returning the proposal in the present form** and warned the consultant to take due care while filling up the form and submitting information to the Ministry.

2.21 Expansion of Kodingamali Bauxite Mine for a production of 3.0 MTPA to 6.0 MTPA of Odisha Mining Corporation limited located in Koraput & Rayagada districts of Odisha – Consideration for specific ToRs (Standard ToR issued). [IA/OR/MIN/143523/2020; F.No. J-11015/439/2007-I.A II (M)]

The proposal of M/s. Odisha Mining Corporation (OMC) Limited is for enhancement of Production Capacity from 3.0 MTPA to 6.0 MTPA in Kodingamali Bauxite Mine located in Koraput&Rayagada districts of Odisha. The ML area over 428.075 Ha is confined within the Latitudes: 19°05'13.42"N to 19°01'46.35"N and Longitudes: 83°05'11.89" to 83°03'22.91" E and falls within Survey of India Topo sheet No. E 44 F 4 on 1:50,000 scale.

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) mining of minerals as the Mining lease area is more than 100 Ha. The PP applied online vide proposal No. **IA/OR/MIN/143523/2020** dated 17.02.2020 and submitted the Form-1, Pre-feasibility Report. Being an expansion proposal and in pursuant to S.O. 751(E) dated 17.02.2020 the Standard ToR was issued by the online system but EAC can prescribed the additional ToR within 30 days of acceptance. The proposal was accepted by Member Secretary on 13.04.2020 and the proposal is now placed in EAC meeting scheduled to be held on 20-21 April, 2020 wherein the Committee deferred the proposal for want of requisite information. The PP submitted the information and the proposal is now placed in EAC meeting held on 1st June, 2020. Wherein the Committee deliberated on the following:

3. PP submitted that initially, the mining lease was granted for an area of 715.075 ha on 01.02.1999 for a period of 30 years. OMC applied for fresh ML for an area of 447.25 ha which was bauxite bearing area. Director of Mines (Odisha) issued the 'Precise Area Map' with Boundary descriptions vide their letter No. 3786, dated 22.05.2006. A DGPS cum precise area map was issued for 428.075 ha. (drg no OMC/KDM/2017/02) & modified mining plan for the deposit was approved by IBM for areas of 428.075 hectares vide their letter NO. MPM/FM/18-OR/BHU/2015-6/110 dated 11.04.2016 due to revision in the ML area. The lease deed was executed for an area of 428.075 Ha on 10.01.2017 for 50 years.

Observation of EAC: The Committee previous observed that area in form-1 is showing as 6 ha and PP in its EDS reply dated 2.04.2020 already clarified *"after making necessary entry of 3 & 6 in the Form-I (only numerical are allowed), it should automatically pick up MTPA as unit on preview. OMC has no control over the error on "MTPA" taking as "ha". However, OMC have made necessary entry for 3 to 6 again."* OMC has enclosed screen shot of the same."As this is a technical issue related to PARIVESH the Committee ask the Member Secretary to look into this so that the same can be avoided in future. **The Committee asked PP to submit the revised Form-1 clearly mentioning the mining lease area and total excavation from the mines.**

Further, with regard to mismatch in mining lease area as mentioned in earlier EC and what is proposed now the Committee observed that in response of EDS dated 23.03.2020 the PP submitted that "The EC granted earlier for the entire mining lease area of 447.25 ha [Vide letter No.J- 11015/439/2007-1A-II (M) dt 28.05.2008] was subsequently modified vide No. J-11015/439/2007- IA-II (M) dt 24.11.2017 and letter No. J-11015/439/2007-1A-II (M) dt 17.12.2018 over reduced mining lease area of 428.075 ha. The revised area of 428.075 ha has been clearly mentioned in the modified order dated 24.11.2017 (4th page). The diverted forest land over 434.935 ha comprises 428.075 ha of executed revised ML area and 6.86 ha of forest area outside the ML used for access road to the mining lease."

Committee also observed that forest area mentioned in Form-1 is -1 Ha which seems to be technical issue, however PP has uploaded the letter issued by Ministry of Environment Forest & Climate Change vide letter dated 8-46/2016-FC dated 25.09.2017 wherein the FC (Stage-II) clearance was granted for 434.935 Ha area (428.07 Ha mining lease including 18.098 Ha in safety zone and 6.860 Ha of forest land outside the mining lease for construction of road to approach mining lease).

PP vide its letter dated 27.05.2020 submitted the revised Form-1 wherein the mining lease area is mentioned as 428.075 Ha which is entirely forest area. The production capacity is 6 MTPA.

Observation of EAC: *The Committee observed that PP has submitted the revised form-1 but as total excavation from the mines is still not mentioned therefore, it may be considered as 6.0 MTPA.*

4. PP submitted that the mining plan of Kodingamali Bauxite Deposit over an area of 447.25 hectare was approved by the Controller of Mines, Indian Bureau of Mines, Nagpur vide letter No. 314(3)/2006-MCCM(C)/MP-4 dated 15.09.2006 for fresh grant of mining lease. The modification in approved mining plan of Kodingamali Bauxite mine over an area of 428.075 hectare was approved by the Regional Controller of Mines, Indian Bureau of Mines, Bhubaneswar vide letter No. MPM/FM/18-ORI/BHU/2015-16/110 dated 11.04.2016 for change in the mining lease area. The approved mining plan again modified under Rule 17(3) of MCR 2016 for changes in better grade control through blending, con-current back-filling from 3rd year of operations, Release of mined-out areas for reclamation form 3rd year, Provision of Rain-water harvesting in the mined-out area etc& approved by the Regional Controller of Mines, Indian Bureau of Mines, Bhubaneswar vide letter No. MPM/FM/18-ORI/BHU/2017-18/2348 dated 20.12.2017. **Now Modification in approved Mining Plan along with Progressive Mine Closure Plan is prepared & submitted under Rule 17 (3) of (Other than Atomic and Hydro Carbons Energy) Minerals Concession Rule, 2016 with the proposed plan period 2019-20 to 2020-21 for enhancement of the production capacity 3.0 MTPA to 6.0 MTPA.**

5. The deposit is being worked by fully mechanized opencast method of mining with formation of benches by drilling and blasting. Presently maximum height of bench is 10 m whereas, maximum width of bench is 25 m. 50% of the bauxite and overburden is excavated by ripping and dozing and the balance 50% is mined by drilling & blasting. Top bauxite is mined by loosening the material with use of drilling & blasting and excavated by use of Loader/Shovel - Dumper combination. The ore from Kodingamali Bauxite mine will increase the supply of bauxite ore to India's domestic Alumina and Aluminium industries.

The overburden produced during next year of operations (approx 0.22 M cum) is stored in a temporary dump with parapet wall, garland drain & settling pond, which is re-handled subsequently from the 6th years onwards with respect to availability of exhausted area / mine out area. Sub grade generated & non-bendable (Al₂O₃ 20-30% with high silica >5%) is suitably stored for future use through scientific back-filling in mined out back-fill area.

6. PP submitted that the Environment Clearance for Kodingamali Bauxite mining project has been accorded by Ministry of Environment, Forest and Climate Change (MoEF & CC) vide letter no. J-11015/439/2007-IA.II (M) dated 28.05.2008 for a production capacity of 3.0 million tons per annum, transportation through pipe conveyor, 200 KLD of water requirement sourced from treated waste water from alumina refinery for initial years and after that from mine pit. Amendment of EC dated 28.05.2008 was provided vide letter dated **24.11.2017** for i) *The mining project shall use 400 KLD of water for its operations as per the permission granted by Water Supply department, Government of Odisha, ii) The land-use for the project shall be governed as per the Stage-1 FC granted by MoEFCC vide its letter dated 17.04.2017. The*

operations shall be started only after obtaining required approvals under Forest (Conservation) Act, 1980, iii) The PP shall carryout mineral transportation of only up to 1.26 Millon TPA of Bauxite ore by road subject to required strengthening of carriageway at present. As the EC permits production of 3 Million TPA of Bauxite ore, transportation beyond 1.26 Million TPA by road shall be allowed only on prior confirmation from the State PWD Department regarding preparedness of the 7 meter wide carriageway. At present, the PP is allowed to carry out transportation limited to 1.26 Million TPA and iv) The M.L. area shall be read as 428.075 Ha in placed of 447.15 Ha, based on executed lease dead and approved mining plan submitted by PP.

PP submitted letter No 6820 dated 1.08.2018 wherein it has mentioned that “ *it is to state that as verified the road from NH-326 to Marbaiguda village to Laxmipur block in the district is improved to 7 meter carriage way.*”

Amendment was again provided vide letter dated 17.12.2018 for transportation 3.0 MTPA of Bauxite Ore via road as committee previously observed “*that strengthening of carriage way to 7m width and 2.5 meter shoulder width may increase the carriage capacity to 3.7 Million Tonne.*” PP has now applied for enhancement of Production Capacity from 3.0 MTPA to 6.0 MTPA in Kodingamali Bauxite Mine located in Koraput&Rayagada districts of Odisha.

Observation of EAC:*The Committee previously observed that as per previous EC the width of road should be 7 meters with 2.5-meter shoulder width for transportation of mineral by road. The Committee therefore asked the PP to submit a certificate from the PWD department that the road for carrying out mineral in addition to having a width of 7 meters and a 2.5 meters shoulder width is available on either side of the road.*

Complete details of transportation plan need to be submitted with supporting document, maps, plan etc. In addition to this details of each section of road starting from mining lease needs to be provided with their carrying capacity w.r. t. i) traffic and ii) strength of road for the transportation of minerals and

PP in its reply submitted on 27.05.2020 submitted letter No. 1363 dated 29.04.2020 issued by Executive Engineer, RWD, Sunabeda wherein it has mentioned that “*the road from NH-326 to Jholaguda (up to mines road junction) total length is 3.90 km. The carriage way width of the road is 7.5 meter, both side shoulder is 1.50 meter and total formation width is 10.50 meter. The road having a design capacity of 11,500 PCU (passenger carrying unit) per day as per IRC64:1990 and is suitable for carrying 35 Tons GVW Trucks.*”

PP also submitted the details of the transportation plan with supporting documents and maps. which includes the details of each section of road starting from Mining Lease with their carrying capacity with respect to the traffic and strength for transportation of minerals.

The Committee asked the PP that there is patch of road which is having many curves and how the transportation of the ore can be done. What would be impact due to transportation.

PP shown the drone images of the patch of the road to support that it has sufficient width for movement of tippers. In response to the impact of the road transport by increasing the quantity from 3 MTPA to 6 MTPA and existence of the several curves and hilly terrain, the project proponent through consultant submitted that the OMC will deploy the 200 trucks of 18T and 50 trucks of 21T carrying capacity and of Bharath-VI, latest trucks of Volvo which can carry more load may be deployed, so as to keep the minimum impact due to emissions by the increased fleet.

Observation of EAC:*The Committee asked the PP whether they are agreed with the submission of consultant as it may have cost implication and once agreed it will become a mandatory condition. The PP agreed to comply with the submission made by the consultant w.r.t to type and make of tipper used for the transportation. The Committee is of the view that PP has already applied for amendment and let this condition may also be implemented for the existing transportation of the mineral. Therefore, the project proponent shall replace all the existing trucks with the compliant of Bharath-VI in addition to the proposed new trucks for increasing the capacity as committed. The Committee is also of the view that in EIA/EMP Report the details study on carrying capacity of each road with respect to traffic and strength of the roads needs to be carried out by engaging expert agency having expertise in design of the road. Necessary permission may also be obtained from the concerned government agency for each section of the road for transportation of the mineral.*

7. PP submitted that the present lease area comprises of Forest Land only (Kodingamali Reserved Forest – 406.385 Ha and Kodinga Proposed Reserved forest- 21.69 Ha). Stage-I Forest Clearance was granted by MoEF & CC over 434.935 ha of forest land (428.075 ha ML + 6.860 ha approach Road) vide F. No 8-46/2016-FC dated 17.04.2017. Stage-II Forest clearance has been granted by MOEF vide letter no. F. NO. 8-46/2016-FC dated 25th September, 2017 for an area of 434.935 ha including 428.075 ha ML area & 6.860 ha for approach road. PP has reported that the forest land required for this mining does not include any National Park, Wild Life Sanctuary, Tiger Reserve, Elephant Reserve or Biosphere Reserve. No archaeological monuments are located inside the proposed area.

Observation of EAC:*The Committee previously observed that as per KML file some mining activities appears to be outside the mining lease and asked the PP to submit a **Certificate from Forest Department, Odisha after verifying the KML file with actual ground situation to the effect that all the mining operation related to this project are well within the mining lease area.***

PP in its reply dated 27.05.2020 submitted that Divisional Forest Officer, Koraput has submitted the siteinspection report vide letter dated 27.05.2020.

The Divisional Forest Officer, Rayagada has submitted the site inspection report vide letter dt 18.05.2020. Also the Dy. Director of Mines, Koraput visited the site and submitted his report vide Memo dt 19.05.2020. The Forest as well as the Mining Officers have verified the KML file with actual ground situation and observed in their inspection report that all the mining operations related to Kodingamali Bauxite Mines are well within the mining lease area.

The Committee asked the PP for revised KML file. The PP submitted that the same will be submitted soon. The Committee is of the view that revised KML file as per the DGPS coordinates given by the DFO and/ or DMG needs to be submitted.

- a. The revised KML file as per the DGPS coordinates given by the DFO and/ or DMG

Observation of EAC: *The Committee previously observed that progress in the plantation is not sufficient and PP shall submit a time bound plantation plan for safety zone and avenue plantation along the species.*

PP in its reply dated 27.05.2020 submitted a time bound plantation plan for safety zone and avenue plantation.

The Committee is of the view that the same is for the five year only and PP needs to submit the detailed plan in EIA/EMP. In addition to this plantation in the safety zone at lease boundary the plantation should be completed in the current year only. The seedling to be planted should not be less than 2-meter height. The PP should submit the drone image of plantation before and after.

8. Site specific Wildlife Conservation Plan has been approved vide letter No.5845/1WL-SSP196/2016 dt 06.07.2017 with a total financial outlay of Rs 1240.22 lakh. The distance of the proposed mining area from Karlapat sanctuary is around 60 km as the crow flies.

9. PP previously submitted that Average water consumption for domestic and industrial use are 50 m³ /day and 350 m³ /day, respectively. PP has reported that they have permission to use 400 KLD ground water for the existing capacity. PP will store rain water inside ML area and use it for expansion project. PP will use portable water through approved sources of relevant State Authorities and industrial water by treated recycled water.

Observation of EAC: *The Committee observed that water demand for the said project has already been increased from 200 KLD to 400 KLD. PP needs to justify that why permission from CGWA is not required for drawl of 400 KLD ground water. Compliance of Ministry's O.M No 21-103/2015-IA.III dated 2.11.2018 needs to be submitted.*

PP in its letter dated 27.05.2020 submitted that OMC is not drawing any ground water for the project. We are using surface water from Dharua Nalla and permission has been obtained vide letter no. 1785/WR, Irr-11-WRC-32/18 dated 19.01.2018.

10. PP submitted that the mines shall contribute Rs. 99.00 Crores per annum to the State exchequer by way of mining revenue (Rs. 45.0 Crores) and sales tax (Rs. 54.0 Crores). The cost of the project is Rs. 42.48 Crores. The proposed production will provide an opportunity to generate direct employment in mining for 330 persons and indirect employment of 1330 persons in the ancillary activities those will be benefitted from this project.

11. PP has submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up. PP has given undertaking on 17.02.2020 that the data and information given in the application and enclosures are true to be best of their knowledge and belief and they are aware that if any part of the data and information found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at their risk and cost. In addition to this, in pursuant to Ministry's O.M No 3-50/2017-IA.III (Pt.) dated 3.05.2018; PP already submitted an undertaking in the form of affidavit on Rs 100 Non-Judicial Stamp Paper bearing No K 141114 dated 9.08.2018 for compliance of Common Cause Judgment dated 2.08.2017 and other statutory requirement.

12. In addition to above, PP also requested to submit/use the EIA and EMP on the basis of baseline data already collected for the months of Dec'19 to Feb'20. As Post Covid-19, from March'20 onwards, collection of data on ground is not possible owing to restrictive measures. The PP also requested for exemption in public hearing.

Observation of EAC: The Committee is of the view that the data already collected may be used if it meets the protocol and norms of the baseline data as per the extant rules. The committee **did not agree for the exemption of public hearing** in light of the extant provisions in the EIA Notification, 2006. However, the committee was of the opinion that the issues has to be taken up with the ministry as it is a policy decision in view of the pandemic CoVID-19, which may be applicable for all the proposals for uniform decision.

13. Based on the discussion held and document submitted the Committee **recommended** the proposal of M/s Odisha Mining Corporation limited for Expansion of production from of 3.0 MTPA to 6.0 MTPA from Kodingamali Bauxite Mine located in Koraput & Rayagada districts of Odisha. In addition to standard terms of reference (Annexure-I) the Committee also prescribed the following additional ToR for this project:

- 1) The total excavation (minerals, waste, top soil) to be excavated needs to be bring out clearly in production and development plan. The mineable reserves, blocked reserves need to be mentioned along with life of mine. PP should add an annexure in the mining plan clearly showing the year-wise production and development plan (tabular format) till the end of life of mine. The location of mineral stacking, dumping sites, plantation and other infrastructures needs to bring out clearly in the mining plan.

PP needs to bring out the waste to be generated during the entire life of mine and where it will be dumped/backfilled.

- 2) PP should submit an undertaking by way of affidavit as required as per Ministry's O.M No 3-50/2017-IA.II(M) dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- 3) PP should provide in the EIA Report details of all the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after grant of EC.
- 4) PP should submit the real-time aerial footage & video of the mining lease area and of the transportation route.
- 5) PP should submit the detailed plan in tabular format (year-wise for life of mine) for afforestation and green belt development in and around the mining lease. The PP should submit the number of saplings to be planted, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. In addition to this PP should show on a surface plan (5-year interval for life of mine) of suitable scale the area to be covered under afforestation & green belt clearly mentioning the latitude and longitude of the area to be covered during each 5 years. The capital and recurring expenditure to be incurred needs to be submitted. Plantation plan should be prepared in such a way that 80% of the plantation to be carried out in first 5 years and for the remaining years the proposal for gap filling. The seedling of height not less than 2 meters to be selected and accordingly cost of plantation needs to be decided. In addition to this plantation in the safety zone at lease boundary the plantation should be completed in the current year only. Status report on the same needs to be submitted.
- 6) PP should submit the quantity of surface or ground water to be used for this project. The complete water balance cycle need to be submitted. In addition to this PP should submit a detailed plan for rain water harvesting measures to be taken. The PP should submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted.
- 7) PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged for implementation of environmental management

plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.

- 8) PP should submit the year-wise, activity wise and time bound budget earmarked for EMP, occupational health surveillance & Corporate Environmental Responsibility needs to be submitted. The capital and recurring expenditure to be incurred needs to be submitted.
- 9) PP should submit the measures/technology to be adopted for prevention of illegal mining and pilferage of mineral.
- 10) PP should submit the detailed mineralogical and chemical composition of the mineral and percentage of free silica from a NABL/MoEF&CC accredited laboratory.
- 11) PP should clearly show the transport route of the mineral and protection and mitigative measure to be adopted while transportation of the mineral. The impact from the center line of the road on either side should be clearly brought out supported with the line source modelling and isopleth. Further, frequency of testing of Poly Achromatic Hydrocarbon needs to be submitted along with budget. Based on the above study the compensation to be paid in the event of damage to the crop and land on the either side of the road needs to be mentioned. The PP should provide the source of equations used and complete calculations for computing the emission rate from the various sources. The Ground level concentration of various pollutants in worst case and control case scenario, needs to be submitted.
- 12) EIA/EMP Report the details study on carrying capacity of each road with respect to traffic and strength of the roads needs to be carried out by engaging expert agency having expertise in design of the road. Necessary permission may also be obtained from the concerned government agency for each section of the road for transportation of the mineral.
- 13) The PP shall provide the detailed action plan for completion of the conveyor belt within two years, as committed to avoid the road transportation after that.
- 14) As agreed in the meeting the details of the machine to be used for the transportation which is in compliance of BS VI emission Standards needs to be submitted along with its general specification, and tentative cost. In addition, this PP shall start using use similar machine for the existing transportation and status of the same needs to be submitted.
- 15) PP should clearly bring out that what is the specific diesel consumption (Liters/Tonne of total excavation & mineral) and steps to be taken for

reduction of the same. Year-wise target for reduction in the specific diesel consumption needs to be submitted.

- 16) PP should bring out the awareness campaign to be carried out on various environmental issues, practical training facility to be provided to the environmental engineer/diploma holders, mining engineer/diploma holders, geologists, and other trades related to mining operations. Target for the same needs to be submitted.
- 17) The budget to be earmarked for the various activities shall be decided after perusal of the Standard EC Conditions published by the Ministry.
- 18) The PP should ensure that only NABET accredited consultant shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that accreditation of consultant shall be valid during the collection of baseline data, preparation of EIA/EMP report and during the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and PP and consultant are fully accountable for the same.
- 19) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.
- 20) All the certificates viz. Involvement of Forest land, distance from protected area, list of flora & fauna should be duly authenticated by Chief Wildlife Warden & Forest Department. The Certificate should bear the name, designation, official seal of the person signing the certificate and dispatch number.
- 21) Revised KML file as per the DGPS coordinates given by the DFO and/or DMG needs to be submitted.

Standard Terms of Reference (TOR) for Mining Project

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

9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.

10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.

11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.

12) A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.

13) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.

14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.

15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.

16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.

17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained

from the Standing Committee of National Board of Wildlife and copy furnished.

18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.

19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.

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

21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

22) One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant

downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.

23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.

25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.

27) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.

28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.

29) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.

30) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.

31) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be

planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.

32) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.

34) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.

35) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.

36) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.

37) Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

38) Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.

39) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.

40) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

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

i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and

(iii) Sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

Standard Tor Beneficiation

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

it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.

15. Issues relating to Safety should be detailed. The proposed safeguard measures in each case should also be provided. Disaster management plan shall be prepared and included in the EIA/EMP Report.

16. The study area will comprise of 10 km zone around the Plant.

17. Cumulative impact study of both Beneficiation Plant with suggested mitigation measures as per the study should be described.

18. Location of Railway siding with its handling capacity and safety measures should be indicated.

19. Option to provide only silo for storage of minerals instead of open stacking to avoid fugitive dust should be explored and arrangements finalized justified.

20. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.

21. Details of the land for any Over Burden Dumps outside the lease, such as extent of land area, distance from lease, its land use, R&R issues, if any, should be given.

22. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the Project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.

23. Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and

compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.

24. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.

25. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.

26. A study shall be got done to ascertain the impact of the Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly detailed mitigative measures required, should be worked out with cost implications and submitted.

27. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.

28. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.

29. Proximity to Areas declared as 'Critically Polluted' shall also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB/CPCB shall be secured and furnished to the effect that the proposed activities could be considered.

30. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the unit w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

31. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study

area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects, should be discussed in the report.

32. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season); December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the predominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the unit in the predominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.

33. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

34. The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.

35. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be secured and copy furnished.

36. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.

37. Impact of the project on the water quality, both surface and groundwater should be assessed and necessary safeguard measures, if any required, should be provided.

38. Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.

39. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the project. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to the pollution.

40. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered.

41. Details of the onsite shelter and facilities to be provided to the workers should be included in the EIA report.

42. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area should be detailed.

43. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.

44. Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

45. Public hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.

46. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the project should be given.

47. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

48. A brief background of the Project, its financial position, Group Companies and legal issues etc should be provided with past and current important litigations if any.

49. Benefits of the Project, if the project is implemented should be outlined. The benefits of the projects shall clearly indicate environmental, social, economic, employment potential, etc.

50. Besides the above, the below mentioned general points are also to be followed:-

- a) Executive Summary of the EIA/EMP Report;
- b) All documents to be properly referenced with index and continuous page numbering.
- c) Where data are presented in the report especially in Tables, the period in which the data were collected and the sources should be indicated.
- d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the project.
- e) Where the documents provided are in a language other than English, an English translation should be provided.
- f) The Questionnaire for environmental appraisal of project as devised earlier by the Ministry shall also be filled and submitted.
- g) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should also be followed.
- h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
- i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified Report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project by the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable

Standard EC Conditions: (As Ministry's O.M No 22-34/2018-IA.III dated 8.01.2019 and Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020)

I. Statutory compliance

- 1) This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- 2) The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
- 3) The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
- 4) This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
- 5) This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
- 6) Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board/Committee.
- 7) The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.
- 8) The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
- 9) The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues

related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area”.

10) The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.

11) A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.

12) State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.

13) The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.

14) The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

II. **Air quality monitoring and preservation**

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

16) Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein

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

III. **Water quality monitoring and preservation**

1) In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.

2) Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

3) Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

4) The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured

that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.

5) Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.

6) Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.

7) Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.

8) The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

IV. Noise and vibration monitoring and prevention

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

10) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not

disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.

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

V. Mining plan

12) The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, overburden, interburden and top soil etc. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form of Short Term Permit (STP), Query license or any other name.

13) The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change for record and verification.

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

VI. Land reclamation

15) The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan

as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.

16) The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.

17) The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.

18) The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.

19) The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC.

20) Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.

21) Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.

22) The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered

to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

VII. Transportation

23) No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.

24) The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

VIII. Green Belt

25) The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.

26) The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the

local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.

27) The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.

28) The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.

29) And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

IX. Public hearing and human health issues

30) The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEFCC Regional Office and DGMS on half-yearly basis.

31) The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins),

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

32) The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).

33) The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1), Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEFCC annually along with details of the relief and compensation paid to workers having above indications.

34) The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

35) Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related

infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.

36) The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

X. Corporate Environment Responsibility (CER)

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

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

XI. Miscellaneous

39) The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.

40) The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

41) The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.

42) A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEFCC.

43) The concerned Regional Office of the MoEFCC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend

full cooperation to the MoEFCC officer(s) by furnishing the requisite data / information / monitoring reports.

44) In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

Annexure-IV

Recommendation of CSIR-NEERI Report on “Carrying Capacity Study for Environmentally Sustainable Iron and Manganese Ore Mining Activity in Keonjhar, Sundargarh and Mayurbhanj districts of Odisha State: The Committee has also deliberated the various specific recommendations of carrying capacity study report conducted by CSIR-NEERI w.r.t. mining proposal of Iron Ore and/or manganese in the State of Odisha. There are recommendation which needs to be implemented by the State Govt. of Odisha and Project Proponent.

1) Project Proponent and Department of Steel & Mines, Govt. of Odisha shall ensure the implementation of recommendations of carrying capacity study report conducted by CSIR-NEERI w.r.t. mining proposal of Iron Ore and/or manganese in the State of Odisha.

2) Department of Steel & Mines, Govt. of Odisha should prepare 5 years regional plan for annual iron ore requirement from the state, which in turn shall be met from different mines/zones (e.g. Joda, Koira.) in the state. Accordingly, sustainable annual production (SAP) for each zone/mine may be followed adopting necessary environmental protection measures.

3) Project Proponent shall construct the cement concrete road from mine entrance and exit to the main road with proper drainage system and green belt development along the roads and also construction of road with minimum 300 m inside the mine. This should be done within one year for existing mines and new mine should have since beginning. The Department of Steel & Mines, Govt. of Odisha should ensure the compliance and should not issue the Mining Permits, if mine lease holder has not constructed proper cement concrete road as suggested.

4) The Committee observed that as per the recommendations of NEERI report the PP needs to do regular vacuum cleaning of all mineral carrying roads aiming at “zero dust re-suspension” within 3 months.

5) Project Proponent shall monitor the environmental quality parameters as per EC and CTE/CTO conditions, and implementation of suggested measures

for control of road dust and air pollution. Odisha State Pollution Control Board has to ensure the compliance of CTE/CTO. Regional office of the MoEF&CC, Bhubaneswar shall monitor the compliance of the EC conditions. Regional office of the Indian Bureau of Mines (IBM) shall monitor the compliance of mining plan and progressive mine closure plan. Any violation by mine lease holder may invite actions per the provisions of applicable Acts.

6) Project Proponent shall ensure the compliance of Suggested Ore Transport Mode (SOTM) with association of the State Government of Odisha. All existing mines should ensure adoption of SOTM within next 5 years. New mines or mines seeking expansion should incorporate provision of SOTM in the beginning itself, and should have system in place within next 5 years.

7) The State Govt. of Odisha shall ensure dust free roads in mining areas wherever the road transportation of mineral is involved. The road shoulders shall be paved with fence besides compliance with IRC guidelines. All the roads should have proper drainage system and apart from paving of entire carriage width the remaining right of way should have native plantation (dust capturing species). Further, regular maintenance should also be ensured by the Govt. of Odisha. Progress on development of dust free roads, implementation of SOTM, increased use of existing rail network, development of additional railway network/conveyor belt/ pipelines etc. shall be submitted periodically to Regional office of the MoEF&CC.

8) Project Proponent shall develop the parking plazas for trucks with proper basic amenities/ facilities inside the mine. This should be done within one year for existing mines and new mines should have since beginning.

9) Department of Steel & Mines shall ensure the construction of NH 215 as minimum 4 lane road with proper drainage system and plantation and subsequent regular maintenance of the road as per IRC guidelines. Construction of other mineral carrying roads with proper width and drainage system along with road side plantation to be carried out. This shall be completed within 2 Years.

10) Regular vacuum cleaning of all mineral carrying roads aiming at “Zero Dust Re- suspension” shall be adopted by PWD / NHAI/ Mine Lease Holders within a time Period of 3 months for existing roads..

11) In case the total requirement of iron ore exceeds the suggested limit for that year, permission for annual production by an individual mine may be decided depending on approved EC capacity (for total actual dispatch) and actual production rate of individual mine during last year or any other criteria set by the State Govt., i.e. Dept. of Steel & Mines. Department of Steel and Mines in consultation with Indian Bureau of Mines-RO should prepare in advance mine-wise annual production scenario so that demand for iron ore can be anticipated, and actual production/dispatch does not exceed the suggested annual production.

12) R&D studies towards utilization of low-grade iron ore should be conducted through research/academic institutes like IMMT, Bhubaneswar, NML, Jamshedpur, and concerned metallurgical departments in IITs, NITs etc., targeting full utilization of low-grade iron ore (Fe content upto 45% by 2020 and upto 40% by 2025). In fact, life cycle assessment of whole process including environmental considerations should be done for techno-economic and environmental viability. R&D studies on utilization of mine wastewater having high concentration of Fe content for different commercial applications in industries such as cosmetics, pharmaceutical, paint industry should also be explored. Responsibility: IBM, Dept. of Steel & Mines, Individual Mine Lease Holders.

13) The mining activity in Joda-Koira sector is expected to continue for another 100 years, therefore, it will be desirable to develop proper rail network in the region. Rail transport shall not only be pollution free mode but also will be much economical option for iron ore transport. The rail network and/or conveyor belt system upto public railway siding needs to be created. The total length of the conveyor belt system/ rail network to be developed from mines to nearest railway sidings by 11 mines in Joda region is estimated to be about 64 km. Similarly, in Koira region, total length of rail network/ conveyor system for 8 mines (under SOTM 1 & 2) is estimated to be around 95 km. Further, it is suggested to develop a rail network connecting Banspani (Joda region) and Roxy railway sidings in Koira region. Responsibility: Dept. of Steel & Mines, Govt. of Odisha and Concerned Mines along with Indian Railways. Time Period: Maximum 7 years (by 2025). The Department of Steel & Mines, Govt. of Odisha should follow-up with the concerned Departments and railways so that proposed proper rail network is in place by 2025.

14) State Govt. of Odisha shall make all efforts to ensure exhausting all the iron & manganese ore resources in the existing working mines and from disturbed mining leases/zones in Joda and Koira region. The criteria suggested shall be applicable while suggesting appropriate lease area and sustainable mining rate. Responsibility: Dept. of Steel & Mines, Govt. of Odisha.

15) Mining Operations/Process Related: Project Proponent shall implement the following mitigation measures: (i) Appropriate mining process and machinery (viz. right capacity, fuel efficient) should be selected to carry out various mining operations that generate minimal dust/air pollution, noise, wastewater and solid waste. e.g. drills should either be operated with dust extractors or equipped with water injection system. (ii) After commencement of mining operation, a study should be conducted to assess and quantify emission load generation (in terms of air pollution, noise, waste water and solid waste) from each of the mining activity (including transportation) on annual basis. Efforts should be made to further eliminate/ minimize generation of air pollution/dust, noise, wastewater, solid waste generation in successive years through use of better technology. This shall be ensured by the respective mine lease holders. (iii) Various machineries/equipment selected (viz. dumpers, excavators, crushers, screen plants etc.) and transport

means should have optimum fuel/power consumption, and their fuel/power consumption should be recorded on monthly basis. Further, inspection and maintenance of all the machineries/ equipment/ transport vehicles should be followed as per manufacturer's instructions/ recommended time schedule and record should be maintained by the respective mine lease holders. (iv) Digital processing of the entire lease area using remote sensing technique should be carried out regularly once in 3 years for monitoring land use pattern and mining activity taken place. Further, the extent of pit area excavated should also be demarcated based on remote sensing analysis. This should be done by ORSAC (Odisha Space Applications Centre, Bhubaneswar) or an agency of national repute or if done by a private agency, the report shall be vetted/ authenticated by ORSAC, Bhubaneswar. Expenses towards the same shall be borne by the respective mine lease holders. Responsibility: Individual Mine Lease Holders.

16) Air Environment Related: Project Proponent shall implement the following mitigation measures: (i) Fugitive dust emissions from all the sources should be controlled regularly on daily basis. Water spraying arrangement on haul roads, loading and unloading and at other transfer points should be provided and properly maintained. Further, it will be desirable to use waterfogging system to minimize water consumption. It should be ensured that the ambient air quality parameters conform to the norms prescribed by the CPCB in this regard. (ii) The core zone of mining activity should be monitored on daily basis. Minimum four ambient air quality monitoring stations should be established in the core zone for SPM, PM10, PM2.5, SO2, NOx and CO monitoring. Location of air quality monitoring stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board (based on Emission Load Assessment Study). The number of monitoring locations may be more for larger capacity mines and working in larger area. Out of four stations, one should be online monitoring station in the mines having more than 3 MTPA EC Capacity. (iii) Monitoring in buffer zone should be carried out by SPCB or through NABET accredited agency. In addition, air quality parameters (SPM, PM10, PM2.5, SO2, NOx and CO) shall be regularly monitored at locations of nearest human habitation including schools and other public amenities located nearest to source of the dust generation as applicable. (iv) Emissions from vehicles as well as heavy machinery should be kept under control and regularly monitored. Measures should be taken for regular maintenance of vehicles used in mining operations and in transportation of mineral. (v) The vehicles shall be covered with a tarpaulin and should not be overloaded. Further, possibility of closed container trucks should be explored for direct to destination movement of iron ore. Air quality monitoring at one location should also be carried out along the transport route within the mine (periodically, near truck entry and exit gate), Responsibility: Individual Mine Lease Holders and SPCB.

17) Noise and Vibration Related: Project Proponent shall implement the following mitigation measures: (i) Blasting operation should be carried out only during daytime. Controlled blasting such as Nonel, should be practiced. The mitigation measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented. (ii) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs. (iii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone. Further, date, time and distance of measurement should also be indicated with the noise levels in the report. The data should be used to map the noise generation from different activities and efforts should be made to maintain the noise levels with the acceptable limits of CPCB (CPCB, 2000) (iv) Similarly, vibration at various sensitive locations should be monitored atleast once in month, and mapped for any significant changes due to successive mining operations. Responsibility: Individual Mine Lease Holders.

18) Water/Wastewater Related: Project Proponent shall implement the following mitigation measures: (i) In general, the mining operations should be restricted to above ground water table and it should not intersect groundwater table. However, if enough resources are estimated below the ground water table, the same may be explored after conducting detailed geological studies by GSI and hydro- geological studies by CGWB or NIH or institute of national repute, and ensuring that no damage to the land stability/ water aquifer system shall happen. The details/ outcome of such study may be reflected/incorporated in the EIA/EMP report of the mine appropriately. (ii) Natural watercourse and/or water resources should not be obstructed due to any mining operations. Regular monitoring of the flow rate of the springs and perennial nallas should be carried out and records should be maintained. Further, regular monitoring of water quality of nallas and river passing thorough the mine lease area (upstream and downstream locations) should be carried out on monthly basis. (iii) Regular monitoring of ground water level and its quality should be carried out within the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring should be carried out on monthly basis. (iv) In order to optimize water requirement, suitable conservation measures to augment ground water resources in the area should be undertaken in consultation with Central Ground Water Board (CGWB). (v) Suitable rainwater harvesting measures on long term basis should be planned and implemented in consultation with CGWB, to recharge the ground water source. Further, CGWB can prepare a comprehensive plan for the whole region. (vi) Appropriate mitigation measures (viz. ETP, STP, garland drains, retaining walls, collection of runoff etc.) should be taken to prevent pollution of nearby river/other water bodies. Water quality monitoring study should be conducted by State Pollution Control Board to ensure quality of surface and ground water sources on regular basis. The study can be conducted through NABL/ NABET approved water testing laboratory. However, the report should be vetted by SPCB. (vii) Industrial wastewater (workshop and wastewater from the mine) should be properly collected, treated in ETP so as to conform to the

discharge standards applicable. (viii) Oil and grease trap should be installed before discharge of workshop effluents. Further, sewage treatment plant should be installed for the employees/colony, wherever applicable. (ix) Mine lease holder should ensure that no silt originating due to mining activity is transported in the surface water course or any other water body. Appropriate measures for prevention and control of soil erosion and management of silt should be undertaken. Quantity of silt/soil generated should be measured on regular basis for its better utilization. (x) Erosion from dumps site should be protected by providing geo-textile matting or other suitable material, and thick plantation of native trees and shrubs should be carried out at the dump slopes. Further, dumps should be protected by retaining walls. (xi) Trenches / garland drain should be constructed at the foot of dumps to arrest silt from being carried to water bodies. Adequate number of check dams should be constructed across seasonal/perennial nallas (if any) flowing through the mine lease areas and silt be arrested. De-silting at regular intervals should be carried out and quantity should be recorded for its better utilization, after proper soil quality analysis. (xii) The water so collected in the reservoir within the mine should be utilized for the sprinkling on hauls roads, green belt development etc. (xiii) There should be zero waste water discharge from the mine. Based on actual water withdrawal and consumption/ utilization in different activities, water balance diagram should be prepared on monthly basis, and efforts should be made to optimize consumption of water per ton of ore production in successive years. Responsibility: Individual Mine Lease Holders, SPCB and CGWB.

19) Land/ Soil/ Overburden Related: Project Proponent shall implement the following mitigation measures: (i) The top soil should temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long (not more than 3 years or as per provisions mentioned in the mine plan/ scheme). The topsoil should be used for land reclamation and plantation appropriately. (ii) Fodder plots should be developed in the non-mineralised area in lieu of use of grazing land, if any. (iii) Over burden/ low grade ore should be stacked at earmarked dump site (s) only and should not be kept active for long period. The dump height should be decided on case to case basis, depending on the size of mine and quantity of waste material generated. However, slope stability study should be conducted for larger heights, as per IBM approved mine plan and DGMS guidelines. The OB dump should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles should be undertaken for stabilization of the dump. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Proper records should be maintained regarding species, their growth, area coverage etc. (iv) Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from mine operation, soil, OB and mineral dumps. The water so collected can be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly de-silted, particularly after monsoon and should be maintained properly. Appropriate documents should be maintained. Garland drain of appropriate size, gradient and length should be constructed for mine pit, soil, OB and mineral dumps and sump capacity

should be designed with appropriate safety margin based on long term rainfall data. Sump capacity should be provided for adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and de-silted at regular intervals. (v) Backfilling should be done as per approved mining plan/scheme. There should be no OB dumps outside the mine lease area. The backfilled area should be afforested, aiming to restore the normal ground level. Monitoring and management of rehabilitated areas should continue till the vegetation is established and becomes self-generating. (vi) Hazardous waste such as, waste oil, lubricants, resin, and coal tar etc. should be disposed off as per provisions of Hazardous Waste Management Rules, 2016, as amended from time to time. Responsibility: Individual Mine Lease Holders.

20) Ecology/Biodiversity (Flora-Fauna) Related: Project Proponent shall implement the following mitigation measures: (i) All precautionary measures should be taken during mining operation for conservation and protection of endangered fauna namely elephant, sloth bear etc. spotted in the study area. Action plan for conservation of flora and fauna should be prepared and implemented in consultation with the State Forest and Wildlife Department within the mine lease area, whereas outside the mine lease area, the same should be maintained by State Forest Department. (ii) Afforestation is to be done by using local and mixed species saplings within and outside the mining lease area. The reclamation and afforestation is to be done in such a manner like exploring the growth of fruit bearing trees which will attract the fauna and thus maintaining the biodiversity of the area. As afforestation done so far is very less, forest department needs to identify adequate land and do afforestation by involving local people in a time bound manner. (iii) Green belt development carried out by mines should be monitored regularly in every season and parameters like area under vegetation/plantation, type of plantation, type of tree species /grass species/scrubs etc., distance between the plants and survival rate should be recorded. (iv) Green belt is an important sink of air pollutants including noise. Development of green cover in mining area will not only help reducing air and noise pollution but also will improve the ecological conditions and prevent soil erosion to a greater extent. Further, selection of tree species for green belt should constitute dust removal/dust capturing plants since plants can act as efficient biological filters removing significant amounts of particulate pollution. Thus, the identified native trees in the mine area may be encouraged for plantation. Tree species having small leaf area, dense hair on leaf surface (rough surface), deep channels on leaves should be included for plantation. (v) Vetiver plantation on inactive dumps may be encouraged as the grass species has high strength of anchoring besides medicinal value. (vi) Details of compensatory afforestation done should be recorded and documented by respective forest divisions, and State Forest Department should present mine-wise annual status, along with expenditure details. Responsibility: Individual Mine Lease Holders and State Forest & Wildlife Department.

21) Socio-Economic Related: Project Proponent shall implement the following mitigation measures: (i) Public interaction should be done on regular basis

and social welfare activities should be done to meet the requirements of the local communities. Further, basic amenities and infrastructure facilities like education, medical, roads, safe drinking water, sanitation, employment, skill development, training institute etc. should be developed to alleviate the quality of life of the people of the region. (ii) Land outtees and land losers/affected people, if any, should be compensated and rehabilitated as per the national/state policy on Resettlement and Rehabilitation. (iii) The socio-economic development in the region should be focused and aligned with the guidelines/initiatives of Govt. of India/ NITI Aayog around prosperity, equality, justice, cleanliness, transparency, employment, respect to women, hope etc. This can be achieved by providing adequate and quality facilities for education, medical and developing skills in the people of the region. District administration in association with mine lease holders should plan for “Samagra Vikas” of these blocks well as other blocks of the district. While planning for different schemes in the region, the activities should be prioritized as per Pradhan Mantri Khanij Kshetra Kalyan Yojna (PMKKKY), notified by Ministry of Mines, Govt. of India, vide letter no. 16/7/2017-M.VI (Part), dated September 16, 2015. Responsibility: District Administration and Individual Mine Lease Holders.

22) Road Transport Related: Project Proponent shall implement the following mitigation measures: (i) All the mine lease holders should follow the suggested ore transport mode (SOTM), based on its EC capacity within next 5 years. (ii) The mine lease holders should ensure construction of cement road of appropriate width from and to the entry and exit gate of the mine. Further, maintenance of all the roads should be carried out as per the requirement to ensure dust free road transport. (iii) Transportation of ore should be done by covering the trucks with tarpaulin or other suitable mechanism so that no spillage of ore/dust takes place. Further, air quality in terms of dust, PM10 should be monitored near the roads towards entry & exit gate on regular basis, and be maintained within the acceptable limits. Responsibility: Individual Mine Lease Holders and Dept. of Steel & Mines.

23) Occupational Health Related: Project Proponent shall implement the following mitigation measures: (i) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects periodically. (ii) Occupational health surveillance program for all the employees/workers (including casual workers) should be undertaken periodically (on annual basis) to observe any changes due to exposure to dust, and corrective measures should be taken immediately, if needed. (iii) Occupational health and safety measures related awareness programs including identification of work related health hazard, training on malaria eradication, HIV and health effects on exposure to mineral dust etc., should be carried out for all the workers on regular basis. A full time qualified doctor should be engaged for the purpose. Periodic monitoring (on 6 monthly basis) for exposure to respirable minerals dust on the workers should be conducted, and record should be maintained including health record of all the workers. Review of impact of various health measures undertaken (at an interval of 3 years or

less) should be conducted followed by follow-up of actions, wherever required. Occupational health centre should be established near mine site itself. Responsibility: Individual Mine Lease Holders and District Administration (District Medical Officer).

Annexure-V

Standard EC conditions for Mineral Beneficiation Plants:

Standard EC conditions for mineral beneficiation plants which are mentioned in Ministry's OM No. 22-234/2018-IA-III dated 09th August 2018.

List of member of Expert Appraisal Committee participated through VC

S.No	Member Name	Member Address	Designation	28 th May	29 th May	1 st June
1	Dr. S.R. Wate	Add. 148/149, Nagar Vikas Society, Narendra Nagar, Nagpur-440015, Maharashtra	Chairman	Yes	Yes	Yes
2	Shri.Sharath Kumar Pallerla	3rd Floor, Vayu Block, Indira Paryawaran Bhawan, MoEF&CC, Jorbhag, New Delhi-11003	Member Secretary	Yes	Yes	Yes
3	Shri B Ramesh Kumar	H-No. 6-1-134/6, Balram Compound, Padmarao Nagar, Secundrabad-500025, Andhra Pradesh	Member	Yes	Yes	Yes
4	Prof. S. Ramakrishna Rao	50-120-9/1, Tulasi Mani Regency North Extension, Seethammadhara, Visakhapatnam - 530013 Andhra Pradesh.	Member	Yes	Yes	Yes
5	Shri Santosh Gupta	Flat No. 405, Block –B, Gaur Green Vista, Nyay Khand -1, Indrapuram, Ghaziabad-201014	Member	Yes	Yes	Yes
6	Dr. (Ms.) Asha Rajvanshi	Wildlife Institute of Inida, Chandrabani, Dehradun-248001	Member	No	Yes	Yes
7	Dr. Ajay Deshpande	Building A-26, Flat-403, Happy Valley Homes, Manpada, Ghodbunder Road, Thane (West) - 400610, Maharashtra	Member	Yes	Yes	Yes
8	Shri G.P. Kundargi	Plot No. 32, MOIL Vatika, Chicholi Road, Fetri, Nagpur 441501, Maharashtra	Member	Yes	Yes	Yes
9	Dr. A.N. Malhotra	C-6, SubhavnaNiketana, Road No. 41, Pitampura, Delhi-110034	Member	Yes	Yes	Yes

10	Dr. Gurdeep Singh	Centre of Mining Environment, Department of Environmental Science & Engg. Indian Institute of Technology (Indian School of Mines), Dhanbad-826004	Member	Yes	Yes	Yes
11	Dr. Parimal Chandra Bhattacharjee	A/3 Asiyana Housing Complex Maligaon, Guwahati-781011, Assam	Member	No	No	No
12	Prof. Mukesh Khare	Department of Civil Engineering, IIT, Delhi	Member	No	No	No
13	Mr. V. K. Soni	Government of India, Ministry of Earth Sciences, India Meteorological Department, Mausam Bhawan, Lodi Road, New Delhi – 110003	Member	No	No	No
14	Shri Peeyush Sharma	Regional Controller of Mines, IBM Block D, Second Floor, Indira Bhavan, Civil Lines, Nagpur - 440001	Member	Yes	Yes	Yes
15	Sh. Manoranjan Doley	Representative of DGMS, DMS, Gaziabad Region	Member	Yes	No	No
16	Sh. Aftab Ahmed	Representative of DGMS, DMS, Gaziabad Region	On behalf of DGMS representative	No	Yes	Yes

Note: Dr. A.N. Malhotra informed that he will not be participating during the deliberations of agenda item no. 2.2 of the 16th EAC meeting and deliberations on amendments of the same proposal in this meeting. He did not part of the deliberations.

Email

sharath.kr@gov.in

Re: Draft Minutes of the MoM

From : satishwate@gmail.com

Sat, Jun 06, 2020 09:23 AM

Subject : Re: Draft Minutes of the MoM**To :** Sharath Kumar Pallerla <sharath.kr@gov.in>

Dear Dr. Sharath,
Excellent! It's good to receive comments from members. Minutes are now in perfect order.

Minutes approved for further na.

Satish Wate
Chairman EAC Non Coal

Sent from my iPhone

On Jun 6, 2020, at 8:59 AM, Sharath Kumar Pallerla <sharath.kr@gov.in> wrote:

Respected chairman,

It is to submit that, based on the inputs / suggestions from Sh. B. Ramesh Kumar, Sh. Santosh Gupta, Dr. Asha Rajavamshi, Dr. Ajay Deshpandey, Dr. Kundargi, Dr. AN Malhotra, Dr. Gurdeep Singh, Sh. Peeyush Sharma through text message, Dr. Ramesh Anguluri in respect of corrections in the submissions of IREL proposal, revised and final draft has been prepared and attached herewith for **kind perusal and approval for uploading on the PARIVESH website.**

Regards,

From: "Sharath Kumar Pallerla" <sharath.kr@gov.in>
To: satishwate@gmail.com, virarkay@yahoo.com, rkrunkari@yahoo.com, santoshg75@gmail.com, asharajvanshi@gmail.com, deshpandejay1@gmail.com, gpkundargi@gmail.com, ajitkumarmalhotra463@gmail.com, gurdeep@iitism.ac.in, bhattapc@gmail.com, "VIJAY KUMAR SONI" <vijay.soni@imd.gov.in>, "Director General" <dg@dgms.gov.in>, kharemukesh@yahoo.co.in, "CCOM Nagpur" <ccom@ibm.gov.in>, manoranjandoley@gmail.com
Cc: "Amit Vashishtha" <amit.vashishtha@nic.in>, "Pankaj Verma" <pankaj.verma@nic.in>, "RAMESH ANGULURI" <ramesh.anguluri@gov.in>
Sent: Thursday, June 4, 2020 7:14:05 PM
Subject: Draft Minutes of the MoM

Respected sir / Ma'am,

As per the deliberations of the meeting of Expert Appraisal Committee held during 28th -29th May and 1st June, 2020 and also concision made on the recommendations of the committee on the proposals deliberated at the end of the meeting, the draft minutes of the meeting is attached herewith for kind perusal and approval by tomorrow please.

Regards,

Sharath Kumar Pallerla,
Member Secretary, EAC (Non-coal).



<Final MoM of 17 EAC.docx>
