

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

SUMMARY RECORD OF 21st MEETING OF THE COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 21st 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 September 23-25th, 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 20th EAC Meeting held during August, 19-21, 2020

1.11 The minutes of 20th EAC Meeting held during 19-21st August, 2020 was placed before the members of the Committee during 21st EAC meeting held on 23rd to 25th sep, 2020. The Member Secretary informed the Committee that the project proponents, submitted a request for the following amendments in 20th EAC meeting minutes in respect of following items:

A. Proposed Pachhtardi Limestone Mine (ML Area- 18.0388 ha) with Production Capacity 0.35 million TPA at Village: Pachhtardi, Taluka: Bhanvad, District: DevbhumiDwarka (Erstwhile Jamnagar) (Gujarat) of M/s Shree Digvijay Cement Company Limited.

Page No.	Para No.	Line No.	As Per MOM of 20thEAC (Non-Coal Mining) Meeting	Corrigendum Requested by project proponent	Recommended by EAC during 21st EAC
173	20 (ii)	1 st	No mining shall be carried till the shifting of school to alternate site. The Project proponent shall undertake the shifting of school to alternative site in consultation with District Education officer, inter alia, including requisite facilities	Request is to grant permission to start mining with a condition that there shall be no mining within 300 m of the School till the school is shifted to alternate site as per directives of EAC. Further, it is to inform with reference to Approved Mining	The project proponent shall take all precautions to see that there is no impact on school function till it is shifted to new agreed premises in a time bound manner within 2 years from the date of opening of mine. A safe distance of 300 meters should be maintained from the school, in which there should not be

			<p>such as play ground, drinking water and furniture.</p>	<p>Plan that the Mining is proposed to be started from farthest end of the school without Drilling & Blasting, so there is no impact envisaged on functioning of the school, that have already been emphasized and appraised to the committee.</p> <p>DGMS considers 45 m as safe distance in case of No Blasting and 300 m in case of Blasting. The structure being school, 300 m (without Drilling & Blasting) may please be considered as safety zone, to be on safer side.</p> <p>We shall ensure that the mining, including transportation is at least 300 m. away from the school so that there is no disturbance in the school activities as well as safety of the school students & teachers is maintained till the school is shifted to alternate site.</p>	<p>mining.</p> <p>In the mining area adjacent to 300 meters boundary, mining should be carried out without use of explosives and with controlled mining activities, so that the school activities are not affected due to noise, vibration and dust.</p> <p>Construction of new school building should be started as early as possible and all efforts should be made to see that school in new premises as agreed by Panchayat begins immediately after that.</p>
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B. Seethainagar Limestone Mine located at Villages: Alambadi, Mallapuram, and Karikkali, Tehsil: Vendasandur, District: Dindigul, State: Tamil Nadu in favor of M/s. Chettinad Cement Corporation Private Limited- Permission for removal/disposal of developmental Waste as rough stone @ 2.12 million TPA in G.O.No.81 (ML Area 251.59 ha) in existing EC under Para 7(ii) of EIA notification, 2006 without change in total excavation.

Page No.	Para No.	Line No.	As Per MOM of 20 th EAC (Non-Coal Mining) Meeting	Corrigendum Requested by project proponent	Recommended by EAC during 21 st EAC
179	15	3 rd to 8 th	The Committee recommended the proposal for grant of EC under para 7(ii) of EIA Notification 2006 for dispatch of rough stone from the old 8 dumps proposed (Extent: 38.050 Hectares) in addition to limestone keeping the total dispatch same as 2.97 million TPA.	As per existing EC/approved mining plan limestone production capacity of GO 81 mining lease is 2.97 MTPA and 3.98 MTPA is waste handling and total excavation is 6.95 MTPA. In this connection we would like to apprise you that waste handling from mine pit will be reduced from 3.98 MTPA to 1.87 MTPA and instead of that the disposal of developmental waste will be from permitted dumps of about 2.11 MTPA, so that the total handling of waste will be within EC approved quantity=2.11(from dumps to outside mining lease for other purposes) +1.87 MTPA (developmental waste generated from mines to dumps) = 3.98 MTPA. Therefore, we would like to request you to accord EC allowing the disposal of rough stone to the extent possible in addition to the limestone dispatch from G.O. 81 is 2.97 MTPA and total dispatch of limestone from all three mining leases is 4.5 MTPA as per EC vide letter no.	The Committee has not agreed, as per the request of the project proponent due to the following reasons: (i) Mass balance is not clear in terms of excavation and decrease in dump waste together. Project proponent is requested to submit Mass balance covering total excavation, total production of Lime stone, Total waste excavation from the pit, total rough stone excavation, including Total quantity of dispatches of Limestone & Rough stone (waste) visa-vis permitted Maximum Excavation, Production & dispatches as per EC. All figures should be either in Cubic metres or Metric Tonne. (ii) The committee noted that the total

				J-11011/518/2009-IA-II(M) dt. 02.08.2010.	<p>transportation outside the mine lease area as appraised in the committee was 2.97 MTPA.</p> <p>(iii)The Committee noted that there are no details about the total tonnage of transport outside the mine lease including lime stone and waste dump.</p> <p>(iv) Project proponent is requested to submit the above details for further consideration in the matter, till then the minutes of 20th EAC stands <i>status-quo</i>.</p>
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C. Revalidation of Environmental Clearance under EIA Notification 2006 as per Gazette Notification dated 06.04.2018 for Nimbahera-Ahirpura Limestone Mine (ML No.-02/1997, ML Area- 403.1875 ha) at total excavation capacity of 0.8949 Million TPA (Limestone: 0.8609 Million TPA, Subgrade Mineral: 0.0050 Million TPA, Interburden: 0.0220 Million TPA and Top Soil:-0.007 Million TPA), situated at Village-Ahirpura&Murlia, Tehsil- Nimbahera, District- Chittorgarh, Rajasthan by J. K. Cement Works.

Page No.	Para No.	Line No.	As Per MOM of 20 th EAC (Non-Coal Mining) Meeting	Corrigendum Requested by project proponent	Recommended by EAC during 21 st EAC
195-196	9	17 th	The committee, after detailed deliberations, has decided that in certain cases the public hearing can be exempted, but the PP	Request to incorporate the matter regarding exempt of formal public consultation	The Committee not agreed.

		<p>needs to invite the suggestions/objections as wider part of public consultations for the project, as per the procedure prescribed in EIA Notification, 2006. The committee also decided that for all these class of cases, the exemption of component of public hearing can be considered, if the proposal meets the following criteria:-</p> <p>i. The project must have undergone a Public hearing under EIA Notification, 1994 as part of its appraisal earlier for the same capacity and ML area, during life of the project;</p> <p>ii. The present proposal shall be with 'No increase in the production capacity and Mining lease;' and</p> <p>iii. No change in mining namely, mining method, mining plan, mineral transportation, water requirement, reclamation plan.</p> <p>iv. The Proposal shall not be a violation case.</p>	<p>and consideration of Public opinion in writing.</p>	
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1.12 The following typographical error notice during process of proposals are as follows:

D.Production capacity of China Clay 0.24 million TPA(ROM) and production of RED Ochre with a capacity of 0.045 million TPA(ROM) In the ML area of 278.69 Ha by M/s Bhilwara Mines & Minerals, located at village(s) Itawa&kesarpura, Tehsil-Kotri, DistrictBhilwara, Rajasthan [Proposal No: IA/RJ/MIN/164255/2020 File No. J-11015/41/2012 - IA.II(M)] -Extension of validity of EC.

Page No.	Para No.	Line No.	As Per MOM of 20 th EAC (Non-Coal Mining) Meeting	May be read as
181	2	1-3	As per EIA Notification dated 14 th September, 2006 as amended from time to time, the project falls under Category B or Activity 1(a) as the mining lease area is less than 100 ha.	As per EIA Notification dated 14 th September, 2006 as amended from time to time, the project falls under Category A as the mining lease area is more than 100 ha.

E. Mining of Mineral Bajri (Minor Mineral) with proposed production capacity of 1.12 Million TPA (ROM) by lessee Shri Abhishek Chaudhary, located at Revenue Village(s) of Tehsil-Raipur, District-Bhilwara, Rajasthan (MLA 836.13ha). [F. No. J-11015/232/2013-IA.II (M); Proposal No. IA/RJ/MIN/20302/2013] – Reconsideration of EC

Page No.	Para No.	Line No.	As Per MOM of 20 th EAC (Non-Coal Mining) Meeting	May be read as
79	21	1 st	The Proponent submitted that total project cost will be approx. Rs. 30 Lakhs	The Proponent vide letter dated 2.06.2020 submitted that total project cost is Rs. 4.50 crore.

F & G

Page no 184, agenda no 2.13 at line no 6 the proposal no was mentiond as IA/RJ/MIN/166045/2020 instead of IA/OR/MIN/166045/2020.	The same may read as IA/OR/MIN/166045/2020
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Page no 135, agenda no 2.6 para no.3 line no3 it was mentioned that Ministry vide letter No. J-11015/28/2001-IA.II(M) dated 24.12.2004 instead of Ministry vide letter No. J-11015/28/2001-IA.II(M) dated 24.12.2002.	The same may be read as Ministry vide letter No. J-11015/28/2001-IA.II(M) dated 24.12.2002.
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Member secretary informed that above D to G are typographical error and factual in nature. Therefore, the committee confirmed the 20TH EAC minutes with the above said changes.

2.1: River Sand Mining with Production Capacity of 42 Lakh TPA Sand by M/s Shekhawat Associates located near 26 revenue villages viz. Dhuwala, Bagudaar, Kesharpura, Keshavvilas, Madhopura and others., TehsilJahajpur, District- Bhilwara (Rajasthan) (1299ha.) – [Proposal No.IA/RJ/MIN/27046/2013; File No.J-11015/259/2013-IA.II (M)] – Reconsideration of EC.

The proposal of M/s Shekhawat Associates for mining of Bajri (Minor Mineral) at 26 revenue village(s) of Tehsil-Jahazpur, District-Bhilwara, Rajasthan with proposed production capacity of 42.0 Lakh TPA (ROM) of Bajri in the mine lease area of 1299.0ha. The mine lease area lies in Banas River bed. The Latitudes and Longitudes of the mine lease area lies between 25^o45'00" N to 25^o29'00" N and 75^o06'00" E to 75^o 19'00" E on Survey of India toposheet number 45 O/2, 45 O/3, 45 O/5, 45 O/6 and 45 O/7. As per Seismic Zoning Map of India IS:1893(Part-1):2002, 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. PP vide its letter dated 29.07.2020 submitted that a certificate w.r.t. homogeneous Mining lease within 500 meters of this lease is provided Mining Engineer, DMG, Bhilwara vide its letter No. Kha.A./Bhil/Ma.chi/PramanPatra/Kha.Pa.117/2012/220 dated 15.06.2020.

3. The proposal was considered by the Expert Appraisal Committee in its 11th Meeting held during 25th to 27th September, 2013 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The ToR was issued by MoEF vide letter No. J-11015/259/2013-IA.II (M), dated 17th October, 2013. PP vide Proposal No. IA/RJ/MIN/27046/2013 dated 05.03.2015 submitted the EIA/EMP Report online to Ministry for seeking environmental clearance after conducting Public Hearing for Production Capacity 42 Lakhs TPA of Sand in 1299 ha. The mine lease area is located near 26 revenue villages viz. Dhuwala, Bagudaar, Kesharpura, Keshavvilas, Madhopura and others, Tehsil-Jahajpur, District-Bhilwara (Rajasthan).

4. The proposal of Environmental Clearance was appraised by the Reconstituted Expert Appraisal Committee in its 34th meeting held during May 27-29, 2015. The Committee deliberated at length the information submitted by PP and recommended the proposal for environmental clearance for Mining of Mineral Bajri (Minor Mineral) with proposed production capacity of 42.0 Lakhs TPA (ROM) subject to submission of letter from the State Govt. on Aravali Notification.

5. Hon'ble Supreme Court vide its judgment dated 16.11.2017 in the matter of SLP(C) No.34134 of 2013 (State of Rajasthan Vs Nature Club of Rajasthan) has restrained river sand/ bajri mining in the State of Rajasthan in respect of 82 Letter of Intent (LoI) holders who had submitted their applications to the MoEFCC for grant of EC. As per directions of Hon'ble Supreme Court dated 16/11/2017, as directed to carry out Scientific Replenishment Study and submit the report expeditiously to the Ministry of Environment, Forest and Climate Change for appraisal before EAC.

6. Further, as per Hon'ble Supreme court order dated 6th December, 2019, the Ministry of Environment, Forest and Climate Change (MoEF&CC) was directed to process pending applications stating that "Hence, in the meantime we direct that the aforesaid applications may be completed and appropriate orders be passed thereon by the Ministry of Environment, Forest and Climate Change (MoEF&CC)". Accordingly, after receipt of documents, proposal was considered in the EAC meeting.

7. The proposal was placed in the 21st EAC meeting held during 23rd to 25th Sept., 2020, wherein the project proponent was not able to connect through video conference, due to some technical problem on 23rd Sept., 2020 (1st day of the meeting). Further, similar proposals of Bajri (river sand) mining were considered during the following two days i.e. on 24th and 25th Sept., 2020 and also, the Committee noticed that consultant is same for all Sand Mining Proposals of Rajasthan. The Member Secretary informed the committee that for the instant proposal, the baseline data was generated during October to December, 2013 and the Public Hearing was conducted on 19th December, 2014.

The committee observed that (i) the baseline data is of 7 years old. (ii) The list of flora and fauna was not authenticated by the chief wildlife warden. (iii) Supporting documents were not submitted according to the Enforcement & Monitoring guidelines of sand mining 2020. (iv) no detailed transportation plan as per the Enforcement & Monitoring guidelines of sand mining 2020.

8. In view of the above, the committee **deferred** the proposal and sought the following information: -

- (1) The project proponent needs to carry out the fresh baseline data for one-month period (non-monsoon season). The project proponent 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 project proponent should submit the original test reports and certificates of the labs which will analyze the samples.

- (2) The project proponent needs to submit the list of flora and fauna, list of schedule-1 species authenticated by the chief wildlife warden.
- (3) The project proponent needs to submit the action plan as per Enforcement & Monitoring guidelines of sand mining 2020.
- (4) The project proponent needs to submit the detailed transportation plan as per the Enforcement & Monitoring guidelines of sand mining 2020. Project proponent should clearly show the transport route of the mineral and protection and mitigative measure to be adopted during transportation.
- (5) The project proponent needs to compare the current baseline data with the previous baseline data. If any changes exist, then detailed mitigation measures needs to be provided.
- (6) The project proponent shall prepare the conservation plan in consultation with the State Forest Department and approved by the Chief wildlife warden.
- (7) The project proponent needs to submit the detailed plan in tabular format (year-wise) for afforestation and green belt development in and around the mining lease. The project proponent 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.
- (8) Project proponent should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations.

2.2 Kumaraswamy Iron Ore Mine (ML No: 1111, M.L. area 639.80 Ha, 8.6 MTPA (ROM 7 MTPA and Waste Excavation 1.6 MTPA) Iron ore production capacity) of M/s. NMDC Limited, Tehsil Sandur, Ballari District, Karnataka [Proposal No. IA/KA/MIN/75088/2018; File No.IA-J-11015/93/2018-IAII(M); Consultant: M/s. Ecomen Laboratories Pvt. Ltd]– Environmental Clearance

The Proposal of M/s. NMDC Limited is for total excavation of 8.6 Million TPA of material [7.0 MTPA Iron Ore (ROM) & 1.6 MTPA waste] from Kumaraswamy Iron Ore Mine (Mining Lease Area 639.80 ha) and installation of 1800 TPH crushing and screening plant located at Villages Deogiri, Taluka- Sandur, District- Ballari Karnataka. The mining lease is covered under SOI Toposheet D43E12(old57A/12) and bounded by Latitude between 15°00'00"N to 15° 01' 20"N and Longitude between 76° 33' 55"E to 76° 37' 10"E.

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category "A", Projector Activity 1(a) as the Mining lease area is more than 100 Ha.

3. As the Environmental Clearance was already been granted to PP vide letter No J11015/20/2002-IA.II(M) dated 29.10.2004 under EIA Notification 1994, the PP applied as per provision of S.O. 1530(E) dated 6.04.2018 for getting environmental clearance under EIA Notification 2006. The PP applied online vide Proposal No. IA/KA/MIN/75088/2018 dated 22.05.2018 and submitted Form- 1, and PFR. The proposal was placed in the EAC meeting held during 15th - 16th November, 2018. The Committee noted that as per the notification dated 06.04.2018; the Project Proponent applied before 5th October 2018 and submitted the Form-1 and Pre-Feasibility Report. The Committee after due deliberation recommended the proposal for grant of ToR. The Ministry granted the TOR on 10.12.2018. PP applied for amendment in TOR which was considered & recommended in the 10th EAC meeting held during October 21-22, 2019. MoEF&CC issued the Amendment to TOR vide letter dated 09.12.2019 by withdrawing TOR point nos: 1 & 2 of standard TOR for mining projects. PP then applied for EC vide Proposal No. IA/KA/MIN/75088/2018 dated 16.06.2020 and has submitted the EIA/EMP Report and the proposal was considered in EAC meeting held during **23rd July, 2020** wherein the committee **deferred** the proposal for want of requisite information. PP vide letter no. NMDC/KIOM/EC/2020/2289 dated 26.08.2020 submitted the information, accordingly the proposal reconsidered in the EAC in its 21st meeting held on **23rd September, 2020**.

4. The PP presented the point-wise compliance to the additional information sought by the EAC, as given under:

(i) PP needs to verify the waste quantity submitted in the EIA Report.

PP Reply- PP has submitted that the waste quantity is verified and the quantity of waste generation shall be 33.545 million tons w.e.f 2019-20 till life of mine. The quantity of waste already generated till 2018-19 is 5.17 million tons and is dumped at AD-1 & AD-2 waste dumps. Thus, the total quantity of waste generation shall be 38.715 million tons.

The total waste proposed to be generated till life of mine shall be 38.715 MT. The quantity of waste to be handled during the life of the mine is 36.132 Million Tons (as on 1.4.18). Waste (till life of mine) 38.7 MT.

(ii) PP needs to undertake air quality modeling and should also submit details for selection of monitoring station, values at sensitive receptors etc.

PP Reply- PP has submitted that the monitoring stations for Ambient Air Quality are identified as per TOR condition no: 25. The monitoring studies for AAQ were conducted during Summer season (March to May 2019) in the study area of Kumaraswamy Iron Ore Mine (ML no: 1111). One meteorological station was also set up at Mines Office for generation of meteorological data. The pre-dominant wind direction observed during summer season 2019 is SSW with wind speed varying from 2.40mm/sec to above 10.10mm/sec. The AAQ locations represent the study area, down wind direction, up wind direction, etc. PP has submitted that the results of ambient air quality standards are within NAAQS limits.

(iii) PP shall clarify whether the remaining forest land will be diverted or surrendered. In case it is diverted than status of Forest Clearance needs to be submitted.

PP Reply- PP has submitted that the remaining forest land of 159.01 Ha shall be retained within Mining Lease of Kumaraswamy Iron Ore Mine as per guidelines issued by Director, F.C. Division, MOEF&CC, New Delhi vide F.No: 11-599/2014-FC dated 1/4/2015 (Annexure-1). In the guidelines, the relevant portion is re-produced below:

(v) In case of existing mining leases having forest land in part or in full, where approval under Section 2 of the FC Act for a part of the forest land has only been obtained, Central Government hereby accords general approval under Section 2(iii) of the FC Act for the remaining area of the forest land falling within such mining leases, subject to following conditions:

(a) State Government shall, within a period of one year from the date of issue of this letter, realize from the user agency, NPV of the entire forest land falling in the mining lease, in case NPV of such forest land has not already been realized;

In view of the above guidelines and based on request by NMDC to pay NPV charges for retaining remaining forest land within Mining lease, the PCCF (HOFF), Government of Karnataka, Bangalore vide letter no: A5(1)/ MNG.GR.28/15-16 dated 29/4/2016 addressed to Chief Conservator of Forests, Ballari has clarified that the application of M/s. NMDC Ltd, ML No: 1111 is to be considered as per the MOEF guidelines and directed to take necessary action. In view of the above, and as desired by the Dy. Conservator of Forests, Ballari, a joint survey has also been conducted by Dy. RFO, Sandur, AE-DMG, Hospet and Taluk Surveyor, Sandur. As per survey, it is concluded that the un-diverted forest land is having an area of 159.01 Ha.

Dy. Conservator of Forests, Ballari vide letter no: MI/MNG/NMDC/ML NO: 1111/AR/CR-13/2014-15 dated 12/8/2016 has issued demand notice for payment of

NPV charges of Rs.12,76,85,030/- for remaining forest land of 159.01 Ha under section 2(iii) of F.C. Act, 1980 under general approval clause as accorded by Gol vide reference dated 1/4/2015. Based on the above demand notice, NMDC has paid NPV charges of Rs.12,76,85,030/- on 23/8/2016 through Karnataka CAMPA AC (Corporation Bank, Bangalore) for the balance un-diverted area of 159.01 Ha forest land and same had been informed to the Dy. Conservator of Forests, Ballari vide DNM/ENV/85M/2015/1458 dt.27.08.2016 (Annexure-5)

Hence, deemed approval under section 2(iii) of FC Act, 1980 has been obtained as per guidelines issued by MOEF&CC vide letter dated 1/4/2015 for retaining the remaining forest land of 159.01 Ha within 639.80 Ha Mining Lease of Kumaraswamy Iron Ore Mine.

The general approval under section 2(iii) of FC Act has also been communicated to Ministry at the time of seeking TOR for above proposal and also taken into consideration by MOEF&CC while issuing Terms of reference vide letter no: J11015/93/2018-IA.II(M) dated 10/12/2018.

In order to protect the remaining forest land, steel mesh fencing has already been done demarcating the separation of diverted and remaining forest land by erecting intermediate corner pillars.

At present, the life of Kumaraswamy Iron Ore Mine at rated capacity of 7 MTPA ROM Iron ore is 23 years from 2019-20. NMDC being Public Sector Enterprise under Ministry of Steel is committed to supply Iron Ore to Steel, Pellet and Sponge Iron Industries located in not only in Ballari but in other parts of the country also. One of the biggest customer of Iron Ore from Kumaraswamy Iron Ore Mine is JSW Steel (16 MTPA capacity) at Tornagallu, Ballari.

Further, the crude steel production is to be enhanced from existing 111 MTPA to 169 MTPA by 2024 as per Steel Ministry's National Steel Policy (NSP) 2017. NMDC is committed to meet the Iron Ore requirement of the country as per Policies of the Government of India specifically National Steel Policy.

The ore body at Kumaraswamy Iron Ore Mine is dipping towards remaining forest land and there is high probability of ore being present there. Hence, NMDC retained the remaining forest land within Mining lease for future exploration / proving of mineral reserves in this area. If the reserves are proved, it will add to the resource base, will increase life of mine and will be a great value addition to NMDC.

The Mining Plan was also approved for total lease area of 639.80 Ha and Government of Karnataka has also extended the lease period for entire 639.80 Ha under section 8A(8) of MMDR Amendment Act, 2015 read with Rule 3(1) of the Mineral (Mining by Government Company) Rules 2015. The above mining lease area is with NMDC since 1972.

In order to have Environmental Clearance compatible with approved Mining Plan and Lease area approved by Government of Karnataka, NMDC would like to retain the remaining forest land within sanctioned lease area as per guidelines issued by MoEF&CC vide F.No11-51/2015-FC dated 1/4/2015 for the reasons explained as above.

Observation of EAC: The Committee is of the view that if PP has paid NPV for remaining forest land of 159.01ha within the mine lease area then PP shall submit the stage-I FC obtained from the Ministry.

(iv) PP shall submit list of schedule-1 species duly authenticated by concerned department. In case there is presence of Schedule-1 species than conservation plan needs to be prepared for the same. In addition to this PP should submit the proof of submission of conservation plan to Chief Wildlife Warden.

PP Reply- PP has submitted the list of schedule-1 species authenticated by Deputy Conservator of Forest, Bellary Division, Bellary. PP has also submitted the copy the conservation plan for 7 nos. Schedule –1 species with budget provision of Rs. 200 Lakhs for approval to Pr. Chief Conservator of Forest/Chief Wildlife Warden, Karnataka Forest Department.

Observation of EAC: PP has submitted the list of flora and fauna; however, the same is not authenticated by the State forest department as per their records, PP has submitted their survey report to the DFO, along with the conservation plan, thus the Committee is of the view that PP should submit list of Schedule-1 species duly authenticated by concerned department as per their records. The conservation plan needs to be prepared in consultation with the State Forest & Wildlife Department for Schedule-1 species. In addition to this PP should submit the proof of submission of conservation plan to Chief Wildlife Warden.

(v) PP shall provide the issues raised during previous PH and status of implementation of compliance made during PH.

PP Reply- PP submitted that Public Hearing was conducted on 06.08.2001, and the proceedings of the Environmental Public Hearing duly signed by Dy. Commissioner and the Chairman, Environment Public Hearing Committee, Bellary District, Bellary, Karnataka. The PP has also submitted the status of the implementation and compliance made by NMDC, Kumaraswamy iron ore mine.

Observation of Committee: The public concerns made during public hearing are not addressed properly in the EIA/EMP report. The PP should make a statement

regarding point-wise compliance made for the issues raised and as mentioned in the Minutes of public hearing.

(vi) PP needs to provide the time-line for implementation of the activities proposed under CER. The activities proposed also need to be quantified for the future monitoring.

PP Reply- PP has submitted that the total capital cost of Kumaraswamy Iron Ore Mine is Rs.899/-Cr. The CER expenditure works out Rs.449.50 Lakhs (0.5% of capital cost for brown field projects as per MoEF&CC O.M No: 22-65/2017-IA.II(M) dated 1/5/2018). The CER works have been identified under Education, Drinking water, Health & Hygiene and Infrastructure. The total estimated cost as per SOR 2018-19 / DSR 2018 for various works identified under CER works out Rs.441.09 lakhs. However, budget of Rs.460.00 lakhs have been provided to take care of premium over the estimated rates quoted by contractors. The details of proposed CER works along with estimate cost, budget provided, time line for implementation, etc is given below: -

S. no	Name of Work	Estimated Cost / budget provided (Rs. In Lakhs) Capital works	Time line for Implementation (excluding the rainy season)	No. of beneficiaries	Brief Description of activity
1	Education: Construction of Dining Hall (20m X 10m) at Government High School, Donimalai.	38.41 / 44 As per SOR 2018- 19 (<i>Estimate copy at Annexure-1</i>)	9 months	Approx. 500 Students	Providing hygienic space to the students for consumption of lunch.
2	Drinking Water: Construction of 1 No. R.O. Plant (2000 Litres) capacity at Narsinghapura Village. (5.5m X 5.5m)	19.85 / 23 As per SOR 2018- 19 (<i>Estimate copy Annexure-2</i>)	9 months	Approx. 2000 Villagers	Providing potable drinking water to Narsinghapura Villagers.
3	Health and Hygiene: Construction of Primary Health Centre Building at	33.82 / 40 As per SOR 2018- 19. (<i>Estimate copy at Annexure-</i>	9 months	Approx. 2000 Villagers	Providing regular health

	Narsinghapura Village. (20 m X10m)	3)			
4	Infrastructure : Modernization	200.00 As per PWD SR (Partnership with State Govt.) (Annexure-4.	6 months	10000 Beneficiaries of 4 Taluks of Ballari district. 1. Kampli, Hospet Tq. 2. Tekkalakote Sirguppa Tq. 3. Magimavinahalli , Hagribomm -anhalli Tq. 4. Gudekote,	To improve health care at Rural level and augment maternity services to improve MMR &IMR.

(vii) PP should prepare the EMP till the lease validity and future extension and time bound, activity wise EMP along with budgetary provision both recurring & capital needs to be submitted

PP Reply- PP has submitted the Environmental Management Plan covering various works. PP has submitted that the Kumaraswamy Iron Ore Mine is an existing project and various Environmental Pollution Control measures are in place. Further, the recommendations of ICFRE suggested in R&R plan are being implemented. PP has submitted that capital cost already incurred (till 2019-20) is Rs. 1,880.60 lakhs (R&R works as per ICFRE report and DPR), capital cost (proposed) from 2020-21 to 2042-43 shall be Rs. 7,001.89 lakhs and recurring cost (proposed) from 2020-21 to 2042-43 shall be Rs. 6,615.90 lakhs. PP has submitted time bound & activity wise along with budgetary provision both capital & recurring.

(viii) PP shall submit the activities and budgetary provision till the proposed lease validity under OHS.

PP Reply- PP submitted that the fund allocation up to the year 2042-43 based on the above annual budget and considering escalation @ 5% every year works out Rs.20.733 Crores. PP submitted that annual plan for fund allocation amounts shall be Rs.50.00 lakhs which includes: -

A. Statutory Medical examinations including Initial Medical Examinations for trainees & contractual labour, Periodical Medical Examinations for employees and Stool tests for cooks of ICH shall be conducted as per Mines Rules, 1955 and Recommendations of DGMS Safety Conferences.

Details	Number	Cost (Rs.)
Statutory Periodical Medical Examination of Employees	300	6,00,000
Statutory Pre-retirement Medical Examination of Employees	50	1,00,000

Statutory Initial Medical Examination of Trainees	100	1,00,000
Statutory Medical examination of CISF personnel	80	8,00,000
Statutory Initial Medical Examination of Contractual Labour	500	10,00,000
Cooks of Indian Coffee House	62	15,500
Hospital staff medical examination	100	2,00,000
Total Amount		28,15,500

B. Eye Refraction Test of Employees, Donimalai Complex

Eye refraction tests for the drivers and the operators involved in operating HEMM shall be conducted in compliance of the Recommendations of DGMS Safety Conferences.

Project	2020 (Numbers)	Cost (Rs.)
DIOM, Donimalai	230	25,000

C. Issue of personal protective equipment's for prevention of occupational diseases.

Personal protective equipment's will be issued in compliance of MMR, 1961 for prevention of employees, contractual labour and CISF personnel from occupational diseases.

Safety Equipment's	Number	Cost (Rs.)
Ear Plugs	3000	21,920
Dust Respirators	3200	94,280
Total		1,16,200

D. In-house OHS programmes on health awareness by internal faculty

Health Awareness programmes have been planned by OHS, Donimalai in order to provide adequate knowledge to the employees and CISF personnel so as to keep themselves fit and prevent themselves from the diseases/ disorders being generated through occupation.

Description	No. Of programs	No. of participants	cost (Rs.)
Awareness Programme for employees on dengue	1	50	15,500
Awareness Programme for employees on Hypertension	1	50	15,500
Awareness Programme for employees on Tobacco and Nicotine	1	50	15,500

Awareness Programme for employees on Heart disease	1	50	15,500
Awareness Programme for employees Diabetes	1	50	15,500
Awareness Programme for employees on Life style	1	50	15,500
Awareness programme for CISF persons on Life style and HIV	3	60	20,000
Workshop on Life style disorders	1	50	15,500
Programme for Absentee employees	1	30	8,000
Training Programme for chronic alcoholic employees	1	25	7,500
Course on Stress free life for employees	1	50	15,000
Total Amount			1,59,000

E. OHS Programme on life style by external faculty for 2020-21.

Sr. No.	Description of course	Cost (Rs.)
1.	Course on Living Values	50,000
2.	Behavioral changes and stress-free life	50,000
	Total	1,00,000

F.OHC Equipment's with accessories.

Equipment Description	Cost
Digital Audiometry	600,000
Digital Spirometry	650,000
Total Amount	12,50,000

G. First Aid Boxes with First Aid items, Stretchers Cost – Rs.3, 00,000.00

PP also submitted that Covid 19 screening setup has been established with 4 isolation beds in the hospital and the patients with ILI and SARI symptoms are being referred to Sandur State Government fever clinic for further evaluation. A quarantine center with 18 beds has also been setup in the township.

24. The proposal was reconsidered in the 21st EAC meeting held during September 23-25, 2020. The EAC noted that the PP have paid NPV for remaining forest land of 159.01ha within the mine lease area, however PP could not submit the documents showing the status of Forest Clearance for the entire forest land involved in the proposed project. The EAC also noted that the FC-1 for the entire forest land need to be obtained and submitted to MoEF&CC by the PP prior to release of Environmental Clearance in terms of O.M. No. J-11013/41/2006-IA.II (I) dated 9th September, 2011. The EAC after detailed deliberations decided to **defer** the proposal for want of following information:

- I. Stage-I Forest Clearance from MoEF&CC for the entire forest land involved in the project.
- II. The documents showing validity extension of mining lease for further period up to 20 years as per the MMDR Act, 2015 as amended time to time shall be submitted.
- III. List of Schedule-1 species duly authenticated by concerned department as per their records. The conservation plan needs to be prepared in consultation with the State Forest & Wildlife Department for Schedule-1 species. Proof of submission of conservation plan to Chief Wildlife Warden.
- IV. Statement regarding point-wise compliance made for the issues raised and as mentioned in the Minutes of public hearing to ascertain the needed CER activities in project cover area.

2.3. Aridongri Iron Ore Mine of M/s Godavari Power & Ispat Limited at Village Kachche, Tehasil Bhanupratappur, Dist. Uttar Bastar (Kanker)- Enhancement of iron ore production from 1.405 MTPA to 2.35 MTPA (incl. 0.55MTPA BMQ) along with setting up of beneficiation plant of 0.60 MTPA capacity for beneficiation of Banded Magnetite Quartzite (BMQ), setting up of 250 TPH Iron Ore Screening Plant with magnetic separator for processing of low grade material and 2 MTPA Dolerite Crushing & Screening Plant in 2 modules of 1 MTPA at Kachche Aridongri Iron Ore Lease within existing leasehold area of 138.96 ha, located at village: Kachche, Tahsil: Bhanupratappur, District: Uttar Bastar (Kanker), State: Chhattisgarh [Proposal No: IA/CG/MIN/130756/2019; F.No. J-11015/384/2012-IA.II(M), Consultant: Vardan Environet]- Consideration of ToR.

The proposal of M/s Godavari Power & Ispat Limited is for enhancement of iron ore production of Kachche Aridongri Iron Ore Mines from 1.405MTPA to 2.35 MTPA (incl. 0.55 MTPA BMQ) along with setting up of beneficiation plant of 0.60 MTPA capacity for beneficiation of Banded Magnetite Quartzite (BMQ), setting up of 250 TPH Iron Ore Screening Plant with magnetic separator for processing of low grade material and 2 MTPA Dolerite Crushing & Screening Plant in 2 modules of 1 MTPA at Kachche Aridongri Iron Ore Lease within existing leasehold area of 138.96 ha, located at village: Kachche, Tehsil: Bhanupratappur, District: Uttar Bastar (Kanker), State: Chhattisgarh.

2.0PP had applied earlier vide Proposal No. IA/CG/MIN/130715/2019. The proposal was placed in EAC meeting held during 06.05.2020 wherein the Committee observed that PP has proposed for both mining of mineral and beneficiation but applied only under schedule 1(a) in addition to this PP also proposed for mining of dolerite. The Committee after detailed deliberation returned the proposal in present form and ask the PP to apply under schedule 1(a) & 2(b). In addition to this past production details duly authenticated by DMG for all the mineral and all the mining leases and amalgamated mining lease needs to be submitted. PP shall examine and confirm whether there is a violation of S.O. 804(E) dated 14.03.2017 & Common

Cause Judgment dated 2.08.2017 or not.

3.0 The PP then applied online vide proposal No. IA/CG/MIN/130756/2019 dated 21.05.2020 and has submitted the Form-1, Pre-feasibility Report for enhancement of iron ore production of Kachche Aridongri Iron Ore Mines from 1.405 MTPA to 2.35 MTPA (incl. 0.55 MTPA BMQ) along with setting up of beneficiation plant of 0.60 MTPA capacity for beneficiation of Banded Magnetite Quartzite (BMQ), setting up of 250 TPH Iron Ore Screening Plant with magnetic separator for processing of low grade material and 2 MTPA Dolerite Crushing & Screening Plant in 2 modules of 1 MTPA at Kachche Aridongri Iron Ore Lease within existing leasehold area of 138.96 ha and the proposal was considered in the EAC meeting held on 22nd June, 2020 wherein the committee deferred the proposal for want of additional information. PP submitted the reply vide letter no. GPIL/Env/2020-21 dated 18.08.2020. The proposal was reconsidered in the EAC meeting held on 23rd September, 2020; wherein, the PP presented the following point-wise reply to the observations of the EAC:

i. PP did not submit the valid mining lease/LOI for the mineral Dolerite which will be used for non-captive purpose. Therefore, the same needs to be submitted.

PP Reply: -PP has submitted that in principle approval/ permission for disposal of Dolerite has been obtained from Department of Mineral Resource, Govt. of Chhattisgarh vide letter no. F 7-29/2016/12 Naya Raipur Atal Nagar dated 17.08.2020. PP has also submitted that since the mine is facing acute shortage of space for waste dumping, dolerite crushing and screening plant within the existing lease has also been envisaged to be constructed for sizing of Dolerite, which is being mined as overburden waste and presently being dumped in existing waste dump. During the EAC meeting the PP also submitted in-principal approval/permission (letter no s.no. 7-29/2016/12 dated 21 september, 2020) of Mineral resource Department, Government of Chhattisgarh regarding disposal of minor Mineral Delorite obtained during excavation work within mine lease area of 136.96ha (Amalgamated Lease Area) granted under the MMDR act, 1957 in FC No. RF 608 New (139Old) in the name of M/s Godavari Power & Ispat Ltd.

ii. After verification of the KML file on the Google Earth, the Committee is of the view that the PP has not carried minimum plantation along the boundary of the mining lease. The committee expressed its dissatisfaction on the status of the plantation that even after 12 years of grant of EC, PP did not make any efforts for development of greenbelt. Further, the committee observed that accumulation of dust in the crusher area. The committee advised the PP to carry out plantation with at least 12 Feet height saplings of native species during the ensuing monsoon, and may approach the Ministry, along with the certification from the local DFO in respect of the plantation along the ML boundary and inside the mining lease boundary. The DFO should also mention the no of trees/saplings, height of the sapling, species planted etc, for both along the lease boundary and within ML area in its certificate.

PP has submitted that a total of 86835 no. of saplings covering an area of 29.40 ha has been planted in the existing mining lease area upto FY 2019-20 which has been duly certified by DFO, Bhanupratappur after site inspection vide letter no. Ma.chi//2020/4558, Bhanupratappur dated 14.08.2020.

ii. Water utilization as against the previous EC, and why there is an increase in waster demand needs to be submitted.

PP has submitted that maximum water requirement as per earlier EC was 25 KLD which has now increased to 414 KLD as per present proposal. PP has submitted that total water requirement at Kachche Aridongri Iron Ore Mine for domestic and industrial use is to the tune of 40 m³/day and 374 m³/day, respectively. Total water requirement will be 414 m³/day. Domestic water requirement of 40 m³/day has been planned to be met from borewells. Out of the 374 m³/day Industrial water requirement, 260 m³/day industrial water requirements has been planned to be met through borewell and balance 114 m³/day from mine water. The lessee has ground water drawl permission of 300 m³/day from CGWA. At present only dry crushing and screening is being done at Aridongri Iron Ore Mines. No wet processing of Iron Ore is being done at the Mines. Presently water is only being utilised for drinking purpose and for dust suppression in crushing and screening plant which is within the permitted water quantity. However, in the present proposal, there is a proposal for setting up of a beneficiation Plant of 0.6 MTPA Capacity within the lease for beneficiation of Banded Magnetite Quartzite (BMQ). The beneficiation plant will not only include separate crushing and screening for BMQ but also the grinding, floatation, magnetic separation and filtration etc. of BMQ.

Therefore, water demand has increased to cater the water requirement of BMQ Beneficiation plant, dust suppression in BMQ beneficiation plant and drinking water requirement of additional manpower etc.

iii. Location of proposed beneficiation plant, crusher plant needs to be shown on Kml file and map.

PP has submitted that Kml file showing the location of proposed beneficiation plant, crusher plant is given in Annexure-III. Map showing the location of proposed beneficiation plant, crusher plant is given in Plate 1 of the reply.

iv. Affidavit submitted by the PP is not as per O.M dated 30.05.2018 the revised affidavit needs to be submitted.

PP has submitted that M/s Godawari Power & Ispat Limited, undertakes that PP shall comply with all the statutory requirements of Judgment of Hon'ble Supreme Court dated 02.08.2017 in Writ petition(Civil(No. 114 of 2014 in the matter of Common cause vs union of Union of India and other before grant of EC

5.0 Based on the discussion held and documents submitted the Committee **Recommended** the aforesaid proposal of M/s Godavari Power & Ispat Limited for grant of Term of Reference for preparation of EIA/EMP report. In addition to standard ToR the committee also prescribed the following additional ToR for this project:

- I. The total excavation (minerals, waste, top soil) to be excavated needs to 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.
- II. PP should provide in the EIA Report details of all the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after grant of EC.
- III. PP should submit the real-time aerial footage & video of the mining lease area and of the transportation route.
- IV. 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 within 2 years only.
- V. 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.
- VI. 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.
- VII. PP should submit the measures/technology to be adopted for prevention of illegal mining and pilferage of mineral.
 - VIII. PP should submit the detailed mineralogical and chemical composition of the mineral and percentage of free silica from a NABL/MoEF&CC accredited laboratory.
 - IX. PP should clearly show the transport route of the mineral and protection and mitigative measure to be adopted while transportation of the mineral. The impact from the center line of the road on either side should be clearly brought out supported with the line source 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. The cumulative impact of other activities needs to be considered in EIA/EMP Report.
 - X. 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.
 - XI. PP should bring out the awareness campaign to be carried out on various environmental issues, practical training facility to be provided to the environmental engineer/diploma holders, mining engineer/diploma holders, geologists, and other trades related to mining operations. Target for the same needs to be submitted.
 - XII. As per submissions made the PP intend to mine Dolerite Mineral along with Iron Ore; PP shall submit the valid Lease/Lol & mining plan approval accordingly for the Dolerite Mineral along with quantity and period of mining. The same shall be incorporated in the EIA/EMP report.
 - XIII. Final approval of the State Government for mining of Dolerite mineral to be incorporated in to the Mine lease/LOI and the same need to be submitted along with the EIA/EMP report.
 - XIV. The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.
 - XV. Feasibility of installation of beneficiation plants inside the mining lease boundary needs to be explored. Target for completion of exploration needs to be submitted.
 - XVI. Details of beneficiation plant justifying its location, impacts on environment

(air, water and noise) and environmental quality monitoring infrastructure in terms of sustainable mining activity.

- XVII. Final approval of the State Government for mining of Dolerite mineral to be incorporated into the Mine lease/LOI and the same need to be submitted along with the EIA/EMP report.
- XVIII. Time bound action plan for plantation activities within three years.
- XIX. Statement about point-wise compliance made during public hearing to ascertain the CER needs in the project cover area.

2.4 Choutapalli limestone mine, 262.247 ha amalgamated mining lease area, M/s My home industries private limited; total excavation of 2.17 mtpa (limestone: 1.82 mtpa + top soil: 0.35 mtpa) located at Choutapalli Village Of Mattampalli Mandal and Mellacheruvu Village Of Mellacheruvu Mandal, Suryapet District, Telangana – Reconsideration of ToR [Proposal No. IA/TG/MIN/99989/2019; File No. J-11015/46/2019-IA.II(M)].

PP has applied vide Proposal no: IA/TG/MIN/99989/2019 dated 25.03.2019 for obtaining EC for amalgamated mining lease as per provision of S.O. 1530(E) dated 6.04.2018. The proposal was earlier considered in EAC meeting held on 23-24 April, 2019; wherein the EAC after discussion raised following observations:

- I. After the amalgamation of the mining lease-1 & 2 PP was required to obtain EC for the amalgamated mining lease but the same has not been obtained and PP now after 10 years applied to the Ministry for obtaining EC under EIA Notification 2006. Further, name of the company has also changed which is also not rectified by the PP in the EC letters. PP was unable to explain the reason for not applying to the Ministry for amendment in EC after amalgamation of mining lease. However, submitted a letter dated 1.09.2008 wherein requested the Ministry to amend the Specific Condition No iii) of EC granted on 31.07.2008 in respect of a) lease area from 216.67 to 216.167 Ha and 18.211 Ha to 46.08 Ha.
- II. The Committee observed from the past production details submitted by the PP that the PP has exceeded the EC (granted on 31.07.2008) capacity in year 2006-07 wherein production achieved was 1283588 as against 1000000 Tonne. The Committee also observed that PP has exceeded the mining plan capacity during the year 2006-07, and 2007-08. Thereafter the production is well within the EC and mining plan limit. Thus, the production during 2006-07 & 2007-08 is in violation of Common Cause Judgement dated 02.08.2017 and production during 2006-07 is attract provision of S.O. 804(E) dated 14.03.2017.
- III. The Committee also felt that it is difficult to ascertain the production capacity for individual mines after amalgamation of mining lease on 12.12.2008 to compare the same with EC capacity in order ascertain the violation of Common Cause Judgment dated 02.08.2017 and S.O. 804(E) dated 14.03.2017.

- IV. The Committee also observed that Regional Office, MoEF&CC has also inspected both the mine for compliance of EC conditions and no major non-compliance has been reported.
- V. The Committee also observed that in all the necessary permissions/approvals PP has amended the mining lease details and name of the Company except in the EC letters.
- VI. The Committee also observed that previous EAC specified the condition of amalgamation of mining lease because at as per KML file submitted by the PP it appears that mining lease having area of 46.08 in completely surrounded by the mining lease having area of 216.167 Ha and for proper development of the mine the same needs to be amalgamated.
- VII. The Committee finally suggested that it's a peculiar case wherein one EC has validity as per EIA Notification 2006 and another EC has validity as per EIA 1994. In one EC provision of violation notification S.O. 804(E) 14.03.2017 may attract, the mine is having all the necessary permission including ECs and also inspected by regional office of MoEF&CC. Thus, considering all the factors the matter may be referred to policy sector for its comments.

The Committee therefore returned the proposal in the present form and was of the view that decision of policy sector may be communicated to PP for necessary compliance.

11. The matter was referred to the Expert Committee constituted in the Policy Sector during its meeting held on 17.06.2019. After detailed deliberation, the committee noted that the amalgamation of the mining leases were carried by the project proponent, in compliance with the condition prescribed by the ministry as a part of EC for ML-2. While directing the project proponent for amalgamation the Ministry did not specifically mentioned to obtain fresh EC after amalgamation. Therefore, the committee was of the opinion that EC not being sought for amalgamation may not be treated as violation. However the excess production during 2006-07 against the capacity specified in EC granted for ML-I shall be treated as violation of EIA Notification, 2006. The committee opined that the matter may be referred to sectoral committee for further course of action.

12. The matter related to violation in mining sector has been a point of discussion, both in the sectoral committee and policy committee. The policy committee members felt that the structured guidance policy be evolved by the Ministry to address the violation of the EIA Notification, 2006 for mining sector. The two cases referred today, are the only trace examples and many more cases may come up in future. The sectoral committee has taken a stand to examine the existing ECs, its compliance, before considering the cases for grant of ToR for any expansion proposals. This is being done for ensuring the compliance of the earlier approvals. To deal with excess production violation cases, the committee felt that further deliberations are required at the level of the Ministry.

13. The proposal was delisted on 18.10.2019 from the PARIVESH Portal. Further PP letter no Ref: MHIPL/CLM/EC/2020-21 dated 4th August, 2020 requested to Ministry inter-alia stating that the proposal was referred to the Policy sector, However not received any communication in this regard. Accordingly the proposal was re-listed 30.07.2020, the same was **reconsidered in the EAC meeting held on 23-25 September, 2020**; wherein, the Member Secretary presented the decision of IA-Policy Sector, Based on the deliberations the Committee was of the view that it's a violation case and this Committee is not empowered to appraise the violation proposals. Since, the PP could not applied within the time prescribed under the 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.

2.5: Adityana Limestone, Marl & Clay Mine (Mining Lease Area 643.02 ha) by M/s Saurashtra cement limited with production capacity of Limestone 5.1 million TPA, Marl 1.69 million TPA, Top Soil Nil & waste nil with existing crusher of 1000 TPH at villages- Adityana&Ranavav, District- Porbandar, State- Gujarat as per MoEF&CC Notification dated 06.04.2018 [Proposal No. IA/GJ/MIN/81075/2018; File No. IA-J-11015/8/2019-IAII(M)] – Terms of Reference

The proposal of M/s. Saurashtra Cement Limited is for revalidation of existing EC granted for Adityana Limestone, Marl & Clay Mine (Mining Lease Area 643.02 ha) with granted Production capacity of Limestone 5.1 million TPA, Marl 1.69 million TPA with existing crusher of 1000 TPH at villages- Adityana&Ranavav, Taluka Ranavav, District- Porbandar, State- Gujarat under EIA Notification 2006 amended vide Govt. of India Gazette Notification vide S.O. 1530(E) dated 6th April 2018.

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category "A".

3. The proposal was considered during 21st EAC meeting held on 23rd to 25th Sept., 2020, wherein the committee observed that (i) The Barda Wildlife Sanctuary is in (close proximity) to the project site. The Eco-Sensitive Zone (ESZ) around the Barda Wildlife Sanctuary was declared on 28th April 2017. (ii) Mineral clay was not mentioned in the uploaded form-1 for excavation along with minerals limestone and marl. (iii) The project cost was not mentioned in the form 1. (iv) The mine was in operation since 1993-94 as per certified production details. The project proponent informed that the Environmental Clearance (EC) was obtained vide letter no. J-11015/22/2001. IA. II (M) dated 16.07.2003 and no EC existed before 2003. Hence, it attracts the Hon'ble Supreme Court judgement dated 2.08.2017 in the matter of common cause vs Union of India & Ors. W.P.(C) 114/2014 (v) As per specific condition (i) of previous EC, stating that "no mining shall be carried out 300 meter from the Jamuvanti cave as per GOI notification dated 03.05.1997. It shall be ensured that the protected monument shall not sustain any damage due to the

mining operation". However as per the KML file, the clarification is required. (vi) The committee also observed that due to sensitivity of the wildlife sanctuary location, fresh study is to be carried out by the renowned conservation institute of the country illustrating the impact of the mining activities on the native flora and fauna alongwith remedial/management plan.

4. The committee **deferred** the proposal and sought the following information:

- (i) The project proponent needs to submit the superimposed map showing the mining lease site as well as the area covered under the ESZ around Barda wildlife sanctuary vide S.O. 1365 (E) dated 28th April 2017.
- (ii) The project proponent needs to submit the letter from the forest department stating that "the mining lease area does not fall under ESZ".
- (iii) The project proponent needs to submit the updated form-1, as clay is not mentioned in the submitted form-1. Since, clay is the minor mineral, project proponent needs to submit the District Survey Report (DSR) as per Ministry's notification S.O. 3611 (E) dated 25th July, 2018.
- (iv) The project proponent needs to submit the clearly demarcated Part A and Part B of the mining lease area.
- (v) A fresh independent study is to be carried out by the renowned conservation institute of the country illustrating the impact of the mining activities on the native flora and fauna alongwith remedial/management plan.

2.6: Mining of Umrangshu Limestone with production capacity 1.5 Million TPA (ROM) by M/s Assam Mineral Development Corp, Ltd., located at Village Panchayat – Umrangshu, Tehsil- Umrangshu, Dist – Dima Hasao (N.C. Hills), Assam (200 ha)- [Proposal No. IA/AS/MIN/166203/2020; File No. J-11015/40/2020-IAII(M)]– Terms of Reference

The Proposal of M/S Assam Minerals Development Corp. Ltd. is for grant of Term of Reference for Umrangshu Limestone Area, (15,00,000 TPA (ROM) Lime Stone) an area of Area-200 Hect. The mine site is located in the village New Umrangshu, Tehsil-Umrangshu, Dist– Dima Hasao (N.C.Hills) Assam. The mine is located between latitude 25°32'40.46" N to 24°31'17.27" N and longitude 92°47'26.39" E to 92°47'54.36" E, and within survey of India toposheet No. NG-46/10.

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category 'A'.

3. The application for ToR was submitted online vide proposal no. IA/RJ/MIN/31589/2015 dated 25/02/2015. The total mine lease area is of 200.0 ha. This is classified as Govt. waste land. LOI has been granted in favor of M/s Assam Mineral Development Corp. Ltd. letter no. AMDC/P.235/2009/1534 dated 17.11.2009.

4. The proposal was considered by 1st EAC meeting held on 21st Dec., 2015. The TOR was prescribed for the EIA study to be done vide letter No. J-11015/414/2015-IA. II(M), Dt.08/01/2016 & after prepared the draft EIA/EMP report & submitted to SPCB, Assam & requested the Dist. Adm., Dima Hasao for giving a suitable date for conducting the public hearing. The District Administration vide letter no. NCHG/D-246/2016- 17/5713-15 Dt. 30-01-2017 allowed the SPCB to conduct the public hearing on 6th march 2017 and the same was notified accordingly. However, on Dt. 28-02-2017 vide letter no. NCHG/D-246/2016- 17/6232-36 the District Administration requested the SPCB to defer the hearing for a month and reschedule the same on 7/4/2017. Subsequently, the District Administration again postponed the hearing till further orders vide latter no. NCHG/D246/2016-17/33 Dt. 03/04/2017. On Dt. 16/06/2017 vide letter no. NCHG/D-246/2017-18/1014-1017 the District Administration allowed conducting the public hearing on 20/07/2017. But the District Administration again requested SPCB to defer the date to 19/8/2017 vide letter no. NCHG/D-246/2017-18/1391-1394 Dt. 06/07/2017. The administration issued other letter to the SPCB vide letter no. NCHG/D-246/2017-18/2041 Dt. 17/08/2017 for postponing the public hearing once again till further orders, in the meantime, the government of Assam has granted mining lease to AMDC vide letter no. PEM.10/2010/87 Dt. 10/01/2017 subject to submission of prior environment clearance. The district administration again allowed to conduct the public hearing on 27th February 2018 vide letter no. NCHG/D-246/2017-18/98-A Dt.17/01/2018 however, the district administration again issued a letter to the SPCB vide letter No. NCHG/D-246/2017-18/1380- 1383 Dt. 21st February, 2018 to postponing the public hearing till further orders. By the mean time in waiting for next date, TOR period was expired. Therefore, applicant again applied for fresh TOR.

5. The project proponent submitted that the project was held in the 1st expert appraisal committee prescribed the standard TOR for undertaking detailed EIA study as per Annexure-I. Further, the PP was asked to furnish the following along with EC proposal: (i) Impact of mining activity on adjacent agricultural land with particular reference to run off, soil erosion and loss of top soil due to change in topography; and (ii) Details of Transportation of mined out materials as per the Indian Road Congress for both the ways (loaded as well as unloaded trucks) load and its impact on Environment; (iii) Impact of all existing mining on the present land use in the study area.

6. The project proponent submitted that the Mining Plan with progressive mine closure plan for limestone over an area of 200 hect., near village- Umrangshu, Tehsil

– Umrangshu District – N.C. Hills Assam has been approved from IBM, Guwahati vide letter no. IBM/GHY/AS/DH/LST/MP-78 Dt.02/12/2016.

7.The project proponent submitted that the Opencast Mechanized method of mining will be adopted with drilling and blasting method with the use of drill machines, excavators and dumpers for loading and transportation of overburden and limestone. Drill hole will be filled with ANFO explosive for column charge & booster and blasting with excel. Explosive will be handled and used by persons certified under MMR 1961. 4000 lits./day of fuel will be used in machineries during mining. Mostly mobile equipments and their expected emission will be monitored for assessment of impact. About 5000 tons of limestone would be required to be moved daily. 18 dumpers will be able to move this material.

8.Project proponent has submitted that the total water requirement will be 17.0 KLD (2.0 KLD for drinking, 10.0 KLD for suppression and 5.0 KLD for Plantation). Water will be available from nearby villages.

9.Project proponent has submitted that at present no greenbelt/plantation is there. It is proposed to cover 3 ha area at the end of 5th year and 14.320 ha at the end of life of mine. It is proposed to plant 600 trees per year with Gamari, Bogipoma, Bhelu, Hilika, Badam, Khokon, Sundi, Sam, Amra, Koroi, Aldu, Teak, Ashoka, Mango, Neem etc. Place of proposed plantation are at the boundary of the lease or reclaimed land near by leases, both site of the road, at the dump/mined out benches and at the govt. waste land provided by the govt. and own land.

10. Project proponent has reported that there is no National park, wildlife sanctuaries, tiger reserves fall within the lease area. Krungming RF is present in West direction which is 0.98 km away from the lease area.

11.Project proponent has submitted that there is no schedule I species found within the lease hold area. There is no human settlement within the mine lease area. No human settlement will be disturbed due to the mining activity. So, no R&R is proposed. PP has submitted that no litigation court case is pending against the project.

12.Project proponent has submitted that the estimated projet cost is Rs. 6.25 crores. The capital cost of EMP will be Rs. 7.00 lacs and amount earmarked for social fund is Rs. 5.00 lacs for plan period. About 82 skilled, semi-skilled and unskilled workers will get employment.

13. The proposal was considered during 21st EAC meeting held on 23rd to 25th Sept., 2020, wherein the committee observed that based on the letter submitted by Managing Director of Assam Mineral Development Corporation dated 25th Sept., 2020 regarding chronology of the proposal. Terms of Reference was issued on 8th Jan., 2016 and the baseline data was generated during Dec., 2017 to Feb., 2018. Draft EIA/EMP report for public hearing was submitted to Assam State Pollution

Control Board on 22nd April 2018. The project proponent informed that public hearing was postponed/cancelled by 3 times. The ToR was expired on 7th Jan., 2019. The project proponent had applied for fresh Terms of Reference on 26th August 2020 vide proposal no. IA/AS/MIN/166203/2020.

14. Based on the document submitted and discussions held, the committee **recommended** for standard Terms of Reference (ToR) for M/s Assam Mineral Development Corp, Ltd. Of mining of Umrangshu Limestone with production capacity 1.5 Million TPA (ROM), mine lease area 200 ha located at Village Panchayat – Umrangshu, Tehsil- Umrangshu, Dist – Dima Hasao (N.C. Hills), Assam.

15. The performance of consultant was poor. The consultant was not able to explain basic things during presentation, inspite of giving chance for presentation again in the EAC meeting, again consultant was not able to explain properly. Accordingly EAC has asked to MD, AMDC to provide the case details in chronology. Thereafter, EAC appraised the proposal, after receipt of information from MD, AMDC. The Ministry may take up matter with QCI against consultant performance.

2.7: Umrangshu Limestone Area, (20,00,000 TPA (ROM) Limestone) an area of Area-430 Hect. Village- New Umrangshu, TehsilUmrangshu, Dist– Dima Hasao (N.C.Hills) Assam, in favor of M/s Assam Minerals Development Corp. Ltd. - [Proposal No. IA/AS/MIN/166507/2020; File No. J-11015/41/2020-IA.II(M)]–Terms of Reference

The Proposal of M/s Assam Minerals Development Corp. Ltd. is for grant of Term of Reference for Umrangshu Limestone Area, (20,00,000 TPA (ROM) Limestone) an area of area-430 ha. The mine site is located in the village New Umrangshu, Tehsil-Umrangshu, Dist– Dima Hasao (N.C.Hills) Assam. The mine is located between 25^o32'25.26" to 25^o32'45.44" North latitudes and 92^o47'44.70" to 92^o46'35.14" East longitudes with Toposheet No. 83C/14.

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

3.The application for ToR was submitted online vide proposal no. IA/AS/MIN/25395/2014 dated 28/10/2014& it was considered by 1st EAC meeting held on 21-23Dec., 2014. The total mine lease area is of 430.0 ha. The applied area is non forest govt. waste Land. LOI has been granted in favor of M/s Assam Mineral Development Corp. Ltd. letter no- PEM.48/2011/47 dated- 24th July, 2012. Based on the information furnished and presentation made by the Project Proponent and discussions held, the Committee prescribed the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs for including mitigation measures to protect nullah. Also, the committee asked the PP that 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.

4. The PP submitted that earlier as per letter of Intent No. PEM/10201047 dt. 03.05.2010, the online application was submitted vide proposal no. IA/AS/MIN/25395/2014 for ToR and after the presentation made before the committee, TOR was prescribed for the EIA study to be done vide letter No. J-11015/397/2014-IA.II (M), dated 04/02/2015 and after prepared the draft EIA/EMP report and submitted to State Pollution Control Board, Assam and requested the District Administration, Dima Hasao district for giving a suitable date for conducting the public hearing. The District Administration vide letter no. NCHG/D-246/2016-17/5713-15 Dt. 30-01-2017 allowed the SPCB to conduct the public hearing on 6th march 2017 and the same was notified accordingly. However, on Dt. 28-02-2017 vide letter no. NCHG/D-246/2016-17/6232-36 the District Administration requested the SPCB to defer the Hearing for a month and reschedule the same on 7/4/2017. Subsequently, the District Administration again postponed the hearing till further orders vide latter no. NCHG/D- 246/2016-17/33 Dt. 03/04/2017. On Dt. 16/06/2017 vide letter no. NCHG/D- 246/2017- 18/1014-1017 the District Administration allowed conducting the public hearing on 20/07/2017. But the District Administration again requested SPCB to defer the date to 19/8/2017 vide latter no. NCHG/D246/2017-18/1391-1394 Dt. 06/07/2017. The administration issued other letter to the SPCB vide letter no. NCHG/D-246/2017-18/2041 Dt. 17/08/2017 for postponing the public hearing once again till further orders, in the meantime, the government of Assam has granted mining lease to AMDC vide letter no. PEM.10/2010/87 Dt. 10/01/2017 subject to submission of prior environment clearance. The district administration again allowed to conduct the public hearing on 27th February 2018 vide letter no. NCHG/D-246/2017-18/98-A Dt.17/01/2018 however, the district administration again issued a letter to the SPCB vide letter No. NCHG/D-246/2017-18/1380-1383 Dt. 21st February,2018 to postponing the public hearing till further orders. By the mean time in waiting for next date, TOR period was expired. Therefore, applicant has again applied for fresh TOR.

5. The mining plan with progressive mine closure plan for limestone over an area of 200 hect., near village- Umrangshu, Tehsil – Umrangshu District – N.C. Hills Assam has been approved from IBM, Guwahati vide letter no. IBM/GHY/AS/DH/LST/MP-78 dt.02/12/2016.

6. PP has submitted that the limestone proposes to produce production of 2.0 million TPA. The mining will be continuously carried out by open cast manual method with small scale of drilling and blasting. Negligible quantity of top soil will be removed and. Transportation of Limestone stone will be done by trucks and dumper to the

destination place HSD (3500 litres/day) will be used in machineries during mining. PP has submitted that due to mining activity some grasses & shrubs will be removed.

7. The total water requirement will be 12.0 KLD. Water for mining operation (dust suppression) and for domestic & drinking purpose will be supplied from dug well/tube well situated outside the lease area.

8. At present no greenbelt/plantation is there. It is proposed to cover 7.50 ha area at the end of 5th year and at the end of lease period about 6.58 hectare area will be covered under plantation on virgin land and 20.0 ha plantation on dump site & at 20.00 ha. area as on office / road site will be planted.

9. Project proponent has reported that there is no National park, wildlife sanctuaries, tiger reserves fall within the study area (10 km radius of the mine boundary).

10. PP has submitted that it is fresh application for getting TOR. Detailed study will be conducted after getting TOR.

11. There is no human settlement within the mine lease area. No human settlement will be disturbed due to the mining activity. So, no R&R is proposed.

12. PP has submitted that no litigation court case is pending against the project.

13. The cost of the project is Rs. 13.00/- Crores. The capital cost of EMP will be Rs. 7.00 lacs and amount earmarked for social fund is Rs. 5.00 lacs for plan period. About 65 local persons will get employment.

14. The proposal was considered during 21st EAC meeting during 23rd to 25th Sept., 2020 wherein the committee observed that based on the letter submitted by managing director of AMDC dated 25th Sept., 2020 regarding chronology of the proposal, ToR was issued on 8th Feb., 2015 and the baseline data was generated during Dec., 2014 to Feb., 2015. Draft EIA/EMP report for public hearing was submitted to Assam S.P.C.B on 20th Dec., 2016. The PP informed that public hearing was postponed/cancelled by 3 times. The ToR was expired on 3rd Feb., 2018. The PP had applied for fresh ToR 26th August 2020 vide proposal no. IA/AS/MIN/166507/2020.

15. Based on the document submitted and discussion held, the committee **recommended** for standard Terms of Reference (ToR) for M/s Assam Minerals Development Corp. Ltd. For Umrangshu Limestone Area, (20,00,000 TPA (ROM) Limestone) an area of Area-430 Hect. Village- New Umrangshu, Tehsil Umrangshu, Dist- Dima Hasao (N.C.Hills), Assam.

**2.8 Redi Iron Ore Mine with Proposed production capacity for 1.100 MTPA
Extent of Mining Lease: -94.7060Ha Annexed Area granted for dumping
overburden/waste: -12.9628 Ha of M/s GOGTE MINERALS - [Proposal No.
IA/MH/MIN/141413/2020; File No. J-11015/1045/2007- IA-II(M)] – Consideration
of ToR**

PP through a letter no nil dated 8th September, 2020 and informed that they are withdrawing the TOR application due to personal reasons, the same was informed to the Committee by the MS. The EAC accepted the request made by the PP and recommended the Ministry to delist the proposal.

**2.9: Mining of Mineral Bajri (Minor Mineral) with proposed production
capacity of 1.68 Million TPA (ROM) by Shri Abhimanyu Choudhary, located at
Revenue village(s) of Tehsil – Mandal, District - Bhilwara, Rajasthan (995 ha)
(File No. J-11015/234/2013-IA-II(M); Proposal No.IA/RJ/MIN/19720/2013)- Re-
Consideration of EC**

The proposal of ShriAbhimanyuChoudhary is for mining of Bajri (Minor mineral) with proposed production capacity of 1.68 Million TPA (ROM). Themine lease area is located at Revenue village(s) of Tehsil – Mandal, District -Bhilwara, Rajasthan in the mine lease area of 995.0 ha. The mine lease area area lies in Kothari &Khari river and Survey of India toposheet number 45K/2,45K/3, 45K/6, 45K/7.

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 vide its letter dated 31.08.2020 submitted that a certificate w.r.t. homogeneous Mining lease within 500 meters of this lease is provided Mining Engineer, DMG, Bhilwara vide its letter No. Kha.A./Bhil/Ma.chi/PramanPatra/Kha.Pa.114/2012/220 dated 15.06.2020.

4. The proposal was considered by the Reconstituted Expert AppraisalCommittee in its 11th meeting held during 25th - 27th September, 2013. TheTOR was issued by MoEF&CC vide letter No. J-11015/234/2013-IA.II (M) dated17.10.2013.The Proponent submitted the EIA/ EMP Report online to Ministryfor seeking Environmental Clearance after conducting Public Hearing. PP videProposal No. IA/RJ/MIN/19720/2013 dated 20.04.2015 applied forEnvironmental Clearance for mining of Bajri (Minor Mineral) with proposedproduction capacity of 1.68 Million TPA (ROM). The mine lease area is locatedat Revenue village(s) of Tehsil – Mandal, District - Bhilwara, Rajasthan in themine lease area of 995.0 ha.

5. PPvide Proposal No. IA/RJ/MIN/27046/2013, the proposal of EC was appraised before the EAC in its meeting heldduring August 25-27, 2015 wherein the

Committee deliberated at length the information submitted by PP and recommended the Proposal for Environmental Clearance for Mining of Mineral Bajri with proposed production capacity of 1.68 Million TPA (ROM) subject to submission of clarification w.r.t. mining of Bajri.

6. Hon'ble Supreme Court vide its judgment dated 16.11.2017 in the matter of SLP(C) No.34134 of 2013 (State of Rajasthan Vs Nature Club of Rajasthan) has restrained river sand/ bajri mining in the State of Rajasthan in respect of 82 Letter of Intent (LoI) holders who had submitted their applications to the MoEFCC for grant of EC. As per directions of Hon'ble Supreme Court dated 16/11/2017, as directed to carry out Scientific Replenishment Study and submit the report expeditiously to the Ministry of Environment, Forest and Climate Change for appraisal before EAC.

7. Further, as per Hon'ble Supreme court order dated 6th December, 2019, the Ministry of Environment, Forest and Climate Change (MoEF&CC) was directed to process pending applications stating that "Hence, in the meantime we direct that the aforesaid applications may be completed and appropriate orders be passed thereon by the Ministry of Environment, Forest and Climate Change (MoEF&CC)". Accordingly, after receipt of documents, proposal was considered in the EAC meeting.

8. The proposal was placed in the 21st EAC meeting held during 23rd to 25th Sept., 2020. Project proponent informed to committee that for the instant proposal, the baseline data was generated during October to December, 2013 and the Public Hearing was conducted on 7th November, 2014.

The committee observed that (i) the baseline data is of 7 years old. (ii) The list of flora and fauna was not authenticated by the chief wildlife warden. (iii) Supporting documents were not submitted according to the Enforcement & Monitoring guidelines of sand mining 2020. (iv) no Detailed transportation plan as per the Enforcement & Monitoring guidelines of sand mining 2020.

9. In view of the above, the committee deliberated on the submissions made by the project proponent and presentation made by the consultant in the meeting and **deferred** the proposal and sought the following information: -

- 1) The project proponent needs to carry out the fresh baseline data for one-month period (non-monsoon season). The project proponent 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 project proponent should submit the original test reports and certificates of the labs which will analyze the samples.
- 2) The project proponent needs to submit the list of flora and fauna, list of schedule-1 species authenticated by the chief wildlife warden.

- 3) The project proponent needs to submit the action plan as per Enforcement & Monitoring guidelines of sand mining 2020.
- 4) The project proponent needs to submit the detailed transportation plan as per the Enforcement & Monitoring guidelines of sand mining 2020. Project proponent should clearly show the transport route of the mineral and protection and mitigative measure to be adopted during transportation.
- 5) The project proponent needs to compare the current baseline data with the previous baseline data. If any changes exist, then detailed mitigation measures needs to be provided.
- 6) The project proponent shall prepare the conservation plan in consultation with the State Forest Department and approved by the Chief wildlife warden.
- 7) The project proponent needs to submit the detailed plan in tabular format (year-wise) for afforestation and green belt development in and around the mining lease. The project proponent 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.
- 8) Project proponent should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations.

2.10 Pottangi Bauxite Mine with production capacity of 3.5 Million TPA by M/s National Aluminium Company Limited (NALCO) located at Pottangi Village, Pottangi Tehsil, Koraput District, Odisha (MLA: 697.979 ha) – Consideration of EC [Proposal No. IA/OR/MIN/69870/2017; File No. IA-J-11015/8/2018-IA-II(M)]

The proposal of **M/s National Aluminium Company Limited (NALCO)** is for Environment Clearance for Pottangi Bauxite Mine with production capacity of 3.5 Million TPA located at Pottangi Village, Pottangi Tehsil, Koraput District, Odisha (MLA: 697.979 ha).The mine lease area falls in the Survey of India Topo sheet E44 K/14, E44K/15, E44L/2, and E44 L/3 with latitude 18°37' 6.45' N to 18°37'43.44'N & longitude is 82°57'41.10'E to 82°58'46.07'E.

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under Category “A”, Project or Activity 1(a) as the Mining lease area is more than 100 Ha.

3. The Project Proponent applied vide proposal no IA/OR/MIN/69870/2017 for prescribing Term of Reference (ToR) and submitted Form-1 and Pre-feasibility

report. The proposal was considered in 27th EAC meeting held during Jan 18-19, 2018 and 32nd EAC meeting held during May 30-31, 2018 recommended the proposal for prescribing Term of Reference (ToR). The ToR letter was issued vide Letter No. J-11015/08/2018-IA. II (M) dated 28.06.2018.

PP vide proposal no. IA/OR/MIN/69870/2017 dated 05.03.2020 applied for grant of EC and submitted the Form 2 and EIA Report after conducting the Public Hearing on 17.12.2019. As the complete details was not provided an EDS was raised on 01.04.2020 for submission of requisite information. PP submitted the reply to EDS dated 01.04.2020 on 06.07.2020. Thereafter, the Ministry validated the proposal again and raised EDS on 16.07.2020. PP submitted the reply to EDS dated 16.07.2020 on 30.08.2020 and accordingly, the proposal was placed in 21st EAC meeting held during 23-25 September, 2020.

During the EAC meeting the PP informed that:

4. The Department of Steel & Mines, Govt. of Odisha vide Letter No. IV (BX) SM198/ 2015 /5734/SM dated 12.07.2016 had issued Terms and Conditions for grant of Mining lease for Bauxite in an area of 1738.04 ha., in Pottangi Village of Koraput District in favour of M/s. NALCO for a period of 50 years. Further, Ministry of Mines vide notification dated 21.03.2018 has issued a Notification under section 17A (IA) of MMDR Act, 1957 for undertaking prospecting or mining operations in reduced area of 697.979 Ha till 26.04.2022. Then, Department of Steel & Mines, Govt. of Odisha vide Letter No. 3794/SM, Bhubaneswar, dated 14.05.2018 has issued fresh Lol over the reduced area of 697.979 ha., in favour of NALCO for a period of 50 years. Director of Mines, Odisha, Bhubaneswar vide Letter No III (k) 50/1992 3945/DM dt. 22.05.2018 had issued Precise Area Map of 697.979 Ha for Pottangi Bauxite Mines of Koraput District.

5. The mining plan along with PMCP was approved under Rule 16 of Mineral Concession Rules, 2016 by Indian Bureau of Mines vide Lr. MP/FM/13-ORI/BHU/2018-19 dt 27.07.2018.

6. The present mining operation is fully mechanized method of mining with two shift basis working will be adopted. Mining machineries like ripper dozer, blast hole drill, front end loader, back-hoe, dumper, semi mobile crusher with fixed long-distance conveyor, double roll tooth crusher and overland conveyor will be deployed. The proposed bauxite is to be excavated by trench mining method comprising of a number of parallel trenches with staggered faces. Exposed rock types in the mining lease area are laterite, bauxite and khondalite with occasional patches of soil. Before commencement of bauxite mining operation in south block, it is proposed to remove these patches of soil to gain easy access to the bauxite benches in the respective areas. These soil patches are about 0.5 m thick which will be removed separately by scraping with dozer and the heaps so formed will be lifted by loader-dumper combination. Mining in each trench will take place in distinct slices of 8m

each. Top bauxite will be loosened either by ripper dozer or drilling-blasting depending upon physical characteristics of the material. Loosened bauxite will be loaded by hydraulic shovel/loaders on to the dumpers for transportation to the proposed crusher.

PP reported that it is proposed to start the trench from western part at the south block and extending them towards east, the bauxite deposit shows variable thickness, in south block it generally varies between 6m to 37m. Considering the above, it is planned to mine with 8m bench height with width of the benches varying from 15-200mtrs for the purpose of safety of working and ease of movement of machinery. The individual bench faces will be kept nearly vertical whereas the overall quarry slope angle will be maintained at 45° with the horizontal to keeping the overall pit design stable. Ripper will be deployed for bauxite production, where bench height is low. Drilling and blasting technique will be adopted in benches where the strata are too hard for economically loosening by ripping. The bottom of the bauxite shall be excavated using hydraulic Back-hoe shovels. Runoff mine bauxite of 800mm size will be crushed in crusher unit 900tph capacity in to -150mm size and this crushed ore will be sent by conveyor mode of transportation to NALCO's Aluminum Refinery located at Damanjodi at a distance of 20 km (aerial distance). The crushing unit will be located on the pit top.

7. The ground water level in the area is observed to be at a depth of 140 m to 150 m the deposit is planned to be worked up to a depth (40m below ground during this plan period) above the average surface level. Therefore, there is no possibility of ground water puncture during the plan period of 5 years as well as life of the mine.

PP submitted that the estimated total water requirement is 700 KLD (fresh water 600 KLD & Treated water 100 KLD), which sourced from boreholes proposed in the bank of the Kunduli River 3.5 Km in North direction from mining lease area. During plan period about 525 KLD water will be required for water sprinkling on mines haul road for dust suppression. 75 KLD water will be required for Industrial use. 60 KLD water will be required for greenbelt development. 40 KLD water will be required for domestic purpose. Therefore, during operational phase of this mine total requirement of raw water for these purposes mentioned above will be 660 KLD i.e. 1,82,160 m³/year which can easily be fulfilled through the harvested rainwater. Total quantity of surface runoff from roads and safety zone/greenbelt area during plan period will be 2,48,586 m³/year and during conceptual period will be 7,43,295 m³/year. This rainwater will be harvested within surface storage which will create a very good impact on the ground water resource of the area. The domestic wastewater generated in mine area will be treated in STP (Capacity 125 KLD) and treated water used for greenbelt development/dust suppression. The wastewater generation from the Industrial and Domestic use is 68 KLD and 36 KLD respectively. The wastewater from the machines and vehicle washing will be removed oil &

grease and removal of suspended solids. The treated water will be used for greenbelt development.

PP has submitted the Copy of the online application made to CGWA for obtaining NOC/Permission withdrawal of Ground Water for Mining Project (Application for New NOC) vide Application No. 21-4/2509/OR/MIN/2020; date: 05.07.2020.

8. Plantation program over life of the mine has been planned in a phase wise manner. The plantation will be started from 1st year of mining along the boundary of ML area from south to north. A 7.5 m width of green belt development around the ML area will be carried out and more width of green belt will be taken up wherever space is available. Plantation over surface dump area will be not being taken as it will be backfilled. A thick plantation is proposed to be provided and maintained around the mining area and along the roads. Plantation over the backfilled area will begin from 3rd year. PP identified 62 type of species for greenbelt, avenue and block plantations. PP has submitted the yearly requirement of plants during the various years and stages of the mining project as shown below in table.

Year wise Plantation Details

Year	Extent – Ha	No. of plants	Location	Remarks
1 st year	5.76	14,400	South and central block safety zone	Greenbelt area will be developed
2 nd year	9.07	22,675	North and west extension safety zone	
3 rd year	8.57	21,425	East extension safety zone	Maintenance & Gap filling plantation
4 th year	5.62	14,050	Part backfilled area	Afforestation on backfilled area
5 th year	12.92	32,300	Part backfilled area	

PP has submitted that the afforestation will be done along the boundary barrier and quarry roads. Considering a grid of 2m x 2m about 18.54 ha., area, Numbers of plants of different species, mainly fruit – bearing plants like Mango, Jackfruit, Cashew (as per availability) will be planted. About twice the area recommended for mining will be used for afforestation/greenbelt as per the “Forest (Conservation) Amendment Rule, 2004” and subsequently. Local species will be planted as per availability. Dwarf date palms from the mining areas shall be uprooted and transplanted all along the boundary in five rows at a distance of 1.5 m.

The width of the greenbelt shall be 7.5 m and the total length shall be 31256m. Mathematically, it is possible to grow 1,01,935 plants along the boundary. During the rainy season, seeds of *Hamata* (*Stylosantheshamata*) and pelletized seeds of *Subabul* (*Leucaena leucocephala*) shall be sown liberally in order to have a two-tier greenbelt with perennial fodder. Additionally, avenue trees shall be grown on both the sides of roads at a distance of 5 m (total 400 trees per Km of road with 200 on each side at a distance of 5 m). About 32,000 avenue trees can be grown along the road sides.

PP submitted that it is proposed to add 40,000 plants every year for five years besides the soil binding forage crops like *Hamata* grass. In about five years, all unused and vacant areas within the mine lease area will be fully covered with shrubs and trees. Integrated soil, water, nutrient and biodiversity conservation mechanisms shall be chosen to sustain the green initiative. If the State Social Forest Division is prepared to enter in to a Memorandum of Understanding (MoU) for greenbelt development, avenue and block plantations; soil, water and nutrient conservation systems, the NALCO is prepared to spend Rs. 1.0 crores/year for five years. If it is not feasible, the NALCO wants to rope in a private agency which has the potential and competence to do the job. There shall be a third-party midterm performance evaluation after 3 years and a final evaluation after five years.

PP also submitted that Since 1981 NALCO has undertaken several programmes for the development of thick forest in Koraput district as a part of compensatory afforestation, forestry in the reclaimed land (72 Lakhs trees) in the existing two Bauxite mines and refinery including social forestry. NALCO will undertake 1800 Ha of degraded forest for extensive plantation under compensatory afforestation (CA) scheme 2016 (with an expenditure of 30 crores) of Pottangi bauxite mines in undivided Koraput District. Under CER, Budgetary for Plantation (Avenue, community, schools, etc.) allocated is Rs 70 lakhs.

9. The total proposed project subjected for mining falls under forest area, diversion of the same for non-forestry use is inevitable under the Forest Conservation Act 1980. Accordingly, the total forest area over 697.979 ha which includes 674.579 ha under active diversion and 23.400 ha under safety zone diversion has been sought for forest clearance under Section 2 (ii) of Forest Conservation Act, 1980. **PP has applied for Forest Clearance vide Proposal No. FP/OR/MIN/29981/2017 dated 01.11.2017.** PP reported that there are two blocks of reserved forests represented by Rallagedda RF (9.1 Km South) and Tangini RF (9.7 Km SE) within the 10 Km buffer zone of the Mining Lease area. These forests belong to Group II (Tropical dry deciduous forests) of subgroups (i) dry teak forests southern dry mixed deciduous forests (ii) southern tropical dry deciduous forest and (ii) dry bamboo brakes. All three sub-types intricately mixed. **PP submitted that in Form 2, the project attracts the General Condition specified in the Schedule of EIA Notification in view of Inter-State boundaries - Andhra Pradesh – 2.4 km**

(E).

PP submitted that there are no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves existing/proposed within the 10km study area. PP further submitted that the nearest RF such as Rallagedda RF (9.1 Km, S), Tangini RF (9.7 Km, SE), Jodimadu RF (10.2 Km, S), Nanda RF (11.2 Km, E), Duggeru RF (14.2 Km, NE), Pitaguru RF (14.5 Km, W) and Dushura RF (14.5 Km, W). PP submitted that there are 11 water bodies such as Totajhola Nala (0.5 Km SE), Pottangi Nala (2 Km S), Kunduli River (3.5 Km N), BoduruGedda (7.5 Km E), Kukurghat Nala (10 Km NW), PeddaGedda (11 Km E), Karandi River (12 Km N), Shakaigarh Nala (13.5Km, N), Kolab Nala (14Km, NW), Pathagarh Nala (14.8 Km, W) and Kolab River (18.8 Km, NW) are found around the project site. There are no forest dwellers in the Mine lease area, therefore, forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 are not applicable. PP further submitted that there is no protected area has been considered in the 10 km radius because of non-notified ecological and environmental sensitive area within the study. But the Potting Village which is consisting of tribal settlement and it is having 1137 families and 4401 Population, **due to tribal settlement it has been considered as eco-sensitive zones otherwise no sensitive area within 10 Km radius, as per “Technical Guidance of EIA Manual”.**

10. There are no threatened, rare, endangered or endemic species were observed during the survey in core zone. However, schedule I Species found in buffer zone namely Peacock (*Pavocristatus*).

11. Being a Major Mineral there is no requirement of District Survey Report.

12. The baseline data of one Season (Post–monsoon) was collected from September 2018 to November 2018. The baseline data is generated through field study within the impact zone (Core Zone and Buffer Zone) for various components of the environment viz. AAQ, water quality, noise levels, soil quality, flora, fauna and socio-economic data etc., The predominant wind direction observed during study period from E and NE. PP submitted that One micro-meteorological station was established in Malkarbandha village (1 Km - West) from mine lease area. PP submitted that the IMD Visakhapatnam is at a distance of 99.4 Km, SSW. Mean wind speed of the area is 2.11 m/s. PP submitted that the air quality monitoring has been carried out at 8 locations. The air quality concentrations of PM_{2.5} and PM₁₀ for all the 8 AAQM stations were found between 21.1 to 38.2µg/m³ and 35.8 to 55.4 µg/m³ respectively. The concentrations of NO₂ and SO₂ were found to be in range of 14.3 to 23.2 µg/m³ and 4.8 to 14.2 µg/m³, respectively. The ambient air quality of the sampling location was found to be well within the limits of NAAQS. Ambient noise levels were measured at 8 locations in and around the mine site. Noise levels varied from 50.3 to 54.2 Leq dB(A) during day time and from 40.7 to 43.9 Leq dB(A) during night time. PP further submitted that two surface and eight ground water samples

were collected within study area. PP reported that TDS, Total Hardness, Chlorides and Fluorides exceeds the permissible limit in GW8- Gadikhamara and parameters for surface water sample are within the limits as per IS: 10500 (2012) drinking water standards.

13. The public hearing was conducted on 17.12.2019 at Pottangi Mini Stadium, Pottangi under the Chairmanship of Sri Deben Kumar Pradhan, OAS (S.A.G) Additional District Magistrate, Koraput. The advertisement for public hearing was published in Odia daily newspaper "Prameya" and English daily newspaper "The New Indian Express" on 05.11.2019. PP reported that the major issues raised were about Infrastructure development, employment opportunities to surrounding local people, CSR implementation, environmental impact and peripheral development. PP has prepared an action plan to address the issues raised by the public along with a time bound action plan with budgetary provision. PP has also made budgetary provisions in the form of CER, EMP and CSR to address the issues raised during Public consultation. PP reported that around 700 people attended the PH meeting, but in the attendance sheet only 30-40 people agreed to signed and remaining persons refused to sign. In this regard, as proof of persons attended photo and videography taken during the PH were submitted to Ministry by State PCB. Further PP submitted that the Comments/issues raised by the public in Public Hearing and responses of the Project proponent translated in English and both the local language and English of each page signed by PP. The written comments/representations made on Public Hearing before conduction PH and during PH to PCB/ ADM are sent directly to MoEF&CC by State Pollution Control Board.

14. The CER fund shall be allotted as per the MoEF&CC office memorandum F.No.22-65/2017-IA.III dated 1st May, 2018. PP has submitted that as per MoEF&CC guidelines the CER of 0.5% (Greenfield project) of project cost i.e. Rs. 1436.9 Crores, amounting Rs. 720 Lakhs (Rs. 7.2 Cr) shall be spent under CER. This include 1) Drinking water supply – Rs. 30 Lakhs, 2) Health camps and facilities– Rs. 90 Lakhs, 3) Skill development – Rs. 70 Lakhs, 4) Roads & cross drains – Rs. 90 Lakhs, 5) Electrification, solar power – Rs. 90 Lakhs, 6) Sanitation, Solid waste management– Rs. 90 Lakhs, 7) Scientific support to farmers - Rs. 70 Lakhs, 8) Rainwater harvesting, soil conservation - Rs. 70 Lakhs, 9) Plantation (Avenue, community, schools, etc.) - Rs. 70 Lakhs and 10) Others as per the requirement - Rs. 50 Lakhs.

15. There is no settlement or rehabilitation envisaged.

16. The budget earmarked for Environment Management Plan Rs 120 Cr (capital) and Rs 12 Cr (recurring). This will include 1) Air pollution control (Capital – Rs. 10 Cr & Recurring/annum – Rs. 1 Cr), 2) Water pollution control (Capital – Rs. 30 Cr & Recurring/annum – Rs. 3 Cr), 3) Noise pollution control (Capital – Rs. 5 Cr & Recurring/annum – Rs. 0.5 Cr), 4) Pollution monitoring (Capital – Rs. 20 Cr & Recurring/annum – Rs.2 Cr), 5) Safety & health (Capital – Rs. 15 Cr &

Recurring/annum – Rs. 1.5 Cr), 6) Greenbelt development & Soil conservation measures etc... (Capital – Rs. 30 Cr & Recurring/annum – Rs. 3 Cr) and 7) Miscellaneous & Contingency expenses (Capital – Rs. 10 Cr & Recurring/annum – Rs. 1 Cr). PP reported that EMP budget considered as 8.3% of the Total Project Cost and recurring cost considered as 10% of EMP capital cost.

17. The factors of occupational health in Pottangi bauxite project are mainly dust, blasting, ground vibration, noise and land degradation. Hence, it is envisaged to take up the precautionary measures which will include Provision of rest shelters for mine workers with amenities like drinking water etc, all safety measures like use of safety appliances, such as dust masks, helmets, shoes, safety awareness programs, awards, posters, slogans related to safety etc., training of employees for use of safety appliances and first aid in vocational training center, regular maintenance and testing of all equipment as per manufacturers' guidelines., Periodical Medical Examination (PME) of all workers by a medical officer, first aid facility is provided at the mine site, Close surveillance of the factors in working environment and work practices which may affect environment and worker's health and Working of mine as per approved mining plan and environmental plans PP has earmarked a separate Budget for Safety & health (Capital – Rs. 15 Cr & Recurring/annum – Rs. 1.5 Cr).

18. There is no litigation pending against the project and/or land in which the project is proposed to be set up.

19. A declaration in EIA Report that they engaged M/s. Ramky Enviro Private Services Limited, accredited by QCI/NABET (Certificate No. NABET/EIA/1922/RA/0140), valid till 21.05.2022 as EIA Consultant for preparation of EIA report. The EIA report has been prepared in Compliance with the Terms of Reference (vide Memo No. IA/OR/MIN/69870/2017 dated 28.06.2018).

Further, PP has given undertaking in Form-2 that the data and information given in the application and enclosures are true to be best of his knowledge and belief. And he is 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 above, they given undertaking that no activity/ construction/expansion has since been taken up.

The Consultant has also given a declaration that they prepared the EIA/EMP report based on prescribed Terms of Reference issued by MoEF&CC vide Memo No. IA/OR/MIN/69870/2017 dated 28.06.2018 for the proposed Pottangi bauxite mine in Pottangi Village & Tehsil, Koraput Dist., Odisha. In this regard we hereby certify that the EIA/EMP reports prepared by us and data provided by laboratories including our status of approvals presented in the report is factually correct. The laboratory used for analysis of samples is approved under EPA 1986 and rules made there under.

20. The cost of the project is Rs. 1436.9 Cr. PP submitted that number of working days is 350; Two operating shifts per day, each of 8 hours duration. PP also

submitted that the effective working hours will be 12 per day during dry season and 8 per day during monsoon. Total manpower will be 229 which includes 169 skilled and 60 unskilled manpower.

21. The EAC during deliberations on the proposal observed that following aspects are still needs to be addressed in the EIA/EMP for detailed and comprehensive assessment of environmental impacts anticipated from the proposed activity:

- i. Impacts of mining activity and transportation of mining material on villages / Habitat / settlements along with the mitigation plan.
- ii. Ground vibration study through authorized agencies and the results are to be compared with the limiting values prescribed by Director General of Mine Safety (DGMS).
- iii. Incremental value of PM 2.5 in worst case scenario considering the nearest villages.
- iv. Statement about compliance of guidelines issued by the Central Ground Water Authority and directions of Hon'ble NGT in application no. OA No. 176/2015.
- v. List of flora and fauna duly authenticated by the State forest department clearly indicating the Schedule of the species.
- vi. Impact assessment study for proposed activity on Kunduli River located at the distance of 3.5 Km from the project site.
- vii. Clarification about ESZ due to tribal settlement & mitigations plan.
- viii. Details about Total excavation including mineral Waste generation, Inter Burden, over burden, Top Soil generation and its handling.
- ix. Conceptual plan along with the post mining land use.
- x. A copy of clearance certificate from the District Collector under Forest Right Act" 2006.
- xi. Status of stage- I Forest Clearance.
- xii. 3-year action plan for Green belt development with a plantation rate sapling/year.
- xiii. Impact analysis of DG sets
- xiv. Proof of submission of Conservation plan to CWLW for Schedule-1 species, if any.
- xv. Video recording of the Public Hearing proceedings along with time bound action plan for implementation of the activities committed during public hearing in terms of O.M. No. 22-65/2017- IA.III dated 30th September, 2020.
- xvi. Affidavit by way of undertaking as required as per Ministry's Office Memorandum No.3- 50/2017--IA. II(M) dated 30.05.2018.
- xvii. Submission of Mining Plan in the Parivesh portal.

22. The EAC decided to return the proposal in present form and suggested the PP to incorporate the information on the aforesaid points and resubmit the EIA/EMP report for further consideration.

2.11: Amendment in Environment Clearance in EC for River Bed Mining (Bajri) with production capacity of 1.2 million TPA(ROM) by Lease ShriJaswant Singh, located at Revenue villages of Tehsil-Raipur, District-Pali Rajasthan (MLA-1677.94ha) [File No: J-11015/270/2013-IA.II (M); Proposal No: IA/RJ/MIN/141229/2020] - Amendment in EC regarding.

The proposal of M/s Jaswant Singh is for Amendment w.r.t. change in production capacity from 1.2 MTPA to proposed production capacity of 1.2 MT in Environment Clearance granted vide letter No. J-11015/270/2013-IA.II (M) dated 24.02.2016 for River Bed Mining (Bajri) with production capacity of 1.2 million TPA(ROM) by Lease ShriJaswant Singh, located at Revenue villages of Tehsil-Raipur, District-PaliRajasthan. The Lease area falls on Survey of India toposheet number 45 J/4, 45 F/16, 45 K/1, 45 G/13 and between the Latitudes from 25°58'59.14"N to 26°12'0.20"N and Longitudes from 73°54'31.11"E to 74°12'4.94"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. PP vide its letter dated 11.07.2020 submitted that a certificate w.r.t. homogeneous Mining lease within 500 meters of this lease is provided Mining Engineer, DMG, Pali vide its letter No. SME/Aj/Mining plan/F-103/2013/2198 dated 17.12.2013.

4. The proposal of TOR was considered by the Expert Appraisal Committee (Mining) in its 13th Meeting held on November 12, 2013 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TOR was issued by the Ministry vide letter dated 09.12.2013. PP applied for EC after conducting Public Hearing and submitted Form-I and EIA report. The Proposal was appraised before the Expert Appraisal Committee in its Meeting held during August 25-27, 2015. EC was issued by MoEF&CC vide letter No. J-11015/270/2013-IA.II (M) dated 25.02.2016.

4. PP vide Proposal No. IA/RJ/MIN/141229/2020 has applied for Amendment w.r.t. change in production capacity from 1.2 MTPA to proposed production capacity of 1.2 MTPA in the Environmental Clearance dated 24.02.2016.

5. Hon'ble Supreme Court vide its judgment dated 16.11.2017 in the matter of SLP(C) No.34134 of 2013 (State of Rajasthan Vs Nature Club of Rajasthan) has restrained river sand/ bajri mining in the State of Rajasthan in respect of 82 Letter of Intent (LoI) holders who had submitted their applications to the MoEF&CC for grant of EC. As per directions of Hon'ble Supreme Court dated 16/11/2017, as directed to carry out Scientific Replenishment Study and submit the report expeditiously to the Ministry of Environment, Forest and Climate Change for appraisal before EAC. In pursuant to the directions of Hon'ble Supreme Court, the Environmental Clearance

granted to project proponent were kept in abeyance vide Ministry's letter dated 14.12.2017 till Scientific Replenishment Study is submitted and further decision to be taken by the Ministry on the Environmental Clearance application.

6. Further, as per Hon'ble Supreme court order dated 6th December, 2019, the Ministry of Environment, Forest and Climate Change (MoEF&CC) was directed to process pending applications stating that "Hence, in the meantime we direct that the aforesaid applications may be completed and appropriate orders be passed thereon by the Ministry of Environment, Forest and Climate Change (MoEF&CC)". Accordingly, after receipt of documents, proposal was considered in the EAC meeting.

7. The proposal was placed in the 21st EAC meeting held during 23rd – 25th Sept., 2020. Project proponent informed to committe that for the instant proposal, the baseline data was generated during October to December, 2013 and the Public Hearing was conducted on 8th July, 2014.

The committee observed that (i) the baseline data is of 7 years old. (ii) The list of flora and fauna was not authenticated by the chief wildlife warden. (iii) Supporting documents were not submitted according to the Enforcement & Monitoring guidelines of sand mining 2020. (iv) no detailed transportation plan as per the Enforcement & Monitoring guidelines of sand mining 2020.

8. In view of the above, the committee deliberated on the submissions made by the project proponent and presentation made by the consultant in the meeting and **deferred** the proposal and sought the following information:-

- (1) The project proponent needs to carry out the fresh baseline data for one-month period (non-monsoon season). The project proponent 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 project proponent should submit the original test reports and certificates of the labs which will analyze the samples.
- (2) The project proponent needs to submit the list of flora and fauna, list of schedule-1 species authenticated by the chief wildlife warden.
- (3) The project proponent needs to submit the action plan as per Enforcement & Monitoring guidelines of sand mining 2020.
- (4) The project proponent needs to submit the detailed transportation plan as per the Enforcement & Monitoring guidelines of sand mining 2020. Project proponent should clearly show the transport route of the mineral and protection and mitigative measure to be adopted during transportation.

- (5) The project proponent needs to compare the current baseline data with the previous baseline data. If any changes exist, then detailed mitigation measures needs to be provided.
- (6) The project proponent shall prepare the conservation plan in consultation with the State Forest Department and approved by the Chief wildlife warden.
- (7) The project proponent needs to submit the detailed plan in tabular format (year-wise) for afforestation and green belt development in and around the mining lease. The project proponent 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.
- (8) Project proponent should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations.

2.12: Amendment in Environment Clearance in EC for River Bed Mining (Bajri) with production capacity of 2.8 million TPA(ROM) by Lease Shri Vikramaditya Rathore, located at Revenue villages of Tehsil-Hurda Masuda, District-Bhilwara&Ajmer Rajasthan (MLA-544.03ha) [File No: J-11015/413/2013-IA.II (M); Proposal No: IA/RJ/MIN/139541/2020] - Amendment in EC regarding.

The proposal of M/s Shri Vikramaditya Rathore is for Amendment w.r.t. change in production capacity from 2.8 MTPA to proposed production capacity of 2.8 MT in Environment Clearance granted vide letter No. J-11015/413/2013-IA.II (M) dated 25.02.2016 for River Bed Mining (Bajri) with production capacity of 2.8 million TPA(ROM) by Lease ShriVikramadityaRathore, located at Revenue villages of Tehsil-Hurda Masuda, District-Bhilwara& Ajmer Rajasthan.The Lease area falls on Survey of India toposheet number 45 K/5, 45K/9, 45K/10, 45K/13, 45J/12 & 45J/16 and between the Latitudes from 25°14'51.3"N to 25°55'25.6"Nand Longitudes from 74°30'15.9"E to 75°07'18.0"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. PP vide its letter dated 23.8.2020 submitted that a certificate w.r.t. homogeneous Mining lease within 500 meters of this lease is provided Mining Engineer, DMG, Bhilwara&Ajmer vide its letter Akha/Bhilwara-circle/CC.2/Bajri/Bhilwara/2012 Dated 05.12.2013

4. The proposal of **TOR** was considered by the Expert Appraisal Committee (Mining) in its 13th Meeting held on November 12, 2013 to determine the Terms of

Reference (TOR) for undertaking detailed EIA study. The TOR was issued by the Ministry vide letter dated 09.12.2013. PP applied for **EC** after conducting Public Hearing and submitted Form-I and EIA report. The Proposal was appraised before the Expert Appraisal Committee in its Meeting held during August 25-27, 2015. EC was issued by MoEF&CC vide letter No. J-11015/413/2013-IA.II (M) dated 25.02.2016.

5. PP vide Proposal No. IA/RJ/MIN/139541/2020 has applied for Amendment w.r.t. change in production capacity from 2.8 MTPA to proposed production capacity of 2.8 MTPA in the Environmental Clearance dated 25.02.2016.

6. Hon'ble Supreme Court vide its judgment dated 16.11.2017 in the matter of SLP(C) No.34134 of 2013 (State of Rajasthan Vs Nature Club of Rajasthan) has restrained river sand/ bajri mining in the State of Rajasthan in respect of 82 Letter of Intent (LoI) holders who had submitted their applications to the MoEF&CC for grant of EC. As per directions of Hon'ble Supreme Court dated 16/11/2017, as directed to carry out Scientific Replenishment Study and submit the report expeditiously to the Ministry of Environment, Forest and Climate Change for appraisal before EAC. In pursuant to the directions of Hon'ble Supreme Court, the Environmental Clearance granted to project proponent were kept in abeyance vide Ministry's letter dated 14.12.2017 till Scientific Replenishment Study is submitted and further decision to be taken by the Ministry on the Environmental Clearance application.

7. Further, as per Hon'ble Supreme court order dated 6th December, 2019, the Ministry of Environment, Forest and Climate Change (MoEF&CC) was directed to process pending applications stating that "Hence, in the meantime we direct that the aforesaid applications may be completed and appropriate orders be passed thereon by the Ministry of Environment, Forest and Climate Change (MoEF&CC)". Accordingly, after receipt of documents, proposal was considered in the EAC meeting.

8. The proposal was placed in the 21st EAC meeting held during 23rd – 25th Sept., 2020. Project proponent informed the committee that for the instant proposal, the baseline data was generated during December, 2013 to February, 2014 and the Public Hearing was conducted on 20th June, 2014 in Ajmer and 10th December, 2014 in Bhilwara.

The committee observed that (i) the baseline data is of 7 years old. (ii) The list of flora and fauna was not authenticated by the chief wildlife warden. (iii) Supporting documents were not submitted according to the Enforcement & Monitoring guidelines of sand mining 2020. (iv) no Detailed transportation plan as per the Enforcement & Monitoring guidelines of sand mining 2020.

8. In view of the above, the committee deliberated on the submissions made by the project proponent and presentation made by the consultant in the meeting and **deferred** the proposal and sought the following information:-

- (1) The project proponent needs to carry out the fresh baseline data for one-month period (non-monsoon season). The project proponent 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 project proponent should submit the original test reports and certificates of the labs which will analyze the samples.
- (2) The project proponent needs to submit the list of flora and fauna, list of schedule-1 species authenticated by the chief wildlife warden.
- (3) The project proponent needs to submit the action plan as per Enforcement & Monitoring guidelines of sand mining 2020.
- (4) The project proponent needs to submit the detailed transportation plan as per the Enforcement & Monitoring guidelines of sand mining 2020. Project proponent should clearly show the transport route of the mineral and protection and mitigative measure to be adopted during transportation.
- (5) The project proponent needs to compare the current baseline data with the previous baseline data. If any changes exist, then detailed mitigation measures needs to be provided.
- (6) The project proponent shall prepare the conservation plan in consultation with the State Forest Department and approved by the Chief wildlife warden.
- (7) The project proponent needs to submit the detailed plan in tabular format (year-wise) for afforestation and green belt development in and around the mining lease. The project proponent 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.
- (8) Project proponent should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations.

2.13: Amendment in EC for Bhurasar gypsum mine by M/s Rajasthan State Mines & Minerals Limited to reduce Gypsum production capacity from 2 Lac TPA to 1 Lac TPA and increase the Life of Mines located at Village: BHURASAR, Tehsil: Kolayat, District: Bikaner and State: Rajasthan – [Proposal No. IA/RJ/MIN/142882/2020; File No. J-11015/456/2008-IA.II(M)] – Modification of EC

The proposal of M/s Rajasthan State Mines & Minerals Limited is for Amendment in EC w.r.t. reduction in production capacity from 2 LTPA to 1 LTPA as

well as and increase the life of mines. It is a Bhurasar gypsum mine located at Village: BHURASAR, Tehsil: Kolayat, District: Bikaner and State: Rajasthan. The ML no. 05/2005 and the MLA is 280.50 ha. It falls between latitude 28°18'32.17" N to 28°19'34.76" N and longitude 72°15'16.96" E to 72°16'48.58" E and the Survey of India Toposheet No: 44D/07.

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 Environmental Clearance No. J-11015/456/2008-IA. II (M), dated 05.08.2010 was granted for Gypsum production capacity of 3 Lac TPA for Bhurasar Gypsum Mine. The life of mines as per EC was five years from the date of commencement of mining operation as it was new granted mining lease. The mining operation was commenced on 20.02.2011 and therefore the tentative validity of five years for the sanctioned EC was completed on 19.02.2016. The life of mine was extended for the period from 20.02.2016 to 19.02.2020 vide amendment in environmental clearance no. J-11015/456/2008-IA. II (M), dated 28.01.2016 with reduced Gypsum Production Capacity for the Mines 2 Lakh TPA.

4. The mining lease for mineral Gypsum, near village-Bhurasar, Tehsil-Kolayat, District Bikaner was granted in favour of Rajasthan State Mines and Minerals Limited (A Government of Rajasthan Enterprise) by the Mines Department, Government of Rajasthan, vide order No.P.3(143)Khan/Group-2/06, dated 03.12.2010 for a period of 20 years with effect from date of registration i.e. from 04.02.2011 to 03.02.2031. The validity of mining lease was revised to 50 years i.e. up to 03.02.2061 by the Mining Engineer, Department of Mines & Geology, Government of Rajasthan, Bikaner through rider agreement dated 29.08.2019.

5. PP has submitted that the proposal of M/s. Rajasthan State Mines & Minerals Limited (RSMML) is for extension in sanctioned life of mines in EC (extension of validity period) and to reduce gypsum production capacity from 2 lac TPA to 1 lac TPA in ML area of 280.50 Hectare. The reason for reduction in Gypsum production capacity as compare to sanctioned Gypsum production capacity in EC is poor and uncertain demand of Gypsum from mines due to tough competition with short term permission holder khatedars, allowed for Gypsum Mining by the Mines Department, Government of Rajasthan treating Gypsum Mining is a land improvement activity (Rule 74 of Rajasthan Minor Mineral Concession Rules-2017). Further as per MOEF&CC notification dated 28.03.2020 the short term permitted khatedars have been exempted from environmental clearance by the Department of Mines & Geology vide their circular dated 02.06.2020 for Gypsum Mining. This proposal was considered in 15th EAC meeting held during April 20-21, 2020 but PP informed that they could not attend the meeting due to the lockdown. Therefore, the proposal was deferred in view of the request of the project proponent.

6. The project proponent submitted the following:

a) Environmental Clearance was issued vide letter no. 11015/456/2008-IA.II(M) dated 05.08.2008.

b) Environmental Clearance amended vide letter no. 11015/456/2008-IA.II (M) dated 28.01.2016 for life of mine up to 19.02.2020 and reduced production capacity of Gypsum from 3 Lac TPA to 2 Lac TPA .

c) Mine is not in operation since 17.07.2017 due to no market demand and remote location of mine. RSMML hope that present situation may improve in future as short-term permissions for mining of gypsum started in financial year 2017-18 to khatedars directly in nearby area are for five years period.

d) Mineable reserve of Gypsum at mines as on 01.04.2016 is 8.14 Lac MT

e) Production of Gypsum at mines from 01.04.2016 to 31.01.2020 is 0.37 Lac MT only (authenticated production of Gypsum by Department of Mines & Geology IS ENCLOSED).

f) Balance mineable reserves of Gypsum at mines are as on 01.02.2020 are 7.77 Lac MT.

g) Validity of Mining lease is up to 03.02.2061.

h) Estimated life of mine as per Scheme of Mining with proposed production of Gypsum (ROM) 1 Lac TPA is 8 years.

i) Market demand is still uncertain and therefore life of mine is requested to extend for a period of 30 years from the date of Environment Clearance (validity of mining lease i.e. up to 03.02.2061).

j) Renewal of CTO application dated 1309.2018 is under consideration at Rajasthan State Pollution Control Board, Jaipur. Previous CTO was valid up to 31.01.2019 and it will be renewed after issuance of Amendment in EC by MOEF&CC.

7. PP has submitted that Gypsum Mining activities by RSMML form sanctioned mining lease area of Bhurasar Gypsum Mines and the Gypsum Mining by short Term Permitted Khatedars are of similar nature and in both case after mining land become suitable for agriculture by removing gypsum layer as both upper thin cover of sand and underlain sand are same and suitable for agriculture. The Gypsum mining (removal of hard pan) from surface or under thin desert sand layer is an eco friendly mining operation.

8. PP has submitted that the estimated geological reserve of Gypsum at Bhurasar Gypsum Mines is 20.84 Lakh Metric Ton. The estimated Mineable Gypsum Reserve is 19.32 Lakh Metric Ton. The Gypsum production from mines since inception is

11.19 Lakh Metric Ton. The balance estimated reserve of Gypsum at mines is about 8.13 Lakh Metric Ton. The mine is not in operation since 17.07.2017.

9. PP has submitted that the project is an open-cast mining project without drilling and blasting, confined to excavation & loading of Gypsum and allied operations from the proposed site. The operation is mechanized with use of Hydraulic Excavator (for excavation of Gypsum) and tractor with scrapper/water tanker (for removal and backfilling of overburden sand/water sprinkling). The Gypsum is loaded in customers Trollas/Trucks/Tippers directly at working face and dispatched through weighbridge to customer destination.

10. Project Proponent has informed that as per modified scheme of mining, the life of mines is about 9 years from the date of resuming mining operation after issuance of amendments in EC regarding life of mine. The life of mine may vary with actual production of Gypsum, lower down the quality criteria by the customers and during any further exploration at mine. Therefore, RSMML has applied amendment in environmental clearance with request to extend the life of mine up to period of thirty years from the date of environmental clearance i.e. up to 04.08.2040.

11. PP has submitted that the existing consent to operate was valid up to 31.01.2019. Renewal application for consent to operate has been submitted at Rajasthan State Pollution Control Board on 08.08.2017 with prescribed fees. The Rajasthan State Pollution Control Board will renew consent to operate after amendment in EC as applied.

12. PP has submitted that the mine is located at a distance of approx 143 Kms from Bikaner; the District & Divisional head quarter. The nearest railway station is Jamsar, of the North-Western Railway zone at a distance of about 135 kms. The nearest Town Dantore is situated about 40 kms from the mines.

13. PP has submitted that in case of mining in private land, mine is operating on mutual consent basis with khatedars and after completion of mining operation in respective khatedar, the land is being returned back to the khatedars with compensation @Rs 70 per metric ton on Gypsum production & dispatched basis with leveling of mined out land so that the khatedar (farmer) can start agriculture activities soon after the mining and reclamation of land. The mined-out land, falling under Government can be used for agriculture as it may allot to the farmers after surrender of mining lease.

14. The proposal was considered in the 21st EAC meeting held during 23rd to 25th Sept., 2020. The committee observed that there are no approved mining plan and plantation details in the proposal. The previous amended EC issued vide letter J-11015/456/2008-IA. II (M)(Pt.) dated 28th January, 2016 which was valid from 20th feb., 2016 to 19th feb. 2020 as mentioned in EC. The PP applied for amendment of EC on 13th feb., 2020 i.e. prior to expiry of previous amended EC.

15. Based on the documents submitted and detailed discussions, the committee **recommended** for amendment in Environmental Clearance no. J-11015/456/2008-IA.II (M)(Pt.) dated 28th January, 2016 of M/s Rajasthan State Mines & Minerals Limited for Bhurasar gypsum mine (i) to reduce Gypsum production capacity from 2 Lac TPA to 1 Lac TPA (ii) to increase the life of mine till 04.08.2040, subject to submission of (i) approved mining plan; (ii) Implementation of plantation plan as was submitted in the earlier proposal and (iii) legal opinion w.r.t. validity of Environmental Clearance, located at Village: Bhurasar, Tehsil: Kolayat, District: Bikaner, Rajasthan. All other conditions shall be applicable as per EC amendment letter no. J-11015/456/2008-IA. II (M) dated 28th January, 2016.

2.14 Collection of Minor Minerals (Reta, Bajri, Boulder) to existing course of natural water from River Gaula by M/s uttarakhand van vikas nigam, khamanahaldwani located at Gaula River Reserve Forest – Modification of EC [Proposal No. IA/UK/MIN/8724/2011; File No. J-11015/363/2009

The proposal of M/s Uttarakhand Van Vikas Nigam is for Amendment w.r.t. the extension of validity of EC coterminous with the validity of Forest Clearance i.e. 22nd January, 2023. The EC was granted vide Letter No. J-11015/363/2009-IA-II(M) dated 13.04.2011 for collection of Minor Minerals (Reta, Bajri, Boulder) to existing course of natural water from River Gaula by M/s Uttarakhand Van Vikas Nigam, khaman haldwani located at Gaula River Reserve Forest, District Nainital, Uttarakhand.

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

3. PP has submitted that Environmental Clearance was granted vide Letter No. J-11015/363/2009-IA-II(M) dated 13.04.2011 for Collection of Minor Minerals (Reta, Bajri, Boulder) to existing course of natural water from River Gaula by M/s Uttarakhand Van Vikas Nigam, khamanahaldwani located at Gaula River Reserve Forest, District Nainital, Uttarakhand. Para 6 of EC letter specifically mentions that, ***“The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and hereby accords environmental clearance No. J-11015/363/2009-IA-II(M) dated 13.04.2011 for a period of 10 years or till the forestry clearance whichever is earlier....”***

PP vide its Proposal No. **IA/UK/MIN/8724/2011 dated 29.08.2020** has applied for amendment in EC w.r.t. the extension of validity of EC coterminous with the validity of Forest Clearance i.e. 22nd January, 2023.

PP has stated that MoEF&CC vide its letter F. No. 8-61/1999-FC dated 23.01.2013 granted Forest Clearance for a period of 10 years and is valid till 22.01.2023. Since, EC is also valid for a period of 10 years i.e. till 12.04.2021,

therefore, PP has requested for extension of validity of EC coterminous with the validity of Forest Clearance i.e. 22nd January, 2023 for hassle free operations.

The Member Secretary informed the EAC that the National Mission for Clean Ganga (NMCG) has written a letter to MoEF&CC regarding a study conducted by an expert team to assess the impact of illegal sand mining between Raiwala to Bhogpur on the Ganga River. The expert team has identified certain stretches which are not advisable for mining.

The PP replied that they are aware about the NMCG study; however, the project site of the current proposal is on river Gaula, a tributary of river Ramganga and not falling in the stretches as identified in the study.

4. Based on the documents submitted and discussion held during 21st EAC meeting held on 23-25, September, 2020 the Committee recommended the proposal of extension of validity of EC dated 13.04.2011 till 22.01.2023 subject to the following additional conditions.

- i. The PP has to furnish the Certified EC Compliance report.
- ii. All other terms and conditions prescribed under EC dated 13.04.2011 shall remain unchanged.

2.15 Narayana Iron Ore Mine by M/s. JSW Steel Ltd. located at village Narayanapura, Karnataka - [Proposal No. IA/KA/MIN/169931/2020; File No. J-11015/03/ 2007-IA. II(M)]– Consideration of ToR

PP did not attend the EAC meeting thus, the Committee decided to defer the proposal.

2.16 Maliparbat Bauxite Mine, (ML Area: 268.110 Ha) Enhancement of Production of Bauxite From 0.6 MTPA to 0.9 MTPA at Aligaon-Kankaramba Village, Pottangi Tehsil, Koraput District, Odisha State by M/s. Hindalco Industries Limited [Proposal No. IA/OR/MIN/162409/2020; File No. J-11015/411/2005-IA.II(M)] - Terms of Reference.

The Proposal of M/s. Hindalco Industries Limited is for grant of Terms of Reference for Enhancement of Production of Bauxite From 0.6 MTPA to 0.9 MTPA of Maliparbat Bauxite Mine, (ML Area: 268.110 Ha). The mine site is located in the Aligaon-Kankaramba Village, Pottangi Tehsil, Koraput District, Odisha State. The mine is located between latitude 18° 39' 32.810" to 18° 40' 28.384" N & longitude of 82° 53' 22.815" to 82° 55' 50.244" E, and within survey of India topo-sheet Nos. 65J/13, J/14 and 65 N/2.

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

3. PP applied online for grant of Terms of Reference (ToR) vide proposal no. IA/OR/MIN/162409/2020 dated 05 Aug 2020 and submitted form-1 & Pre-Feasibility Report.

5. EDS was sought on 16.07.2020 and PP replied vide letter no. HIL/SEM/MOEF/2020-21/61 dated 04.08.2020 and the proposal was considered in the 21st EAC meeting held on 24th September, 2020. In the EDS it was inter alia asked that *“EC was granted under EIA Notification 1994, please submit the proof of application made in pursuant to S.O. 1530(E) dated 06.04.2018. The validity of EC is 5 years as per Hon'ble SC Judgment dated 02.08.2017”*

PP in its reply has submitted that *“The Environmental Clearance (EC) of Maliparbat Bauxite Mine was issued under the EIA Notification of 1994 vide Letter No.: J11015/411/2005-IA.II (M) dated 07th September 2006. The copy of the EC given in Annexure-IA; ii. The Notification S.O. 1530(E) dated 06.04.2018 came into effect at a time when Maliparbat Bauxite Mining Lease stood lapsed between 1st May 2016 to 7th March 2019. It was post this period that the Government of Odisha, after due hearing, allowed for revival of the Mining Lease. The notification S.O. 1530(E) dated 06.04.2018 stipulated time frame of 6 months (i.e. up to 05 October 2018) to make an application for environmental clearance under EIA notification 2006. However, Hindalco could not submit the application as per notification S.O. 1530(E) dated 06.04.2018 for Maliparbat Bauxite Mines since the Mining Lease itself stood lapsed during such time. Since for future operation the mine expansion in production is need of hour, therefore we have applied for expansion in production from 0.6 MTPA to 0.9 MTPA under EIA notification 2006.”*

6. The during the EAC meeting informed that:

I. The Maliparbat Bauxite mine obtained Environment Clearance (EC) for 0.6 MTPA vide letter No.J-11015/411/2005-IA.II(M) dated: 7th September 2006.

II. the lease area of 268.110 hectares falls under Aligaon-Kankaramba Village, Pottangi Tehsil, Koraput District, Odisha. PP has submitted that the Mining Lease of Maliparbat was issued to Hindalco vide Grant Order from Department of Steel and Mines (Government of Odisha) on 19th June 2007 and the Mining Lease was executed on 8th November 2007.

III. Maliparbat Bauxite Mine was registered on 14.11.2007 in favour of M/s HINDALCO Industries Ltd for the term of twenty (20) years. In view of section 8A(3) of Mines and Minerals (Development and Regulation) Amendment Act,2015, the period of lease is deemed to have been extended up to 14.11.2057 for 50 years from 14.11.2007.

IV. Hindalco obtained all statutory clearances for the development of mine and started Bauxite ore production from FY 2008-09 and continued up to 30th October 2013. Severe difficulties were faced in continuing mining activities thereafter as a result of which we were forced to discontinue mining activities owing to prohibitory

orders issued due to unrest in the area. The copy of order sheets dictating restraining orders from 500 meters of the Mining Lease boundary (of the said mine) promulgated u/r of Cr. P. C 144 issued by the District Magistrate of Koraput stating sufficient evidence of public disorder and order to be enforced by Semiliguda Police Station.

V. Hindalco applied for revival of mining lease and after due consideration of facts, the office of Department of Steel & Mines (Government of Odisha) reconsidered the application of the lessee after the lessee fulfilling statutory conditions in case of mine lapse. The revival of lapsed Maliparbat Bauxite Mining Lease was received on 8th March 2019 from the concerned authorities (Department of Steel & Mines, Government of Odisha).

VI. PP submitted that the entire lease area falls in hilly area under the revenue class of "Pahad and Parbat". There is no forest land in the M.L area. PP has submitted that there are no Ecological Sensitive Areas (wild life sanctuaries, tiger reserves, elephant reserves, national parks and biosphere reserves etc.) present in the study area.

VII. The copy of approval Review of Mining Plan along with Progressive Mine Closure Plan issued by Regional Controller of Mines, Indian Bureau of Mines vide letter no MS/OTFM/22-ORI/BHU/2017-18 Dated 14.11.2017. PP has submitted that the proposed enhancement in Bauxite production will be achieved by opencast mechanized mining method. The main operation shall include removal and stacking of top soil and Overburden by excavator cum loaders, exposing the bauxite zone which will be followed by Bauxite excavation through controlled drilling & blasting and sizing through crusher. The remaining rejects will be used for backfilling. Once mine progresses and sufficient void created, simultaneous back filling will be started mined out areas.

VIII. PP has submitted that Water will be required in the mining area for sprinkling on the roads to suppress the dust, watering of green belt/green verge and trees planted to comply with requisite EMP measures, miscellaneous industrial use, and drinking and sanitation. PP submitted that total requirement water requirement is 61 KLD. The kundli nala is the source of water after treatment. The water permission to extract the water from kundli nala was granted by Irrigation dept. vide letter No. Irr-II. WRC45/06-13366/WR dated 21.04.2006. Effort will be made to avoid use of water from natural sources by creating rain water harvesting ponds with in mining lease area.

IX. There are no rehabilitation and resettlement works to be carried out. The complete area is under possession of HIL.

X. The copy of letter submitted to The Director, Ministry of Environment and Forests, Bhubneshwar vide Letter No HIL/SEM/MoEF/45/2020-21 dated 02.06.2020.

XI. The past production data for the period from 2008-09 to 2013-14 authenticated by Deputy Director of Mines, Koraput Circle, Koraput vide Lr No. 826/Mines dated 17.07.2020. In addition to this PP also submitted the duly filled annexure-III as per which after grant of last EC the production is well within the EC capacity.

XII. There is no litigation pending against the project and/or land in which the project is proposed to be set up.

XIII. Consent to establishment obtained from SPCB, Orissa Vide letter no. 1310/Ind-II-NOC-3889 dated 24.01.2006. PP also submitted the copy of Consent to Operate obtained from SPCB, Odisha vide letter NO. 3833/IND-I-CON-5437 dated 27.03.2020 which is valid upto 31.03.2022.

XIV. The total Project capital Cost is Rs. 24 crores. A total of 180 persons will be employed for average production of 3600 t bauxite / day. PP has earmarked a budget of Rs. 0.5 crores.

7. Based on the documents submitted and discussion held during 21st EAC meeting held on 23-25, September, 2020 the Committee observed that the EC granted on 07.09.2006 under EIA Notification, 1994. PP submitted the past production data for the period from 2008-09 to 2013-14 authenticated by Deputy Director of Mines, Koraput Circle, Koraput vide Lr No. 826/Mines dated 17.07.2020. The committee also observed that the PP has operated the mines till 2013-14 without obtaining Environment Clearance under EIA Notification, 2006 and the PP did not submit the application as per notification no. S.O. 1530(E) dated 06.04.2018. The committee observed that the proposal falls under violation case and opined that this Committee is not empowered to consider violation proposals. The EAC returned the proposal in present form and suggested the PP to take further directions of the Ministry regarding consideration of the proposal.

2.17: Proposal for change in excavation & dispatch patter of Durgaiburu Iron Ore Mining Lease (1443.756 Ha), Beneficiation and Pelletisation Plant Project of M/s Steel Authority of India Limited (SAIL), located at Village Gua&Ghatkuri Reserve Forest, Tehsil-Noamundi, District West Singhbhum, Jharkhand-[Proposal No: IA/JH/MIN/139621/2020, File No. J-11015/453/2008-IA. II (M)-Reconsideration for Amendment in EC under Para 7(ii) of EIA 2006.

The proposal of M/s. Steel Authority of India Limited is for grant of EC under para 7(ii) of EIA Notification 2006 (as amended) for change in excavation & dispatch pattern increasing the excavation & dispatch of Iron ore fines from existing fines dump from 3.1 MTPA to 5 MTPA keeping the total production from the mines within the approved EC capacity of 12.5 MTPA. The Durgaiburu Iron Ore Mining Lease mining lease(ML area 1443.756 ha) is located in Tehsil Noamundi, District West Singhbhum, is a part of Survey of India Topo sheet bearing no.73F/8 (F45H8) and is bounded by latitudes 22°11'17.511" N - 22°14'17.304" N and longitudes

85°19.58.525" E -85°23'28.973" E. The entire mining lease area is located in Ghatkuri Reserve Forest.

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 submitted that earlier the Environmental Clearance has been granted vide letter no. J-11015/453/2008-IA.II (M) dated 25th March, 2013 for expansion in production to 12.5 Million Tonnes Per Annum (MTPA) iron ore comprising of 10 MTPA fresh ROM and 2.5 MTPA of fines from the existing Fines Dump and liquidate the entire fines dump in 13 years, setting up a new 12.5 MTPA iron ore Beneficiation Plant (for processing of 10 MTPA ROM & 2.5 MTPA fines from Fine Dump and Setting up a new 4 MTPA Pelletisation Plant to pelletise slimes generated at the new beneficiation plant. Subsequently MoEFCC has amended the specific condition by vide letter No. J-11015/453/2008-IA.II (M) dated 02nd February, 2015 to utilize the entire dump in 9 years instead of 13–14 years.

The PP has now applied online vide proposal No. IA/JH/MIN/139621/2020 dated 30.01.2020 under para 7(ii) of EIA Notification 2006 (as amended) and submitted Form-2, Modification in approved Review Mining Plan in Respect of Durgaiburu Iron ore lease, letter of Intent(LOI) along with the Lease deed execution and Order of Ministry of Mines. The proposal was placed in EAC meeting held during 26th -27th February, 2020.

4. PP submitted that Durgaiburu Mining Lease was first granted on 22.02.1949 for a period of 30 years. 1st Renewal of Mining Lease (RML) was also granted for another 30 years period w.e.f 22.02.1979 to 21.02.2009. The Govt. of Jharkhand vide order dated 25.06.2019 extended the lease period from 22.02.2009 to 21.02.2029 under the provisions of Mineral (Mining by Government Company) Rules, 2015 and mining lease deed has been executed on 24.09.2019.

5. The Project Proponent reported that Review of Mining Plan for the period from 2019-20 (01.11.2019 to 31.03.2020) to 2023-24 has been approved by IBM vide letter No. RAN/WSB/Fe/MP-17/2019-20 dated 20.12.2019. The estimated iron ore reserves & resources in the Durgaiburu Mining Lease as on 01.11.2019 is 186.41 million tonnes (MT). In addition to the above, there is a huge dump estimated to contain about 33 MT of iron ore fines at Gua Ore Mines, which was accumulated over the years till merger of ISP with SAIL in 2006 due non-availability of facilities to consume iron ore fines in ISP. The Fines Dump is spread over Durgaiburu and Topailore Mining Leases. Out of the 33 MT of fines, about 26.4 MT lies within Durgaiburu Lease and remaining 6.6 MT lies in Topailore Mining Lease.

6. PP submitted that the total lease area of 1443.756 ha, presently the mining and allied activities are confined over 274.691 ha for which Stage – II Forest

Clearances have been obtained from MoEF&CC vide F.No. 8- 251/1986 – FC (Pt) dated 22.08.2014. Further, Stage-I FC over an additional area of 361.295 ha for was granted by MoEF&CC vide F .No. 8 – 251/1986-FC dated 04.03.2014 and grant of Stage–II FC is under consideration by MoEF&CC. The entire mining lease area is located in Ghatkuri Reserve Forest and do not fall under the purview of Wildlife Protected Area.

7. Project Proponent submitted that Ministry of Mines, Govt. of India have noted in their Order F.No. 16/30/2019-M.VI dated 16th September,2019 that vast stocks of slimes and sub-grade ore are lying at mine pit heads of captive mines of SAIL and are liable to cause environmental hazards. Accordingly, Ministry of Mines, Govt. of India vide letter dated 16.09.2019 have accorded permission for selling of these low grade mineral (tailings and sub-grade ore) in the open market to maximise the availability of iron ore for the purpose of beneficiation and pelletisation and subsequent use for iron & steel making and to protect the environment such that mineral can be exhausted and environmental hazards can be mitigated. The disposal of such stockpiles would enhance the availability of iron ore for the purpose of beneficiation and pelletisation and subsequent use for iron & steel making. Further, Ministry of Mines, Govt. of India has also directed concerned State Governments to allow SAIL to sell fresh iron ore up to 25% of total previous year production to mitigate the risk of possible shortage of iron ore on account of expiry of mining leases pertaining to merchant mining on 31.03.2020.

8. PP submitted that since, installation of envisaged beneficiation & pelletisation facilities has been delayed, it is not possible to consume these fines at present. It will take about 4 years for installation & commissioning of the envisaged beneficiation & pelletisation plants after grant of Stage–II FC over 361.295 ha. SAIL has planned to accelerate the liquidation of Gua Iron Ore Fines Dump by excavating the fines from the Fine Dump to the tune of 5 MTPA from Durgaiburu M.L. for selling in open market keeping total production within the approved EC sanctioned capacity of 12.5 MTPA (7.5 MTPA ROM + 5 MTPA fines) till commissioning of the envisaged beneficiation & pellet plants at Gua Ore Mines, which is expected to take about 4 years after receipt of Stage – II Forest Clearance for the earmarked area. Out of the proposed excavation of 5 MTPA fines, about 2.5 MTPA fines will be transported by dumpers/trucks to Gua Public Siding through SAIL's own internal road over ~3.5 km for dispatch through rail and the remaining 2.5 MTPA will be dispatched by road through SAIL's own road covering a distance of 2.2 km and subsequently through Public Road up to Barajamda Railway Siding for dispatch through rail or directly by road as per buyers' discretion. Fines excavation from Gua Fines Dump shall be carried out only during non-monsoon seasons. Workings will also be suspended during periods of heavy un-seasonal rains.

9. Keeping in view of the above stated aspects SAIL has proposed the following modification/amendment in EC for utilisation of dump fines & changes in mode of

mineral despatch from Durgaiburu Mining Lease of Gua Ore Mines till commissioning of envisaged beneficiation & pellet plants (i.e. 4 years after grant of Stage – II FC):

- a) Excavation of iron ore from Durgaiburu Mining Lease of Gua Ore Mines @ 12.5 MTPA including a provision for excavation of maximum up to 5 MTPA iron ore fines from the existing Fines Dump for selling in the open market.
- b) Transportation of 2.5 MTPA of fines excavated from the Fines Dump through SAIL's own roads to Gua Public Siding covering a distance of about 3.5 km for further dispatch by rail. Transportation of the remaining 2.5 MTPA of excavated fines through SAIL's own roads covering a distance of 2.2 km & subsequently through Public Road up to Barajamda Railway Siding & thereafter by rail or directly by road at the discretion of the buyers.

Indian Bureau of Mines (IBM), Ranchi has already approved Modification in Approved Review of Mining Plan for the period from 2019-20 (01.11.2019 to 31.03.2020) to 2023-24 vide letter No. RAN/WSB/Fe/MP-17/2019-20, dated 20.12.2019 covering the above proposed changes under Durgaiburu Mining Lease of Gua Ore Mines.

10. PP reported that the proposed change in scope of work does not have any significant adverse impacts on environment as revealed by the studies undertaken. Further, proposed additional pollution prevention and control measures under the current proposal will further improve environmental quality and land use of the area and also maintain & improve socio-economic aspects of the region. Project Proponent also submitted that in order to assess the likely impacts, if any, on the local road infrastructure & air quality of the area, due to the proposed changes in the scope of work, specific environmental studies viz., Traffic Density Study and Air Quality Impact Prediction Study have been carried out through our environmental consultant M/s MECON Ltd. and incorporated in the enclosed addendum to EIA/EMP Report. It has been noted that the existing roads have adequate spare capacity to handle the additional traffic load due to iron ore transportation by road. Further, the air quality impact prediction also shows the quality of air is within the permissible limits. The proposed utilization of fines from the fines dumps will not only result in effective utilization of these low grade minerals, but also eliminates environmental hazards associated due to storage of fines.

11. Consent to Operate has been obtained from JSPCB, Ranchi vide letter no. JSPCB/HO/RNC/CTO1005380/2016/1066 dated 26.12.2016 which is valid from 01.01.2017 to 31.12.2020.

12. Certified Compliance report of Environmental Clearance has been obtained from the Regional Office, MoEF&CC, Ranchi vide letter no. 103-175/08/EPE/3784 dated 29.01.2020.

13. PP submitted that 200 persons will be deployed for additional fines handling. 50 kW power shall be required for the fines handling area. 600 m³/day of water from

the mine's existing allocation will be required for the fines handling area.

14. The Project Proponent has reported that subsequent to the judgment of Apex Court dated 02.08.2017 in the matter of Common Cause vs Union of India and Ors., the Government of Jharkhand vide letter dated 07.09.2017 issued a demand for payment of Rs. 612,37,00,454/-. Against this demand, SAIL had filed a Writ Petition bearing WP (C) No. 7016/2017 before Hon'ble High Court of Jharkhand at Ranchi. The matter was heard and Hon'ble High Court vide order dated 21.02.2018 referred the matter to Division bench of the Jharkhand High Court since it involves substantial questions of Law. The matter is sub-judice before Division bench of the Hon'ble High Court of Jharkhand.

15. The proposal was appraised in the 14th EAC Meeting held during February 26-27, 2020. Based on the discussion held and document submitted the Committee deferred the proposal for want of a) *PP need to conduct the dump stabilization studies, b) Transport scenario to be properly calculated and resubmitted, c) Traffic density and road carrying capacity to be calculated, d) Excavation plan to be properly delineated, e) Mass balance to be prepared and quantitative despatch scenario for lump, fines to be submitted, f) impact on pollution load (increase/decrease) due to proposed excavation & dispatch plan needs to be submitted. The Committee is of the view that proposal may only be consider after the submission of above information, and site visit by EAC Members & MoEF&CC officials.*

16. Based on the ADS raised above, PP vide its letter dated 29.08.2020 has submitted the requisite information / clarification with a request as follows:

"During above EAC meeting, the Hon'ble committee suggested for a site visit by EAC members and MoEFCC to understand the proposed logistic arrangement as the present -proposal to dispatch dump fines by rail or road. Accordingly, as desired by EAC, the desired information has been reviewed by SAIL and its consultant MECON with the help of internal arrangement and technical information related to dump stabilization studies, transport scenario, traffic density & road carrying capacity, excavation plan, mass balance & quantitative dispatch scenario for lump/fines and impact on pollution load (increase/decrease) due to proposed excavation & dispatch plan have been reassessed. All information is properly delineated in the attached report. In the present lock down situation across the country, to take preventive measures to prevent spread of COVID — 19, we would like to request the committee to reconsider the proposed visit plan to mines at this juncture.

It may be appreciated that Gua Ore Mines of SAIL is located in tribal dominated area in Singhbhum (West) District of Jharkhand and is playing major role in improving the socio-economic development of the area. The proposed excavation and dispatch of the fines from old fines dump will not only help in effective utilization of the low grade resources but also help in elimination of environmental

hazards associated with storage of the fines.”

Further PP has submitted the Point wise reply to additional details sought as follows:

a) Point 1- PP need to conduct the dump stabilization studies.

Gua Ore Mines comprises of four mining leases viz. Durgaiburu Iron Ore Mining Lease (covering 1443.756 ha) – the main iron ore mining lease, Topailore Iron Ore Mining Lease (covering 14.15 ha), Jhillingburu-I Iron Ore & Manganese Ore Mining Lease (covering 210.526 ha) and Jhillingburu-II Iron Ore & Manganese Ore Mining Lease (covering 30.43 ha). Presently active mining is being carried out only in Durgaiburu Mining Lease.

There is a huge iron ore fines dump estimated to contain about 33 million tonnes (MT) of iron ore fines at Gua Ore Mines, which was accumulated over the years till merger of IISCO Steel Plant (ISP) with SAIL in 2006 due non–availability of technology to consume iron ore fines in ISP and thus was stocked at the mines. The Fines Dump is spread over Durgaiburu and Topailore Leases. Out of the 33 MT of fines, about 26.4 MT lies within Durgaiburu Lease and remaining 6.6 MT lies in Topailore Lease. The fine deposit is not a result of a conventional geological formation; rather it is a result of deposition of iron ore fines of -10mm size produced in the Durgaiburu Mining Lease. The Iron Ore Fines are carried to the Topailore leasehold by process of natural sliding aided by precipitation.

Since merger of ISP with SAIL in 2006, the iron ore fines form Gua is being regularly dispatched to the SAIL plants. Hence, there is no further dumping of fines in the fines dump since 2006 and the fines dump has been naturally stabilized over the last 15 years. Further, in order to control surface run-off from the fines dump, as suggested by the IIT KGP and in consultation with Jharkhand State Pollution Control Board & State Forest Officials, series of check dams (5 nos.) have been constructed. Entire run off from the fines dump area is collected in the dams and being discharged after proper settlement of fines in the dams. As suggested by IIT KGP, further, sediment taps have been provided downstream of Dam – 5 for control solids carry over from the fines dump. The check dams and sediment traps provided to control surface runoff from the Fines Dump are shown. All these measures have significantly controlled surfaced runoff from the Fines Dump.

In order to assess stability of the fines dump and provide plan for safe excavation of fines from the Fines Dump including suggesting measures for further stability, a technical job titled “Slope Stability Study and Safe Working along with associated jobs for Reclamation and Future Stability of Fines Dump at Gua Ore Mines” has been assigned to IIT Kharagpur. Team of experts from Mining Dept. of IIT KGP have visited the Gua Ore Mines and inspected the fines dump to assess the stability of the dump.

The work related to the slope stability of 33 million tonnes of Iron ore dump fines at Gua Ore Mines including measures for future safety of dump stability has been completed by the IIT KGP and report has been submitted. Copy of the Slope Stability Study Report by IIT KGP is submitted. Brief details of the studies conducted by the IIT KGP to assess the slope stability of the Fines Dump and recommendations for safe excavation of the fines from the dump as suggested by the IIT KGP are described below.

IIT KGP has conducted geotechnical study of the present dump slopes as well as a detailed numerical modeling of the proposed pit layout at different stages of mining of the dump. The geotechnical study for fines dump comprises (a) Laboratory test work for determining dump material properties, and (b) Slope stability study of existing fines dump as well as proposed pit layout.

PART A: GEOTECHNICAL PROPERTIES OF FINES DUMP SAMPLES

For the purpose of geotechnical analysis based on material properties, samples were collected by the IIT KGP experts from two locations viz fines dump top and fines dump bottom. Unit weight and shear strength of material are considered as primary inputs for the slope stability analysis. The shear characteristics were determined using direct shear testing apparatus. Apart from that, in-situ moisture content, specific gravity of grains, unit weight and particle size distributions were also determined in the IIT KGP Laboratory.

Table – 01: Geotechnical Properties of iron ore fines in Fines Dump

Sl.	Soil Property	Unit	Gua Fines Dump	
			Top Fines	Bottom Fines
1	Moisture Content	%	6.83	6.64
2	Specific Gravity	-	4.04	3.98
3	Particle Size Analysis (d_{50})	microns	625	1000
4	Max. Dry unit weight of compaction	gram /CC	2.70	2.67
a5	Optimum Moisture Content at max. dry unit weight.	%	11.0	14.1
6	Cohesion	kPa	135.38	68.18
7	Angle of internal friction	Degrees	16.47	32.78

PART B: STABILITY ANALYSIS OF DUMP SLOPE

B1. Numerical Analysis of Slope: The Simplified Bishop's Method is an extension of the Method of Slices and is generally used for calculating Factor of Safety (FoS) of slopes. It is reasonable to assume that forces on the sides of each slice are horizontal and no shear force exists at the vertical sides of the slice. The problem

becomes suitable for equilibrium studies. The Safety Factor (SF) is obtained by iterative method. An initial value of SF is assumed and then Newton-Raphson or other iterative techniques are applied to estimate the final SF until difference between SFs for two consecutive iteration is minimal.

B2. Description of Existing Dump Slope: The plan view of the existing Fines dump has been shown. Seven typical sections 30 degrees apart on both sides of a hypothetical center line of the existing dump slope, namely; S1, S-2, S-3, S-4, S-5, S-6 and S-7 are considered for numerical analysis to evaluate the present factor of safety of the dump slope.

The geometrical profiles of the slopes along all the seven selected sections of the fines dump are considered for numerical analysis to evaluate the present factor of safety of the dump slope.

B3. Description of Proposed Dump Slope with Mining Pits:

Among all the seven sections, Section S-3 along the hypothetical centre line of the dump is considered for study. S-3 is chosen because it can show all the benches in the bottom pit. The mining pits will look similar, but not same, as in this section, as in Fig. 05. Here, four slopes namely Slope 1, Slope 2, Slope3 and Slope 4 are considered for initial phase of working. Slope 1 will commence from hill side having 10 benches (height 4m, width 12m and bench angle 38°) with a berm in the middle having a width of 25m. Similarly, Slope 2 has been designed for 5 benches which will start from 40m behind the edge of the main existing slope. Again on the bottom side of the dump, leaving 40 m from the toe of the main slope, Slope 3 will start. Slope 4 has been proposed from the side of the retaining dam. Both Slope 3 and Slope 4 will have 2 benches with the same dimensions as mentioned above. A sample configuration of benches in top pit. The same configuration will be followed all along the configuration of the dump.

B4. Numerical Modeling and Dump Properties

Stability analysis of slope is based on limit equilibrium method. Bishop’s simplified limit equilibrium method is selected to determine the safety factor of the existing and proposed slopes with and without load for the aforementioned sections. Stability of all the slopes has been analyzed for dry conditions. The summarized factor of safety calculated for various sections are as follows:

Table – 02 Summarized of Factor of Safety (FoS) for existing slopes

Sl. No.	Section Name	Factor of safety (without load)	Factor of safety (with load)
1	S-1	1.26	
2	S-2	1.40	
3	S-3	1.40	1.40
4	S-4	1.24	1.24
5	S-5	1.24	

6	S-6	1.71	
7	S-7	2.59	

The above results show that for sections S-4 and S-5, factor of safety was only 1.24 and that of S7 was 2.59. Another major area of interest is S-3 and S-4 that didn't show any change in factor of safety with 100t. Of course, the FoS (1.4 & 1.24) are not acceptable for engineering design. A minimum FoS of 1.50 at all times of operation is always desirable. Hence, IIT Kharagpur team opined that the dumps cannot be worked with one large pit.

B5. Stability Analysis of the Proposed Slopes with Benches:

Stability analysis of the proposed layout comprising of all the slopes for S-3 section has been carried out. The geotechnical properties of the dump materials as determined through laboratory test were used for stability analysis. The modeling strategy in general is to use properties of the dry sample. The proposed slope profiles in dry condition for S3 section without any load and the proposed slope profiles in dry condition for S-3 section with 500t load are shown in the report.

The summarized of factor of safety (FoS) for proposed slopes of section S-3 are as follows:

Table – 03 Summarized Factor of Safety (FoS) for proposed slopes of Section S-3

Sl. No.	Slope Name	FoS without load	FoS with Load
1	Slope-1	3.00	2.75
2	Slope-2	3.74	2.46
3	Slope-3	5.25	2.19
4	Slope-4	5.25	2.17

It is clearly evident from the above results that for the benches in the proposed layout, Factors of Safety ranged from 3.00 to 5.25 without additional load. It was also observed that the Factors of Safety ranged from 2.17 to 2.75 with a very high load of 500t incorporated for testing the reliability of the slopes.

C. Final Recommendations: On the basis of the dump stability studies, the following recommendations have been made by IIT, Kharagpur

C1: Recommendations for Safe Excavation of fines from the Fines Dump

1. The designated top fines dump and the bottom fines dump cannot be worked out as a single mine pit because of the low factor of safety as found in most of the sections. The combined F.O.S. was below 1.5 and hence cannot be allowed to mine as a single pit.
2. It is advised to work out two pits, one at the top and another at the bottom,

with a minimum horizontal distance 200 m between the internal boundaries of the working.

3. As a matter of precaution, dam side mining should start only after reducing the effective height of the Hill-side Pit (Slope -1&2) by at least 15 m (or four benches). This will ensure further safety of the mining operations on the Dam-side pit. Reducing the height of the middle ridge left in the first phase completion of the top section mining is necessary for further reducing the load on the bottom pit, to improve FOS. Later on, dozers towards the slope side, rolling the material to the bottom on the 40 m barrier, will safely remove ore from the top pit, of an approximate height of 20 m and the same can be collected from the bottom - thereby ensuring safe removal of the ores from the leftover part. A technical study may again be required at this point to assess the situation. Now on the nearly leveled ground, similar pit benches will be established and top section mining will continue as in earlier pit. The process will be repeated until the low grade ore can safely be mined.
4. Though the pits will not be worked during the rainy season due to low overall factor of safety, occasional heavy rains in non-rainy seasons may trigger slope failure. An inspection based slope failure damage assessment and control will be in place, the details of which are given below.
5. Run-off Management: The workings, benches, roads and sumps should be so managed that run-off water is allowed as much less as possible to enter and flow on the slopes of the dump. Water from outside the top mine pit must not enter the mine area as far as practicably possible. The top dump pit water should be channeled to the outer side of the mine through sump. The water running from the long dump slope should not be allowed into the bottom pit. A properly maintained garland drain at the toe side of the dump should be constructed to course the flowing water away from the mine and without interruption in to the nearby stream. During rainy season when there will be no mining, some flood control provisions and water level monitoring should be planned to avoid flooding downstream. The water in the bottom pit will be managed by a sump connected to a suitable drainage.
6. It must be emphasized that the IIT Kharagpur team did not have any idea of the dumped material at different depths. As can be seen, the hematite material has been completely oxidized, liquefied-solidified, compacted on the surface into a nearly impermeable structure but the team did not have any idea as to how far in depth this compaction phenomena has reached. At a depth, the material can still be loose. With this idea, the calculation has been based on semi-compacted material, liable to lose strength due to inherent moisture and added moisture due to any rain event.
7. The top dumps slope will be started first and with time it is supposed to ease the normal load as well as horizontal load of the complete dump, ensuring better overall Factor of Safety.

8. Once the two pits are complete as per the proposal, the experience of the working can be used to plan for the excavation of the remainder of the dumps after a technical study.

C2: Recommendations for Dump slopes Condition Assessment and Prevention of Failure and Hazards

1. Mine manager in consultation with the Safety Officer and other mine officials shall appoint a team of qualified persons including Assistant Managers and above, having at least 2nd class Mine Managers Certificate of competency, and with one or two qualified Civil / Mechanical Engineers / Foreman (certificate holder) to periodically review the conditions of the mine slopes: ultimate and operating unbroken mine and overburden slopes and benches, broken stockpile slopes –as within the scope of the study.
2. The Slope stability team must work in close liaison with the Safety Committee.
3. The period of review on dry months of October to May , should be once in 2 weeks whereby every slope will be assessed for safety inspection and assessment that will be properly recorded and signed, and shall remain with the office of the Manager. The Manager will be reported of the details every time in writing of whether the slope conditions have changed off late or changing rapidly.
4. The period of review for predominantly rainy and wet months of June to September the inspection shall be nominally carried out once every week. The Manager will be reported of the details every time in writing of whether the slope conditions have changed off late or changing rapidly. The period between successive inspections by the team shall increase with heavy rain predictions at any time.
5. The features of impending slope failure indications are:
 - High water seepage from wide areas on the slope areas and from the toe,
 - Continuous rolling down of rock blocks from the top.
 - Excessive and increasing slurry flow from one place or from several places in the toe and face of the slope.
 - Increasing number of rill and gullies in short period of time of few hours and days,
 - Visible swelling of and separation from the layers, and
 - Visible surface cracks developed and extending in short period of times from one part to another.
6. The mine management must make a checklist of indications of slope failure or collapse that need to be looked into in situations where the slope un-stability can be out of control.

7. The history of slope failures point that most of the failures take place in the period of incessant rains or immediately after such rain episodes. Events of short period heavy rainfalls and events of medium to heavy period rainfalls are to be particularly taken care of. The office of Area Safety Officer shall heed to such forecasts, now reliably available on the net and media, and direct and participate with the team to make at least one inspection every 24 hours or less, as found necessary. In such event, all operational places should be immediately cleared of workmen, property and asset. The team should document and report any such instances to the manager of the mine and if they are unanimous in voicing dangers of slope failure, the Manager should take immediate action to save the workmen and property and restrict work till all clearance reports are tabled.
8. Any alarm or alert raised by the team and the guidance by the team headed by the Safety Officer must be reported in writing to the Manager to take actions, as may be found necessary, related to stoppage, and evacuation of people, equipment and other assets. In no occasions, the manager should either take or encourage unsafe acts or daredevilry to maintain production at the cost of workmen and property.
9. A Trigger Action Response Plan (TARP) followed by disaster management response plan have to be established to respond to any major eventuality.
10. The team should also listen to the mine workers on the sites, and should engage discussions to look for features that can be considered dangerous and that need appropriate actions.
11. All such actions must have to be reported appropriately to DGMS as per the law prescribed.

b) Point 2- Transport scenario to be properly calculated and resubmitted

In the present proposal, it has been proposed that 2.5 MTPA fines will be excavated from the top of the fines dumps and dispatched for selling in open market. The same will be dispatched by 18 t tipper trucks up to Barajamda Railway Siding and thereafter by rail or directly by road as decided by the successful buyers.

Another 2.5 MTPA of the excavated fines will be excavated from the bottom of the fines dumps and transported through SAIL's own roads to the nearby Gua Public Siding for final dispatch by rail.

The following roads will be used for transport of excavated fines from the Fines Dump:

- SAIL's own internal road from bottom of fines dump to Gua Public Siding
- SAIL's own internal road from top of fines dump to Intermediate Storage area.

- SAIL's own Road from intermediate storage area to Gua-Barajamda road at Gua-Kalimandir
- Public Road from Gua-Kalimandir to Barajamda railway siding on the Gua-Barajamda Road

The proposed ore transport routes from the fines dump to Gua Public Siding as well as route to Barajamda is submitted.

It has been planned to transport the excavated fines from the dump for about 200 days in a year and 24 hours per day for transportation to Gua Public Siding using internal roads and 12 hrs day for transportation through public road. The expected traffic scenario over the proposed ore transport roads for transport of the excavated fines under the present proposal are given in the following tables.

Table 04 - Expected Traffic Over Internal Road leading to Gua Public Siding

Transportation of fines from bottom of Fines Dump to Gua Public Siding	: 2.5 million tonnes per annum
No. of working days per annum	: 200 days
No. of working hours per day	: 24 hrs
Length of transport road from Dumps to Gua Public Railway Siding	: about 3 km
Quantity of fines transportation per day	: About 12500 TPD
Capacity of trucks to be deployed for transportation of excavated dump fines	: 35 t
No. of truck trips per day	: ~ 360 per day (one way) ~720 per day (both ways)
Hourly traffic per hour	: ~ 30 per hour (both ways)

Table 05 – Expected Traffic Over Internal Road leading to intermediate storage area

Transportation of fines from top of Fines Dump to intermediate Storage Area	: 2.5 million tonnes per annum
No. of working days per annum	: 200 days
No. of working hours per day	: 24 hrs
Length of transport road from Dump to Intermediate Storage Area	: about 3.6 km
Quantity of fines transportation per day	: About 12500 TPD
Capacity of trucks to be deployed for	: 35 t

transportation of excavated dump fines	
No. of truck trips per day	: ~360 per day (one way) ~720 per day (both ways)
Hourly traffic per hour	: ~30 per hour (both ways)

Table 06 – Expected Traffic Over Public Road leading Barajamda

Transportation of fines from Intermediate storage area upto Barajamda Rly Siding or beyond	: 2.5 million tonnes per annum
No. of working days per annum	: 200 days
No. of working hours per day	: 12 hrs
Length of transport road from Intermediate Storage Area to Barajamda Public Railway Siding	: about 16.3 km
Quantity of fines transportation per day	: About 12500 TPD
Type of Road	: Two lane black topped
Capacity of trucks to be deployed for transportation of excavated dump fines	: 18 t
No. of truck trips per day	: 694 per day (one way) 1389 per day (both ways)
Hourly traffic per hour	: ~116 per hour (both ways)

c) Point 3- Traffic density and road carrying capacity to be calculated

2.5 MTPA of iron ore fines will be transported to Gua Public Siding through 3.5 km stretch of roads entirely within Gua Surface Rights area. Therefore, no impact is anticipated on public transport due to fines transport to the Gua Public Siding.

The anticipated impact on public transport infrastructure is because of the proposed dispatch of 2.5 MTPA fines from intermediate storage area to Barajamda. The fines will be despatched in 18 t capacity tipper trucks upto Barajamda and thereafter by rail or directly road beyond Barajamda as per the suitability of the successful bidders/buyer.

Traffic Density was studied on the proposed public road at one location on Gua-Barajamda Public road (two lane black topped road), the nearest major public transportation road at junction of Gua – Barajamda Road, about 200 m from Gua-Kalimandir at 22°12'14.6" N, 85°22'50.2" E.

As per IRC:64 "Guidelines for Capacity of Roads in Rural Areas", the recommended design service volume for two lane roads on plain terrain with low curvature (<51°/km) is 15000 Passenger Car Units (PCUs) per day and the reduction factor for 3.5 m wide lane and shoulder width of 1.2 m is 0.92. The Gua-Barajamda Public Road can be classified under this category. Accordingly, the recommended design

service volume comes down to 13800 PCUs/day.

Since it is proposed that transportation of iron ore fines will be carried out only during 0600 hrs. to 1800 hrs., capacity of 6900 PCUs may be considered.

The present traffic on the road as measured over 0600 – 1800 hrs varied from 810 to 2580 PCUs. Transport 2.5 MTPA of fines by trucks to Barajamda is expected to increase the traffic by 1389 trucks per day i.e. 4167 PCUs (say 4170 PCUs) per day. Therefore, the possible maximum traffic on the road will be ~6750 PCUs during day-time, which is within the threshold limit.

d) Point 4- Excavation plan to be properly delineated.

Environmental Clearance for Integrated Durgaburu Iron Ore Mining Project of SAIL for production of 12.5 MTPA (ROM) iron ore, utilization of 3.1 MTPA of fines from existing fine dump in the beneficiation plant, installation of new beneficiation plant of 12.5 MTPA capacity and installation of new pellet plant of 4 MTPA capacity was granted by MoEF vide their letter no. J-11015/453/2008-IA.II (M) dated 25th March, 2013 and subsequent EC amendment dated 2nd February, 2015.

Durgaburu Iron Ore Mine is a fully mechanized opencast mine and falls under Category-A (Fully Mechanized category) as per the IBM guidelines. Mining is being done by conventional opencast mining method with shovel dumper combination with drilling & blasting as per the calendar plan of excavation as approved in the Review of Mining Plan.

In compliance to directions of Ministry of Mines, GoI for effective use of these low grade mineral, SAIL, Gua Ore Mines has planned for excavation of fines from Fines Dump maximum up to 5.0 MTPA and dispatch through rail / road or road & rail combination for selling in open market keeping total production within the approved EC limit of 12.5 MTPA. The excavation of fines from the Fines Dump will be carried out with a back hoe - dumper combination. Loading will be done by hydraulic shovel (back hoe type) with a capacity of 1.2-2.3 m³ and hauling will be done by 35 t dumpers to the stockyards areas for quantity and quality assessment for selling in open market.

The planned and IBM approved excavation plan during 2020- 21 to 2023-24 from Durgaburu Mining Lease is given in the following table.

Table 07 - Approved IBM Excavation Plan of Durgaburu Mining Lease of Gua Ore Mines (Unit : MTPA)

Year	ROM Excavation			Excavation of fines form Fine Dump	Total
	Saleable Ore (+57% Fe)	Mineral Rejects Fe : 45 – 57%	Total		
2020 - 21	5.74	0.29	6.03	5.0	11.03
2021 - 22	6.49	0.37	6.86	5.0	11.86
2022 - 23	6.97	0.49	7.46	5.0	12.46
2023 - 24	7.17	0.44	7.61	5.0	12.61

e) Point 5- Mass balance to be prepared and quantitative despatch scenario for lump, fines to be submitted:-

Mass balance for quantitative despatch scenario for lump, fines from in suite reserves and fines from fines dumps before and after the present proposal shall be as follows-

Table 08 – Comparative Mass balance as per Original EC Configuration and proposed excavation & dispatch of fines

Attribute	As per Original EC	As per Present Proposal	Remarks
Lease Area	1443.756 ha	1443.756 ha	No Change
Production Capacity	12.5 MTPA (including excavation of fines from fines dumps maximum up to 3.1 MTPA)	12.5 MTPA (including excavation of fines from fines dumps maximum up to 5 MTPA)	No Change in total iron ore production but change in product mix
Excavation of fines from fines dump	3.1 MTPA	5.0 MTPA	Increase by 1.9 MTPA till liquidation of fines
Method of Mining	Conventional Open Cast Mining by Shovel-Dumper Combination including drilling & blasting for ROM.	Conventional Open Cast Mining by Shovel-Dumper Combination and including drilling & blasting for ROM.	No Change
OB Generation	1.05 Mm ³ /Year	0.84 Mm ³ /Year	Reduction by up to 20% till liquidation of fines
Production	Processed Ore : Iron Ore Lumps + Fines ~ 9.4 MTPA (Lump proportion: ~ 25%) & Dump fines: 3.1 MTPA	Processed Ore : Iron Ore Lumps + Fines ~ 7.5 MTPA (Lump proportion: ~ 25 %) & Dump Fines: 5.0 MTPA (max.)	Change in product mix till liquidation of fines from the Fines Dumps.
Explosives Consumption	2370 ton/yr	1891 ton/yr	Up to ~20% reduction till liquidation of fines
Mineral Transport	By dumpers to receiving hopper of crushing & screening plant and subsequently by covered conveyor to railway siding.	Freshly mined ore by dumpers to receiving hopper of crushing & screening plant and subsequently by covered conveyor to	Reduction in road transport of ROM to crushing & screening plant. Increased

		railway siding. Excavated fines by tipper trucks to intermediate storage areas and subsequently to Gua Public Siding or Barajamda Public Siding or beyond.	transport of excavated fines to Public Sidings at Gua / Barajamda.
Mode of material dispatch of ore	100% by rail from SAIL's Gua siding.	Processed lumps & fines by rail from SAIL's Gua Siding. 2.5 MTPA excavated fines by tipper trucks to Gua Public Siding and subsequently by rail 2.5 MTPA by road, rail and road & rail.	Increase in road dispatch using public roads up to 2.5 MTPA max till liquidation of fines.
PM ₁₀ Pollution Load	22.33	20.45	Decrease(Only mining activities)
	-	6.57	Increase(transportation 2.5MTPA fines through paved road)
<i>It is to be noted that proposed 12.5 MTPA iron ore Beneficiation Plant and 4 MTPA Pelletisation Plant is still under planning stage.</i>			

(f) Point 6- Impact on pollution load (increase/decrease) due to proposed excavation & dispatch plan needs to be submitted.

Impact prediction has been carried out for the following two scenarios

1. As per EC i.e. Mining of 9.4 MTPA of ore from pit area and excavation of 3.1 MTPA of fines from the fines dump and transport via conveyor/rail.
2. After present proposal i.e. Mining of 7.5 MTPA of ore from pit area and excavation of 5.0 MTPA of fines from the fines dump and transport via road/rail.

Table 9 – Input Data

Parameter	Unit	Quantity as per present EC	Quantity in future after proposed changes
Total Production (as per EC)	MTPA	9.4	7.5
Fresh ROM (Mining)		3.1	5.0
Fines transport		(via	(via Road/Rail)

		Conveyor/Rail)	
ROM/Waste Ratio	t/m ³	8.98	8.98
OB Generation	Mm ³ /Yr	1.05	0.84
Operating Hrs	Hrs/Day	24	24 (Mining and internal transport) 12 (for outside fines transport)
Days of Operation	Days/Yr	330	330(Mining) 200(for fines transport)
Lease Area	ha	1443.756	1443.756
Loader volume	m ³	8	8
Dumper Capacity	T	100	100
Truck Capacity (For fines transport)	T	-	35(for internal transfer) 18(For outside transport)
Avg Speed of Dumper	Km/hr	15	15
Waste Moisture	%	15	15
Waste Silt Content	%	5	5
Waste Drop Height	m	2	2
Ore Moisture	%	10	10
Ore Silt Content	%	3	3
Ore Drop Height	m	2	2
Haul Road Moisture Content	%	20	20
Haul Road Silt Content	%	15	15
Mean wind Speed	m/s	2	2

After the proposed changes, in addition to mining of 7.5 MTPA of ore (existing 9.4 MTPA), fines from dumps shall be excavated and material will be transported by road/railways at the rate of 5.0 MTPA (existing 3.1 MTPA). Total iron ore production shall remain 12.5 MTPA as per EC. The estimated PM10 pollution load from all the activities Durgaiburu Mining operations before and after the proposed changes are as follows.

Table 10 – PM₁₀ Emission Load from various Mining Activities

Sl. No	Area/Activity	Emission rates (g/s)		
		Existing (9.4 MTPA Mining +3.1 MTPA fines rehandling)	After Proposed changes (7.5 MTPA Mining +5.0	Net Change
.				

			MTPA fines rehandling)	
1	Durgaiburu Mine including Emissions from Pits, OB Dumps and material handling	2.52	2.26	-0.27
2	Emissions from haul roads during material transportation in and around mine pit	18.28	17.74	-0.55
3	Excavation and handling of fines at mine and transportation by rail	1.52 (excavation at the top of the fine dump and transportation by dumper)	0.45 (excavation of fines from dump by trucks)	-1.07
Subtotal (1+2+3)		22.33	20.45	-1.89 (-8.44%)
4	Emissions due to Road Transportation of 2.5 MTPA of fines through public road	-	6.57	+6.57
Grand Total(1+2+3+4)		22.33	27.02	

From the above table, it can be observed that there will be a decrease in emissions from mining activities within the lease area due to reduction in overall mining and increase in fines handling.

Increase of pollution loads are observed on the paved public road because the excavated fines will be transported via these road to Barajamda. However, the same will cease to exist after liquidation of fines from the old fines dumps is complete.

It is further submitted that, keeping in view of environmental hazards associated with the huge fines dump, while granting the environmental clearance for Durgaiburu Iron Ore Mining project, MoEF&CC stipulated a specific condition {No. A(iii)} related faster utilization of entire fines to eliminate the associated environmental impacts and stipulated a condition to utilize entire fines from Fines Dump in 9 years instead of 13 – 14 years after Beneficiation & Pellet plants are commissioned. The present proposal further will further reduce time for liquidation to the tune of 5 - 6 years subject market conditions and totally eliminate the hazards associated with the fines dump.

After entire liquidation of the fines in the Fines Dump, mining of 10 MTPA of ROM shall be resumed as per the original EC. Also, as there will be no further excavation of fines after liquidation of existing dump, the net pollution load from all the mining activities in future shall reduce to 21.06 gm/sec of PM₁₀.

The estimated emission loads for PM_{2.5}, SO₂ and NOX are also provided in **Table 11** below for transportation of 2.5 MTPA fines from Durgaiburu Mines to Barajamda.

Table 11 – Estimated Emission rates due to fines transportation through public road towards Barajamda

Sl. No.	Pollutant	Emission Rates (g/s)
1	PM ₁₀	6.57
2	PM _{2.5}	1.59
3	SO ₂	0.72
4	NO _x	4.88

17. Project proponent has submitted that from the above, when compared with mining activity due to present proposal no increase in pollution load is observed. However, due to transportation of 2.5MTPA fines through road there is possibility of increase of pollution in ambient air. In order to estimate increase of ground level concentration on ambient air and anticipate the impacts of transportation of the excavated fines via paved road towards Barajamda, atmospheric dispersion modelling has been carried out using the above estimated release rates to provide information on the location and levels of GLCs on the surrounding areas that may be expected as the result of the proposed project. Hourly meteorological data generated at site is used to examine the effects of wind speed, direction and stability on projected concentrations of contaminants in air and on nearby areas.

18. The proposal was placed in the 21st EAC meeting held during 23rd to 25th Sept., 2020. The Committee is of the view that site visit could not be conducted due to COVID-19 pandemic and it may further take some time to become the situation to normal. In the meanwhile, it is suggested that proposal may be considered based on the information and dump slope stability study conducted by IIT Kharagpur, so far submitted by the project proponent. Study findings of the IIT Kharagpur in respect of safe excavation of fines from fines dump based on factor of safety, Dump Slope Condition assessment, runoff management etc. were deliberated in detail.

19. Based on the discussion held and document submitted, the Committee **recommended** the proposal for amendment in Environmental Clearance (EC) under para 7(ii) of EIA Notification, 2006 for excavation of iron ore fines from the fines dump at the rate of 3.1 MTPA as permitted in Environmental Clearance vide letter No. J-11015/453/2008-IA.II (M) dated 25.03.2013 and subsequent amendment dated 02.02.2015 for selling in open market keeping total production within the approved EC limit of 12.5 MTPA and to transport the mineral by SAIL's internal road to Gua public siding and through SAIL's internal road & public road up to Barajamda Railway Siding by the buyers, all other conditions mentioned in Environmental Clearance vide letter No. J-11015/453/2008-IA.II (M) dated 25.03.2013 and subsequent amendment dated 02.02.2015 shall be applicable subject to the following additional specific conditions:

1. Fines from the fines dump shall not be excavated during the monsoon period as well as heavy rain days.

2. Recommendations of IIT, Kharagpur for safe excavation of fines from the fines dump, slope condition assessment, run-off management etc., shall be implemented and same to be intimated to Regional Office, MoEFCC along with six monthly EC compliance reports. PP shall also obtain other statutory permissions required for dump mining and adhered to.
3. Mitigative measures proposed for excavation and transportation of mineral shall be complied with including moist and covered.
4. The project proponent shall monitor the dust levels along the transportation route to Barajamda and shall deploy adequate mobile road water sprinklers to control dust emissions along the ore transport routes.

2.18: Mining of Mineral Bajri (Minor Mineral) with proposed production capacity of 2.8 Million TPA (ROM) by Shri Abhishek Choudhary, located at Revenue village(s) of Tehsil – Asind, District - Bhilwara, Rajasthan (1207.61 ha) (File No. J-11015/252/2013-IA-II(M); Proposal No.IA/RJ/MIN/27044/2013)- Re-Consideration of EC

The proposal of Shri Abhishek Choudhary is for mining of Bajri (Minor Mineral) with proposed production capacity of 2.8 Million TPA (ROM). The mine lease area is located at Revenue village(s) of Tehsil – Asind, District -Bhilwara, Rajasthan in the mine lease area of 1207.61ha. The mine lease area lies in Mansi, Khari and Nekadiriver and Survey of India toposheet number 45 K/1, 45 K/2, 45 K/5, 45 K/6 and 45 K/10. The Latitudes and Longitudes of the mine lease area are Latitude 25^o38'00.00" to 25^o55'00.00" Longitude 74^o10'00.00" to 74^o 33'00.00".As per Seismic Zoning Map of India IS:1893(Part-1):2002, 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 vide its letter dated 17.8.2020 submitted that a certificate w.r.t. homogeneous Mining lease within 500 meters of this lease is provided Mining Engineer, DMG, Bhilwara vide its letter No. Kha.A./Bhil/Ma.chi/PramanPatra/Kha.Pa.116/2012/221 dated 15.06.2020.
4. The proposal was considered by the Reconstituted Expert Appraisal Committee in its 11th meeting held during 25th - 27th September, 2013. The TOR was issued by MoEF&CC vide letter No. J-11015/252/2013-IA.II (M) dated 17.10.2013. The Proponent submitted the EIA/ EMP Report online to Ministry for seeking Environmental Clearance after conducting Public Hearing. PP vide Proposal No. IA/RJ/MIN/27040/2013 dated 20.04.2015 applied for Environmental Clearance for mining of Bajri (Minor Mineral) with proposed production capacity of 2.8 Million TPA

(ROM). The mine lease area is located at Revenue village(s) of Tehsil – Asind, District - Bhilwara, Rajasthan in the mine lease area of 1207.61ha.

5. PP vide Proposal No. IA/RJ/MIN/27046/2013 The proposal of EC was appraised before the EAC in its meeting held during September 25-27, 2015 wherein the Committee deliberated at length the information submitted by PP and recommended the Proposal for Environmental Clearance for Mining of Mineral Bajri with proposed production capacity of 2.8 Million TPA (ROM) subject to submission of clarification w.r.t. mining of Bajri.

5. Hon'ble Supreme Court vide its judgment dated 16.11.2017 in the matter of SLP(C) No.34134 of 2013 (State of Rajasthan Vs Nature Club of Rajasthan) has restrained river sand/ bajri mining in the State of Rajasthan in respect of 82 Letter of Intent (LoI) holders who had submitted their applications to the MoEFCC for grant of EC. As per directions of Hon'ble Supreme Court dated 16/11/2017, as directed to carry out Scientific Replenishment Study and submit the report expeditiously to the Ministry of Environment, Forest and Climate Change for appraisal before EAC.

6. Further, as per Hon'ble Supreme court order dated 6th December, 2019, the Ministry of Environment, Forest and Climate Change (MoEF&CC) was directed to process pending applications stating that "Hence, in the meantime we direct that the aforesaid applications may be completed and appropriate orders be passed thereon by the Ministry of Environment, Forest and Climate Change (MoEF&CC)". Accordingly, after receipt of documents, proposal was considered in the EAC meeting.

7. The proposal was placed in the 21st EAC meeting held during 23rd – 25th Sept., 2020. The project proponent informed the committee that for the instant proposal, the baseline data was generated during October to December, 2013 and the Public Hearing was conducted on 15th December, 2014.

The committee observed that (i) the baseline data is of 7 years old. (ii) The list of flora and fauna was not authenticated by the chief wildlife warden. (iii) Supporting documents were not submitted according to the Enforcement & Monitoring guidelines of sand mining 2020. (iv) no Detailed transportation plan as per the Enforcement & Monitoring guidelines of sand mining 2020.

8. In view of the above, the committee deliberated on the submissions made by the project proponent and presentation made by the project proponent in the meeting and **deferred** the proposal and sought the following information:-

- (1) The project proponent needs to carry out the fresh baseline data for one-month period (non-monsoon season). The project proponent 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 project proponent should submit

the original test reports and certificates of the labs which will analyze the samples.

- (2) The project proponent needs to submit the list of flora and fauna, list of schedule-1 species authenticated by the chief wildlife warden.
- (3) The project proponent needs to submit the action plan as per Enforcement & Monitoring guidelines of sand mining 2020.
- (4) The project proponent needs to submit the detailed transportation plan as per the Enforcement & Monitoring guidelines of sand mining 2020. Project proponent should clearly show the transport route of the mineral and protection and mitigative measure to be adopted during transportation.
- (5) The project proponent needs to compare the current baseline data with the previous baseline data. If any changes exist, then detailed mitigation measures needs to be provided.
- (6) The project proponent shall prepare the conservation plan in consultation with the State Forest Department and approved by the Chief wildlife warden.
- (7) The project proponent needs to submit the detailed plan in tabular format (year-wise) for afforestation and green belt development in and around the mining lease. The project proponent 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.
- (8) Project proponent should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations.

2.19: Mining of Mineral Bajri (Minor Mineral) with proposed production capacity of 2.8 Million TPA (ROM) by ShriSanjay Kumar Garg, located at Revenue village(s) of Tehsil – Bijoliya Mandalgarh, District - Bhilwara, Rajasthan (1675.85 ha) (File No. J-11015/362/2013-IA-II(M); Proposal No.IA/RJ/MIN/20091/2013)- Re-Consideration of EC

The proposal of Shri Sanjay Kumar Garg is for mining of Bajri (Minor Mineral) with proposed production capacity of 2.8 Million TPA (ROM). The mine lease area is located at Revenue village(s) of Tehsil – Bijoliya Mandalgarh, District - Bhilwara, Rajasthan in the mine lease area of 1675.85ha. The mine lease area lies in Mansi, Khari and Nekadi river and Survey of India toposheet number 45O/3, 45O/4, 45O/7, 45O/8. The Latitudes and Longitudes of the mine lease area are Latitudes 25° 16' 44.27" N 25° 30' 23.3512" N Longitudes 74° 57' 23.63" E 75° 07' 13.5900" E. As per

Seismic Zoning Map of India IS:1893(Part-1):2002, 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 vide its letter dated 17.8.2020 submitted that a certificate w.r.t. homogeneous Mining lease within 500 meters of this lease is provided Mining Engineer, DMG, Bhilwara vide its letter No. Kha.A./Bhil/Ma.chi/PramanPatra/Kha.Pa.01/2013/83 dated 15.06.2020.

4. The proposal was considered by the Reconstituted Expert Appraisal Committee in its 11th meeting held during 25th - 27th September, 2013. The TOR was issued by MoEF&CC vide letter No. J-11015/362/2013-IA.II (M) dated 17.10.2013. The Proponent submitted the EIA/ EMP Report online to Ministry for seeking Environmental Clearance after conducting Public Hearing. PP vide Proposal No. IA/RJ/MIN/20091/2013 dated 20.04.2015 applied for Environmental Clearance for mining of Bajri (Minor Mineral) with proposed production capacity of 2.8 Million TPA (ROM). The mine lease area is located at Revenue village(s) of Tehsil – Bijoliya Mandalgarh, District - Bhilwara, Rajasthan in the mine lease area of 1675.85ha.

5. Project proponent vide proposal No. IA/RJ/MIN/20091/2013 The proposal of EC was appraised before the EAC in its meeting held during September 25-27, 2015 wherein the Committee deliberated at length the information submitted by PP and recommended the Proposal for Environmental Clearance for Mining of Mineral Bajri with proposed production capacity of 2.8 Million TPA (ROM) subject to submission of clarification w.r.t. mining of Bajri.

6. Hon'ble Supreme Court vide its judgment dated 16.11.2017 in the matter of SLP(C) No.34134 of 2013 (State of Rajasthan Vs Nature Club of Rajasthan) has restrained river sand/ bajri mining in the State of Rajasthan in respect of 82 Letter of Intent (LoI) holders who had submitted their applications to the MoEF&CC for grant of EC. As per directions of Hon'ble Supreme Court dated 16/11/2017, as directed to carry out Scientific Replenishment Study and submit the report expeditiously to the Ministry of Environment, Forest and Climate Change for appraisal before EAC.

7. Further, as per Hon'ble Supreme court order dated 6th December, 2019, the Ministry of Environment, Forest and Climate Change (MoEF&CC) was directed to process pending applications stating that "Hence, in the meantime we direct that the aforesaid applications may be completed and appropriate orders be passed thereon by the Ministry of Environment, Forest and Climate Change (MoEF&CC)". Accordingly, after receipt of documents, proposal was considered in the EAC meeting.

8. The proposal was placed in the 21st EAC meeting held during 23rd to 25th Sept., 2020. The consultant informed the committee that for the instant proposal, the baseline data was generated during December, 2013 to February, 2014 and the Public Hearing was conducted on 22nd December, 2014.

The committee observed that (i) the baseline data is around 7 years old. (ii) The list of flora and fauna was not authenticated by the chief wildlife warden. (iii) Supporting documents were not submitted according to the Enforcement & Monitoring guidelines of sand mining 2020. (iv) no detailed transportation plan as per the Enforcement & Monitoring guidelines of sand mining 2020 (v) there was no authorization letter regarding project proponent was sent to the Ministry.

9. In view of the above, the committee deliberated on the submissions made by the project proponent and presentation made by the consultant in the meeting and **deferred** the proposal and sought the following information: -

- (1) The project proponent needs to carry out the fresh baseline data for one-month period (non-monsoon season). The project proponent 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 project proponent should submit the original test reports and certificates of the labs which will analyze the samples.
- (2) The project proponent needs to submit the list of flora and fauna, list of schedule-1 species authenticated by the chief wildlife warden.
- (3) The project proponent needs to submit the action plan as per Enforcement & Monitoring guidelines of sand mining 2020.
- (4) The project proponent needs to submit the detailed transportation plan as per the Enforcement & Monitoring guidelines of sand mining 2020. Project proponent should clearly show the transport route of the mineral and protection and mitigative measure to be adopted during transportation.
- (5) The project proponent needs to compare the current baseline data with the previous baseline data. If any changes exist, then detailed mitigation measures needs to be provided.
- (6) The project proponent shall prepare the conservation plan in consultation with the State Forest Department and approved by the Chief wildlife warden.
- (7) The project proponent needs to submit the detailed plan in tabular format (year-wise) for afforestation and green belt development in and around the mining lease. The project proponent 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.

- (8) Project proponent should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations.

2.20 Achi Bavri Soapstone and Dolomite Mining project of M/s Shree Yash Enterprises, District Rajsmand, Rajasthan- Amendment in EC [Proposal No. IA/RJ/MIN/7696/2005; File No. J-11015/186/2005-IA.II(M)]

The proposal was first considered in the EAC meeting held on 24th April, 2019 but project proponent did not attend the meeting due to ill health. Again, this proposal was considered in the 21st EAC meeting held during 23rd - 25th Sept., 2020 and the project proponent informed the Ministry that project proponent will not be able to attend the meeting due to personal reasons. The Committee therefore, **deferred** the proposal.

2.21 Proposed Limestone Mine (Khatkurbahal (North) Block, Area: 156.43 ha) with production capacity of Limestone 1.6 MTPA, Top Soil 0.033 MTPA, Waste (OB/Sub soil/Reject) 1.105 MTPA, Clay 0.405 MTPA and Dolomite 2.4 MTPA (Total excavation - 5.543 MTPA) with Proposed three crushers with capacity of 800 TPH (Limestone), 600 TPH (Dolomite) and 100 TPH (Reject) at Village Khatkurbahal, Tehsil Kutra, District Sundargarh, Odisha by M/s. Shiva Cement Ltd.-Terms of Reference [Proposal No. IA/OR/MIN/170489/2020; File No. J-11011/84/2008-IA-II(I)]

The Proposal of **M/s. Shiva Cement Limited** is for grant of Terms of Reference for Limestone Mine (Khatkurbahal (North) Block, Area: 156.43 ha) with production capacity of Limestone 1.6 MTPA, Top Soil 0.033 MTPA, Waste (OB/Sub soil/Reject) 1.105 MTPA, Clay 0.405 MTPA and Dolomite 2.4 MTPA (Total excavation - 5.543 MTPA) with Proposed three crushers with capacity of 800 TPH (Limestone), 600 TPH (Dolomite) and 100 TPH (Reject) at Village Khatkurbahal, Tehsil Kutra, District Sundargarh, Odisha. The mine is located between Latitude N 22^o16'45.31025" & 22^o17'10.12835" N and Longitude E 84^o27'36.13496" & 84^o29'18.22107" and within survey of India Toposheet No. 73-B/7, 73-B/8, 73-B/11 & 73-B/12.

2. As per EIA Notification dated 14th Sept, 2006 and its subsequent amendments, the project falls under Schedule 1(a) of mining and is a Category- "A" as the mining lease area is greater than 100 Ha and 2 (b) for "Mineral Beneficiation".

3. PP has now applied vide Proposal no: **IA/OR/MIN/170489/2020 dated 31.08.2020** for prescribing Term of Reference (ToR) and submitted Form-1 and Pre-feasibility report. PP has submitted that the Khatkurbahal limestone mine over an area of 156.43 ha has been intended by the Government of Odisha for grant of

mining lease for a period of 50 years in favour of M/s. Shiva Cement Limited through auction as per the letter of Intent no. 9010/S&M, Bhubaneswar dated 18.11.2019.

4. During the EAC meeting the PP informed that:

I. No forest land involved in the lease area. The nearest Reserve Forest from the mine site are Banglapahari RF (2.0 km, NNW), Kadopani PF (9.5 km, NNW), Brahmani RF-7.5 km, NNW), Lampti RF (3.5 km NNW), Bhursulia RF (7.5 km, WNW), Jhandapaharh RF (5.5 km, ENE), RF (7.0 km, WSW), Kalijapathar RF (6.0 km WSW), PF (4.5 km, West), RF (3.5 km, WSW), Dahijira RF (3.5 km, SSW), Khatang RF (6.0 km, SSE), Gurhiali RF (9.0 km, SSE), Khatang RF (4.5 km SSE), Luhuraberni RF (9.0 km, SSE) and Jurajam PF (9.0 km, South) are found within 10 km radius of the mine lease. PP also submitted that the following nalas are within the radius of 10 Km of the mine lease, NaktiJor (6.5 km in SE), Dalki Nala (7.5 km in ESE), MatwaliJor (8.0 km in WSW), Kantijharia Nala (Passing through the lease area), Tambu Nala (4.0 km in North), Chhindanadi (8.0 km in NNE), Tambo Nala (3.0 km in NE direction), Jharia Nala (3.5 km in ENE) and Sankh River (3.5 km in ENE).

II. PP further submitted that there are no wild life sanctuaries, national parks, elephant/tiger reserves within 10 km of the notified mine lease area. PP submitted that in Form 1, that the project attracts the general conditions in view of Inter-State boundary i.e. Odisha-Jharkhand Interstate boundary (7.5 Km, NNW).

III. The Mining Plan with Progressive Mine Closure Plan has been approved by IBM vide letter no MP/A/02-ORI/BHU/2020-21 dated 03.06.2020.

IV. PP has submitted that the Opencast method of mining will be adopted with the deployment of machines like 115 mm dia DTH drill, 1.8 m³ & 2.5 m³ capacity excavator, 25 T capacity dumper etc. Only one pit/quarry is proposed to be developed in plan period for limestone as well as dolomite. 0.3 m thick top soil on an average will be scraped which will be initially stacked in the lease area and subsequently will be used for spreading over the waste dump, back-filled area and plantation pits for rehabilitation of waste dump and reclamation of mined out area. Opencast mechanized mining by forming systematic benches of 6.0 m height with proper width of 9. Conventional drilling blasting will to be adopted for excavation of limestone as well as waste as per requirement and site conditions/ constraints due to proximity of habitations. Hard rock mass will be loosened by the primary blasting of DTH drilled holes. Controlled blasting technique will be adopted to minimize the ground vibration and flying fragments using NONEL (Raydet & Handidate) with delay elements depending upon the location of human settlements. Stemming process will also be used which allows less explosives into the hole, decrease blasting efficiency and increase ground vibration. Rock breaker will be used to avoid secondary blasting. Keeping the fact in view, optimum top stemming column in the blast hole will be 2 m to obtain sufficient burial depth of explosive charge to prevent

premature venting of explosive gas energy and to reduce the noise level. This length of stemming also will prevent fly rock occurrence & movements. Oversized boulders will be broken by the deployment of rock breakers instead of secondary blasting.

V. The excavation & loading of blasted rocks will be done by excavators of 1.8 cum & 2.5 cum capacity as well as loader/frontend loaders of 1.5 cum capacity. Blasted rock mass will be transported to crushing and screening units {800 TPH (Limestone), 600 TPH (Dolomite) and 100 TPH (Reject)} located in the lease area. Top Soil generation will be 0.033 MTPA (2750 Tonnes/Month), Waste (OB/Sub soil/Reject) generation will be 1.105 MTPA (92083 Tonnes/Month), Clay (Minor Mineral) generation will be 0.405 MTPA (33750 Tonnes/Month), and Dolomite (Minor Mineral) generation will be 2.4 MTPA (200000 Tonnes/Month).

VI. The Limestone crusher with capacity of 800 TPH will bring down the limestone to less than 80 mm to make it suitable for feeding to the grinding system. Crushing & Screening will be done in view of mineral conservation by way of dry processing. The transport of Limestone will be done by 25 Ton capacity dumpers from mine faces to crusher (average distance b/w quarry & crushing unit is 1.5 km) and after crushing the limestone will be dispatched to the Cement plant (located about 12 km away from this mine) of SCL.

VII. Total water requirement is 82 KLD of which 15 KLD be sourced from ground water for drinking & domestic purpose and remaining 67 KLD will be sourced from the sump of existing mine and later from this mine sump as and when developed.

VIII. Waste water (3.5 KLD) generated from workshop will be treated using Oil-Water separator and treated water will be used in dust suppression & Vehicle Washing. 9 KLD of waste water generated from mine office, rest shelters etc. will be disposed in soak pit via septic tank.

IX. PP has submitted that the total ML Area is 156.43 ha, out of which 42.461 ha is government land and 113.96 ha is private land, State/Central government policies and rules as applicable will be followed in case of resettlement and rehabilitation if any.

X. No Court Cases pending against the project and/or land in which the project is proposed to be set up.

XI. Estimated total capital cost of the project will be approximately Rs. 187.95 Crore. PP reported that total employment will be 306.

5. Based on the documents submitted and discussion held during 21st EAC meeting held on 23-25, September, 2020 the committee observed that the mining lease was granted only for Limestone mining; whereas, PP also included Dolomite mineral in the TOR proposal without valid lease for Dolomite mining. The committee also observed that PP was very fair in the meeting about submitting the facts in this

regard, however, the Consultant was unjustifiably defending the wrong facts. The EAC recommended to show cause the consultant in this regard.

Therefore, the EAC returned the proposal in present form and suggested the consultant to submit the modified Form I and revised Prefeasibility report as per the LOI.

2.22: Proposed Expansion of Aniali Limestone Mining from 43000 TPA to 175000 TPA, Mine lease area 21.04 Ha of M/s TATA CHEMICALS LIMITED located at Village Aniali Tehsil Ranavav District Porbandar, Gujarat – [Proposal No. IA/GJ/MIN/166482/2020; File No. J-11015/42/2020-IA.II (M)] – Terms of Reference

The Proposal of M/sTATA CHEMICALS LIMITED is for grant of Term of Reference for expansion of Aniali Limestone Mining from 43000 TPA to 175000 TPA, mine lease area 21.04 Ha located at Village Aniali Tehsil Ranavav District Porbandar, Gujarat. The mine is located between latitude 21° 42' 22" to 21° 42' 33" N and Longitude 69° 49' 26" to 69° 49' 43" E and within survey of India toposheet Nos. Survey No. 207/part, Village: Aniali, Taluk: Ranavav, District – Porbander, Gujarat.

2. As per EIA Notification dated 14th Sept, 2006 and its subsequent amendments, the project falls under Project Activity 1 (a) of non-coal mine and is Category "A" because the lease area is located within 10 km from the boundary of Barda Wildlife Sanctuary, notified under the Wild Life (Protection) Act, 1972 as per General Condition 1 of the EIA, notification 2006, as amended from time to time.

3. The proposal was placed in the 21st EAC meeting held during 23rd to 25th Sept., 2020. The project proponent informed vide letter dated 24th Sept., 2020 that the Terms of Reference (automatic system generated) on 2nd Sept., 2020 and project proponent did not attend the meeting.

4. The committee observed that the ToR was automatically system generated, the proposal was placed before 21st EAC meeting for specific ToR, due to close proximity with the ESZ around Barda Wildlife sanctuary. However, the project proponent did not attend the meeting. The committee **deferred** the proposal and to be again considered in the next EAC meeting for the same.

2.23: Karunda Limestone Mine with total excavation of 3.8 MTPA [Limestone 3.448 MTPA+ Interstitial clay 0.189 MTPA+ Top Soil 0.011 MTPA + Mineral Reject 0.152 MTPA] for expansion of Production of Limestone from 2.0 MTPA to 3.448 MTPA (M.L. No. 03/2003; ML Area 240.86 Ha) Located at Village – Karunda, Tehsil – Nimbahera, District – Chittorgarh (Rajasthan) by M/s. JK Cement Ltd [File No. IA-J11015/36/2019-IA-II (M); Proposal No IA/RJ/MIN/98520/2019; Consultant: Enkay Enviro]– Terms of Reference

The Proposal for issuance of Term of Reference for carrying out EIA/EMP of M/s. JK Cement Ltd is for total excavation of 3.8 MTPA [Limestone 3.448 MTPA+ Interstitial

clay 0.189 MTPA+ Top Soil 0.011 MTPA + Mineral Reject 0.152 MTPA] in order to expand the production of Limestone from 2.0 MTPA to 3.448 MTPA from Karunda Limestone Mine (M.L. No. 03/2003; ML Area 240.86 Ha) Located at Village – Karunda, Tehsil – Nimbahera, District – Chittorgarh (Rajasthan). The Mining Lease area is a part of the Survey of India Topo-sheet No. 45 L/10. The site falls between Latitude 24°41'23.1" N - 24°42'27.8" and Longitude 74°36'25.4"E - 74°37' 12.7" E and falls 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” as the Mining lease area is more than 100 Ha. The project proponent applied online vide proposal No. IA/RJ/MIN/98520/2019 dated 15.04.2019 in Schedule 1(a) and submitted the Form-1, Pre-feasibility Report and other information for examining the proposal in light of Common Cause Judgment dated 02.08.2017 and S.O. 804(E) dated 14.03.2017. The proposal was placed in EAC meeting held during 29-30 May, 2019 and during 23-25 Sept., 2020.

3. The project proponent submitted that the mining lease was originally sanctioned in favor of J. K. Cement Works by State Govt. vide letter no. P5 (32) KHAN/ Group – 03/ 80 dated 25.07.1984 for an area of 336.70 Ha. The company has surrendered an area of 95.84 ha. out of 336.70 ha. and was accepted by Superintending Mining Engineer, Bhilwara vide letter no. SME/ BHIL CIRCLE/ CC1/ ML 3/ 03/ 1509 dated 16.07.2008 and thus retained only an area of 240.86Ha. The Mining lease has been first time renewed vide State Govt. order no. P-16(19) Khan/ Group-2/ 05 dated 18.11.2010 for a period of 20 years for an area of 240.86 ha. Lease agreement signed on 05.08.2014 and registered on 06.08.2014. As per provision of MMDR Amendment Act' 2015, the validity of lease period has been extended upto 12.12.2034 vide State Government order no. AME/ Nimba/ CC – 1/ MI 3/ 2003/ 2046 dated 27.02.2015. The land is categorized as Govt. Waste Land (50.74 Ha.), Private Land (130.32 Ha.) and Charagah/ Pasture Land (59.80 Ha.). The PP submitted that working permission granted by District authorities for working in Grazing land vide District Collectors letter dated 12.10.2006, 02.01.2012, 06.02.2012 & Tehsildar's letter dated 23.11.2006, 28.02.2012 and vide letter no. Prakaran No. 5/96 dated 27.03.1996.

4. The first Mining Plan was approved vide letter no. 682(23) (231)/2002 – UDP dated 17.03.2003 under Rule 22 of MCR 1960 for the period 2002–03 to 2006 –07. The Mining Plan for retained mining lease area has been approved vide letter No. 682(23) (619)/2008-UDAI dated 03.03.2009 under rule 22(6) of MCR, 1960 and 23(B)(1) of MCDR 1988 for the period 2009–10 to 2013–14. The Scheme of Mining has been approved vide letter No. 682(23) (MS-373)/2006-MCCM(N) UDP dated 06.05.2014 under rule 12(3) & 23(B) of MCDR 1988 for the period 2014 – 15 to 2018 – 19. The Modified Mining Plan along with Progressive Mine Closure Plan has been approved from the Office of Regional Controller of Mines, IBM, Ajmer vide letter no. 584(4) (3) (1693)/ 2017 – RCOM – AJM/ 976 dated 19/26.07.2017 for an area of 240.86 Ha. for a period of 2017–2018 to 2018-19 due to installation of new

clinkerisation (cement) plant of capacity 2.2 MMTPA with production capacity from 2.0 to 3.6 MMTPA. Review of Mining Plan with Progressive Mine Closure Plan approved from Office of Regional Controller of Mines, IBM, Ajmer vide letter no. 584(4) (3) (1761)/ 2018 – RCOM – AJM/ 1660 dated 28.11.2018 for an area of 240.86 Ha. For a period of 2019–20 to 2023-24 for inclusion of total handling (total excavation & mining of existing dump of limestone mixed with clay).

5. The project proponent submitted that Environment Clearance was obtained vide letter no. J11015/3/2004-IA-II (Vol.I) dated 04.10.2004 for 1.09 Million TPA under EIA Notification 1994. The Environment Clearance for expansion in production of Limestone from 1.09 Million TPA to 2.0 Million TPA vide letter no. J-11015/428/2008-IAII(M) dated 06.08.2010 under EIA Notification'2006. The Certified compliance of Environment Clearance conditions obtained from Regional Office of MoEF&CC, Lucknow file no. IV/ENV/R/Mine-193/292/04/, site visit done dated 17.12.2019 and certified compliance report forwarded to Ministry vide letter no. IV/ENV/R/Mine222/332/2005/584 dated 22.01.2020.

6. The project proponent has submitted that the method of mining will be opencast mechanized for Total excavation of 3.8 MTPA [Limestone 3.448 MTPA (including 48000 TPA from operation of existing dump of Limestone mixed with clay after screening) + Interstitial clay 0.189 MTPA (including 72000 TPA from operation of existing dump of Limestone mixed with clay after screening) + Top Soil 0.011 MTPA + Mineral Reject 0.152 MTPA].The mining will be done by open cast mechanized method of mining. Expansion in production is envisaged through deploying efficient and high yield production machineries, increased drilling and blasting. The bench height of 8.5 + 0.5m and width 50 m (avg.) will be maintained. The face slope will be 80° - 85°, whereas ultimate pit slope is proposed 35°. It is proposed to install a crusher (in SE side of mining lease between ML-4 to MI-5) with screening arrangement and it is also proposed to transport crushed limestone through tipper/ over land belt conveyor (OLBC) to the Cement Plant situated at Nimbahera&Mangrol. The drilling is being done by heavy duty drills using 3.0m effective drill rods with 115mm diameter bits. The PP submitted that at the conceptual stage, the total excavated area will be 156.706 ha. It will be used for storage of rain water. Overburden dump of 6.677-hectare area will be stabilized and planted. Also, total plantation in 40.253-hectare area will also be carried out till mine life. Ultimate pit limit will be 384 m MSL. Eventually, the area will have enhanced physical environment aesthetics. Rain water accumulated in the pit will be about 63.20 MCM. Loading of mineral will be done using excavator. Mineral will be crushed in the proposed crusher and then will be transported through tipper/ over land belt conveyor (OLBC) to the Nimbahera and Mangrol plant. Dumpers will also be used of 40Tfor transportation of mineral up to the crusher. Movement of daily production of minerals outside the lease area will be through tipper/ belt conveyor to the plant. Thus, the impact due to transportation will be marginal which after adoption of mitigative measures will be kept well within the norms.

7. The project proponent submitted that there are three reserved forests namely Machhla, n/v Shergarh and Gilund RF and one protected forest namely Alsigarh P.F. near the mine site. There are four water bodies present near the mine site namely Gambhiri Reservoir, Gambhiri River, Murliya Dam and SatkhandaNadi.

8. The project proponent submitted that the total water requirement for the proposed expansion will be 125.0 KLD. NOC for ground water withdrawal has been obtained from CGWA vide letter no. 21- 4(286)/WR/CGWA/2008-1676dated 28.10.2015 and renewal applied vide letter no. MGRPC-23/2562 dated 16.10. 2017.Renewal application has already recommended vide letter No. TS/ 21B (221)/ CGWA/ WR/2008- 6073 dated 18/07/2018.

S.No.	Particulars	Existing (KLD)	After Expansion (KLD)	Source
1	Domestic	1.0	1.0	Groundwater
2	Dust suppression	50.0	54.0	Mine pit water
3	Plantation	40.0	50.0	
4	Washing of machineries/mine operations	1.0	20.0	
Total		92.0	125.0	

9. Top soil (0.854 Million Tonnes till Conceptual stage) and interstitial clay (5.63 Million Tonnes till conceptual stage) shall be dumped at earmarked places within the ML and will be stabilized. During the review of Mining Plan period, Top soils (38461.54 Cu.m till in plan period) and interstitial clay from excavation 438870.51 Cu.m. & from operation of existing dump of limestone mixed with clay after screening 163636.36 Cu.m. in plan period generated shall be dumped at earmarked places within the ML and will be stabilized. Top soil will be used for greenbelt development. At the conceptual stage, there will be dump in 6.677 ha. area.

10. The project proponent submitted that the existing cost of the project is Rs. 10.5326 crores (Cost of Machineries) + 21.37 crores (Infrastructure) = 31.9026 Crores and project cost for expansion will be Rs. 17.9225 (Cost of Machineries). Total cost after expansion will be Rs. 17.9225 (Cost of Machineries) + 21.37 (Infrastructure) = 39.2925. The proposed expansion project after expansion will provide employment to 84 workers.

11. Based on the discussion held in the EAC meeting held during 29-30 May, 2019 and documents submitted the Committee returned the proposal in present form due to shortcomings. The observation of EAC and replied by PP are as follows:

- a) Form-1 submitted to the Ministry is by consultant under authorization to consultant for communication with Ministry and Regional Office on behalf of PP. The Committee is of the view that application needs to be filled by the

applicant and all the communication with the Ministry and its regional office should be done by authorized person/officer of the company and not by the consultant. The PP needs to fill the fresh Form-1 and upload the authorization letter in the name of person filling the form on behalf of the company.

Project proponent replied that Fresh filled Form-I with signed by PP is enclosed. All the communication with the Ministry and its regional office will be done by Authorized Signatory- Mr. S.K. Rathore {President (O) &Unit Head) on behalf of the company.

- b) In the compliance status it has mentioned that there are no waste dumps but on viewing the KML file dumps are visible. Thus, PP needs to provide the details of the dumps (material, size and period in which dumps were developed) and mitigation measures already taken by the PP for the waste management and what is its proposal for the expansion proposal.

Project proponent replied that there are two waste dumps at Mining lease area of interstitial clay generated since 1995- 96 and are in active mode. After becoming inactive these dumps shall be stabilized by reclaiming with plantation over it. The size of these waste dumps of interstitial clay are as follows :- The waste dumps will be stabilized & garland drains will be constructed at the foot of the dumps with garland along with sedimentation pit and check dam to prevent siltation during rain. The stacking of sub-grade limestone generated from 2012-13 is done at 3 different locations. There is a proposal given in the approved Review of Mining Plan for the period 2019-20 to 2023-24 vide letter No. 58a(4)93J(1761)/2018-RCMAIM/1660 dated 28.11.2018 that these stocked sub-grade limestones should be mined out after installation of crusher with screening arrangement. After screening, clean limestone will be consumed for cement manufacture and segregated screen rejects (clay) as waste will be stacked in west and south side and shall also be used for haul road maintenance, levelling work.

- c) The Committee observed that plantation and green belt development by the PP is not sufficient and not as per EC Condition. The previous EC was granted in year 2010 and 9 years is more than sufficient to develop a good green belt and plantation within and outside the mining lease. The Committee also observed that the survival rate for the plantation is not good. The Committee is of the view that now many good techniques are being followed in India for development of forest in short span of time. Thus, PP needs to engage the expert in the field for development of green belt and to carry out plantation within and outside the mining lease so that in short span of time good afforestation and green belt can be developed. The PP needs to submit the detailed plantation plan clearly mentioning the target for the same and the agency to be engaged for development of the same along with the budgetary allocation.

Project proponent replied that the total area for plantation to be put in use upto the Mine life as per Conceptual plan is 54.87 Ha. We have done plantation all along the roads, dump site, statutory boundary within and outside the mining lease area as per the mineral resources and availability. Depending upon the availability of the land within the lease area green belt was developed however we will develop greenbelt in the nearby villages (school premises, hospital premises along the village road etc.) In addition to proposal given for plantation within the Karunda Mining lease in Review of Mining Plan approved for the period 2019-20 to 2023-24, year wise proposal for development of Green belt all along the Mining lease boundary in short span of time. This will be done under the close supervision of J.K Cement Works.

- d) The Committee observed that project proponent has not submitted the past production details duly authenticated by DMG, Rajasthan financial year wise. Further, the Committee observed that at some places it appears that mining activities has gone outside the mining lease. Thus, project proponent needs to verify the KML file and submit a certificate from the DMG, Rajasthan clearly stating that the mining operation including dumping is well within the mining lease area only.

Project proponent replied that Financial Year wise Past Production report duly authenticated by office of Department of Mines & Geology, Nimbahera, Rajasthan vide letter no. Ame/NBH/Static/2020-21/M dated 17.06.2020. Mining activity is being done within the lease area which has been verified by DMG department Certificate issued vide letter no. Sa. I(ha. Aa./Nimbahera/CC.1/ ML. 3/2003/208 dated 18.06.2020.

- e) The Committee observed that a nallah is passing through the mining lease which is on the eastern side meeting the catchment area of the earthen dam. The protection measures already taken by the PP for the protection of nallah needs to be provided and what is future proposal.

Project proponent replied that in the mining lease area, there is a seasonal nallah in South side flowing in South direction from SW to SE which is meeting the catchment area of the earthen dam. This area has been deducted from the mine working area. For protection of the nallah following measures are being taken: PP have developed an embankment all along the length of the nallah keeping a safety distance of 15m from it in addition to safety zone of 45 m on both side of the nallah. Project proponent have also planned to develop dense plantation on the embankment of the nallah.

- f) The Committee observed that a Public Road is passing through the mining lease area and it seems that no protection is provided on both side of the road. Thus, PP needs to provide the condition mentioned in contract of lease deed for protection of public road. Whether the same has been maintained or

proposed to be maintained in the expansion proposal. The details of plantation already carried out on both the side of this road and what is the future proposal for the same.

Project proponent replied that in the mining lease area, public road is passing from Chittorgarh - Nimbahera Highway road to Karunda village and then going up to Maliakhera Mining lease. For protection of the road following measures are being taken:- A safety zone of 45m has been marked on both the sides of road where no working has been done. As per DGMS rules & regulations entry in this area is restricted during blasting by barricading this area by putting guards on both the ends of danger zone on road side. Display boards are placed on both the sides of road to warn and restrict public for entry in this danger zone, for diversion road connecting villages CharliaGadia, Karunda and Dhanora, notification by the PWD Government of Rajasthan has been issued on 16/08/2018 and a public notice has been issued on 08/06/2020 by the Sub Divisional Magistrate Nimbahera for land acquisition and diversion. Copy enclosed as Appendix -VII. Both the existing pits of the mining lease will be merged after relocation of the public road. Plantation will be carried out all along the proposed diversion of public road.

- g) The Committee is also of the view that project proponent needs to comply with the previous EC conditions first and provide the timeline and target for implementation of the same.

Project proponent replied that they are complying with the previous EC condition in effective manner and same has been verified by Regional Office, Lucknow, MoEF in the month of December, 2019. Latest Certified compliance of Environment Clearance obtained from Regional Office of MoEF&CC, Lucknow vide letter no. I/ENV/R/Mine-222/332/200s/584 dated 22.01.2020 enclosed as Appendix - VIII.

- h) The Committee observed that mining lease includes the agricultural land and grazing land. Thus, PP needs to provide the documents for the conversion of the same and compensatory land for grazing land as per Rajasthan Land Revenue Rules.

Project proponent replied that the mining lease was originally sanctioned on 25.07.1984 for an area of 336.70 Ha. The company has surrendered an area of 95.84 ha. and retained an area of 240.86 Ha. consisting of 59.80 Ha. of Grazing land. The orders of Hon'ble Supreme Court 2006, is not applicable as the lease was allocated prior to 2006. We have obtained permission for working in Grazing land granted by District Authorities vide District Collectors letter No. Rajasva/Khanan /N.O.C./L2-12 (66) 07 /L99 dated, 02 Jan. /Feb. 2012 & Rajasva/Khanan/N.O.C./12- 72 (66) 07 /228 dated 06 Feb., 2012 and letter No. Prakaran No. 5/96 dated 27.03.1996.

- i) Appropriate document on right of way for conveyor system, if proposed shall be submitted along with risk study for explosive proposed / being used for sequential blast.

Project proponent replied that: Karunda Limestone Mine is adjacent (L kmJ to Maliakhera Limestone Mine, where we have started installation of conveyor system (beltJ and crusher is installed. There is a proposed Limestone Crusher with Screening (500 TPH Limestone and 50 TPH Screening ClayJ at Karunda Limestone Mine from which the crushed material will be transferred to the Cement plant through the existing covered conveyor belt/tipper. Controlled blasting is being done by use of Sequential blasting machine (SBM), Delay detonator, Non-Electric detonator and use of air deck to reduce charge per hole and vibration.

- j) Latest certified compliance certificate of EC conditions from Regional office, MoEF&CC.

Project proponent replied that Latest Certified compliance of Environment clearance conditions obtained from RegionalOffice of MoEF&CC, Lucknow vide letter no.222/332/2005/58a on dated 22.01.2020.

12. The proposal was considered in the 21st EAC meeting held during 23rd to 25th September, 2020. The Committee directed to project proponent to submit the undertaking for plantation plan.

13. The project proponent has submitted the undertaking for plantation plan vide letter dated 26.09.2020, which was received by the Ministry through email on 29th September, 2020, for completion of short fall of plantation area to meet the 33% with the target date up to 31.03.2021 as under:

- I. Current land put in use area: 67.407 ha
- II. Current plantation area: 8.50ha (within lease 17.00ha and outside lease 1.5 ha)
- III. Current survival rate: 85%
- IV. Total 7.5 mts safety zone area of entire lease: 4.9 ha
- V. Current plantation in 7.5 safety zone of lease area: 0.524 ha
- VI. Current required plantation in 33% of put in use of mining lease area: 22.24 ha
- VII. Shortfall of plantation in put in use area: $22.24 - 18.50 = 3.74$ ha
- VIII. Number of sampling in 3.74 ha: 3740 nos.
- IX. Location of plantation will be North side of the lease boundary, South side of the lease boundary and near Karunda village.

14. Based on the deliberations during 23rd to 25th Sept., 2020 and undertaking submitted by the project proponent, the Committee **recommended** for standard Terms of Reference (ToR) for M/s JK Cement Ltd of Karunda Limestone Mine with total excavation of 3.8 MTPA [Limestone 3.448 MTPA+ Interstitial clay 0.189 MTPA+ Top Soil 0.011 MTPA + Mineral Reject 0.152 MTPA] for expansion of Production of Limestone from 2.0 MTPA to 3.448 MTPA (M.L. No. 03/2003; ML

Area 240.86 Ha) located at Village – Karunda, Tehsil – Nimbahera, District – Chittorgarh,Rajasthan.

List of member of Expert Appraisal Committee Participated through VC

S.N o.	Member Name	Member Address	Designation	23 rd Sep	24 th Sep	25 th Sep
1	Dr. S.R. Wate	Add. 148/149, Nagar Vikas Society, Narendra Nagar, Nagpur-440015, Maharashtra	Chairman	Yes	Yes	Yes
2	Dr. Ajay Deshpande	Building A-26, Flat-403, Happy Valley Homes, Manpada, Ghodbunder Road, Thane (West) - 400610, Maharashtra	Member	Yes	Yes	Yes
3	Shri Pankaj Verma	2 nd Floor, Prithvi Block, Indira Paryawaran Bhawan, MoEF&CC, Jorbhag, New Delhi- 110003	Member Secretary -I	Yes	Yes	Yes
4	Shri Yogender Pal Singh	2 nd Floor, Vayu Block, Indira Paryawaran Bhawan, MoEF&CC, Jorbhag, New Delhi- 110003	Member Secretary -II	Yes	Yes	Yes
5	Shri B Ramesh Kumar	H-No. 6-1-134/6, Balram Compound, Padmarao Nagar, Secundrabad-500025, Andhra Pradesh	Member	Yes	Yes	Yes
6	Prof. S. Ramakrishna Rao	50-120-9/1, Tulasi Mani Regency North Extension, Seethammadhara, Visakhapatnam - 530013 Andhra Pradesh.	Member	Yes	Yes	Yes

7	Shri Santosh Gupta	Flat No. 405, Block –B, Gaur Green Vista, NyayKhand - 1, Indrapuram, Ghaziabad- 201014	Member	Yes	Yes	Yes
8	Dr. (Ms.) Asha Rajvanshi	Wildlife Institute of Inida, Chandrabani, Dehradun- 248001	Member	Yes	Yes	Yes
9	Shri G.P. Kundargi	Plot No. 32, MOIL Vatika, Chicholi Road, Fetri, Nagpur 441501, Maharashtra	Member	Yes	Yes	Yes
10	Dr. A.K. Malhotra	C-6, SubhavnaNiketan, Road No. 41, Pitampura, Delhi- 110034	Member	Yes	Yes	Yes
11	Dr. Gurdeep Singh	Centre of Mining Environment, Department of Environmental Science & Engg. Indian Institute of Technology (Indian School of Mines), Dhanbad-826004	Member	No	No	No
12	Dr. Parimal Chandra Bhattacharjee	A/3 Asiyana Housing Complex Maligaon, Guwahati-781011, Assam	Member	Leave of absence granted	Leave of absence granted	Leave of absence granted
13	Prof. MukeshKhar	Department of Civil Engineering, IIT, Delhi	Member	Yes	Yes	Yes
14	Mr. V. K. Soni	Government of India, Ministry of Earth Sciences, India Meteorological Department, MausamBhawan, Lodi Road, New Delhi – 110003	Member	Yes	Yes	Yes

15	Sh. Pankaj Kulakshethra	Regional Controller of Mines, IBM Block D, Second Floor, Indira Bhavan, Civil Lines, Nagpur - 440001	Member	Yes	Yes	Yes
16	Sh. AftabAhmend	Representative of DGMS, DMS, Room No. 201-203, II Floor, B- Block, CGO-II,, Hapur Rd, Kamla Nehru Nagar, Ghaziabad, Uttar Pradesh 201002	Member	Yes	Yes	Yes
17	Sh. B.K. Soda	ADM, Jaipur, Representative of State Government of Rajasthan	Special invitee	no	Yes	no
