

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

SUMMARY RECORD OF 20th MEETING OF THE COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 20th meeting of the Expert Appraisal Committee for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during **August, 19-21, 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 19th EAC Meeting held during July, 22-24, 2020

The minutes of 19th EAC Meeting held during 22nd - 24th July, 2020 was placed before the members of the Committee. The Member Secretary informed the Committee that the project proponent, submitted a request through an e-mail dated 05.08.2020 for the following amendments in 19th EAC in respect of Item No. 2.16

S.No	Typographical Error	May be read as
1	Page No.139, Para 5, Line No. 2 Mining plan and Progressive Mine Closure Plan for an area of 1594.31ha has been approved by the Regional Controller of Mines, Indian Bureau of Mines, Jabalpur.	Mining plan and Progressive Mine Closure Plan for an area of 1594.34ha has been approved by the Regional Controller of Mines, Indian Bureau of Mines, Jabalpur.
2	Page No.139, Para 6, Line No. 9 An area of 1280.332 ha will be mined out by the end of the conceptual period and 562.2 ha area will be back-filled.	An area of 1280.332 ha will be mined out by the end of the conceptual period over an area of 437.33ha will be back-filled.
3	Page No. 141, Para 13, Line No. 4 J.P. Dhurve, Additional Collector, Nagaur	J.P. Dhurve, Additional Collector, Panna
4	Page No. 158, Para 24, Line No. 5 Kakra-Panna Limestone Mine in ML area of 1599.34 Ha.	Kakra-Panna Limestone Mine in ML area of 1594.34 Ha
5	Page No. 158, Para No. 24 (viii) The total excavation shall not be exceeded to 6.27 MTPA, inter alia,	The Total excavation shall not be exceeded to 7.61 MTPA Inter alia including 4.08

	including 4.08 MTPA Lime stone; 1.61 MTPA OB/Top Soil/Waste; and 0.58 MTPA sub-grade mineral.	MTPA Lime Stone, 0.58 MTPA sub-grade limestone, 1.51 MTPA Inter burden, Soil/Alluvium 1.26 MTPA, Mine Waste 0.18 MTPA
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Member secretary informed that these are typographical mistakes and factual in nature. Therefore, the committee confirmed the 19th EAC minutes with the above said changes.

2.1 Mining of Mineral Bajri (Minor Mineral) with proposed production capacity of 0.84 Million TPA (ROM) by Shri Ashu Singh Bhati, located at Revenue villages of Tehsil Shahpura, District-Bhilwara, Rajasthan (MLA 624.39ha)[F. No. J-11015/286/2013-IA.II (M); Proposal No. IA/RJ/MIN/20582/2013] – Reconsideration of EC

1. The proposal of Shri Ashu Singh Bhati is for mining of Bajri (Minor Mineral) with proposed production capacity of 0.84 Million TPA (ROM). The mine lease area is located at Revenue villages of Tehsil – Shahpura, District – Bhilwara in the mine lease area of 624.39ha. The mine lease area lies on Khari and Mashi River. The Project is located in Seismic zone-II. The Lease area falls on Survey of India toposheet number 45K/13, 45K/14, 45O/1 and 45O/2. The Latitudes and Longitudes of the mine lease area as below:

Zone	Latitudes	Longitudes
Zone - I	25°52'42.86" N to 25°46'05.84"N	74°52'03.21" E to 74°06'46.70" E
Zone –II (A)	25°48'15.32" N to 25°46'05.84"N	74°45'31.08" E to 74°06'46.70" E
Zone – II (B)	25°40'06.02" N to 25°44'00.95" N	74°47'09.75" E to 74°57'11.6" 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.

The Committee previously asked the PP to confirm that is there any other homogeneous mining lease within 500 meters of this lease and forming cluster. If, yes details of the same needs to be provided.

PP in its reply dated 10.07.2020 submitted Cluster Certificate issued by Mining Officer, Bhilwara vide its Letter. No 218 dated 15.06.2020 wherein it has mentioned that there is one mining lease within 500 meters as per following details:

M.L. No.	Tehsil	District	Area (in ha)	Name of LOI Holder
119/2012	Hurda, Masud	Bhilwara, Ajmer	544.03	Shri. Vikramaditya Rathod

3. The proposal of TOR was considered by the Expert Appraisal Committee in its 13th Meeting held during 12th November, 2013 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TOR was issued by MoEF&CC vide letter No. J-11015/286/2013-IA.II (M) dated 09.12.2013.

4. PP vide Proposal No. IA/RJ/MIN/20582/2013 dated 05.05.2015 applied for Environmental Clearance and submitted the EIA/ EMP Report online to Ministry for seeking Environmental Clearance after conducting Public Hearing for mining of Bajri (Minor Mineral) with proposed production capacity of 0.84 Million TPA (ROM). The mine lease area is located at Revenue villages of Tehsil – Shahpura, District –Bhilwara in the mine lease area of 624.39ha. The Proposal of EC was appraised before the Expert Appraisal Committee in its meeting held during August 25- 27, 2015. 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 **0.84 Million TPA (ROM)**. *The Committee recommended additional specific conditions viz. (i) Excavation will be carried out up to a maximum depth of 3 meters from surface of mineral deposit and not less than one meter from the water level of the River channel whichever is reached earlier; (ii) Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical checkup and once in six months and necessary medical care/preventive measures under taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted; (iii) Project Proponent shall appoint a Monitoring Committee to monitor the replenishment study, traffic management, levels of production, River Bank erosion and maintenance of Road etc.; (iv) Transport of minerals shall be done either by dedicated road or it should be ensured that the trucks/dumpers carrying the mineral should not be allowed to pass through the villages; (v) Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density; (vi) Implementation of Action Plan on the issues raised during the Public Hearing. The Proponent shall complete all the tasks as per the Action Plan submitted with the budgetary provisions during the Public Hearing; (vii) The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centre; Washing of all transport vehicle should be done inside the mining lease; and (viii) Permanent pillars has to be constructed to demarcate width of extraction of ROM leaving 25% of River width from the bank with depth of 1.5m below the ground and 1.2 m above the ground to observe its stability.*

Additional details were sought from the PP vide letter dated 26.12.2016 (uploaded on PARIVESH on 29.12.2016) to conduct a scientific replenishment study citing the following:

“The matter was examined in the Ministry w.r.t. replenishment study and noted that the Ministry has issued the terms of reference and inter-alia mentioned a condition that the Project Proponent shall conduct a detailed replenishment study and submit the report along with the EIA/EMP. However, the Project Proponent has made a theoretical study based on Dendy Bolton’s Replenishment Formula. In view of the above, the Ministry requested the EAC to recommend the amount of production on yearly basis based on a duly conducted scientific replenishment study before recommending Environmental Clearance. Accordingly, the proposal to discuss the replenishment study issues related to sand/bajri mining projects have been re-considered before the EAC meeting held during October 24-25, 2016.

The Committee deliberated the issues and opined that Replenishment of the sand is a natural process in the perennial rivers. The sand moves along with the water streams and is deposited in the void created in the mined out areas. Replenishment rates vary depending on nature of watershed, nature of soil and rainfall etc. and mining beyond the natural replenishment rate results into damage of river bed leading to adverse environmental consequences. Mining proposals under the category of river mining are received for Environmental Clearance mainly from States such as Uttarakhand, Himachal Pradesh, Uttar Pradesh, Jammu and Kashmir, Haryana, Bihar and Rajasthan. Analysis of these proposals reveals that the proposals of sand mining from Rajasthan are not in perennial rivers. These are, in effect, paleo sand deposits and are not replenished annually during monsoon season. The mined out areas are not replenished adequately and may turn into permanent depressions.

The Committee noted that the EIA/EMP reports on sand mining proposals estimate replenishment rates based on theoretical Dendy—Boltan formula and not on actual replenishment studies. The Dendy- Boltan formula is not very useful to estimate replenishment rates at a particular stretch of a river and its application to cases such as those of Rajasthan, where rivers are not perennial, is even more problematic. In view of the above, there is a need, therefore, to treat the river sand mining proposals from Rajasthan differently from those of other States. The Committee deliberated the issues w.r.t. replenishment study and is of the view that in case of Sand/Bajri mining projects from the State of Rajasthan, Project Proponents shall first conduct a scientific replenishment study and submit the report before the EAC for further consideration of amount of production for mining of sand/bajri on yearly basis. Therefore, the Committee deferred all such sand/bajri mining proposals of State of Rajasthan.”

In response to the ADS dated 27.12.2016, PP uploaded the “Scientific Replenishment Study Report for Bajri/Sand Mine Leases in The State of Rajasthan (Phase-II Report)” dated February, 2018 on PARIVESH on 03.04.2018.

Notably, the proposals of River Sand/Bajri Mining in State of Rajasthan were considered by the Special EAC meeting held on 08.01.2018 pursuant to the judgement of Hon’ble Supreme Court, dated 16.11.2017. These proponents had submitted Scientific Replenishment Study Report

prepared by the Central Mine Planning & Design Institute (CMPDI). Apart from M/s CMPDI and PPs, the officials of the State Government of Rajasthan namely Shri Deepak Tanwar, Senior Mining Engineer, Bharatpur and Shri D. P. Gaur, Senior Mining Engineer, Jaipur were invited to attend the EAC meeting.

The Member Secretary appraised the Committee that the 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. The above 19 PPs are covered under 82 LoI holders who have been restrained from carrying out river sand/ bajri mining.

The Consultant, M/s CMPDI, on behalf of PPs submitted that it has carried out three-stage study to estimate the replenishment of sand in the State of Rajasthan (as detailed in the minutes). Based on the study, M/s CMPDI estimated the annual replenishment of sand w.r.t. each of the proposals. For this proposal of M/s. Pradeep Sethi Estimated the Annual Replenishment was found to be 1.61 Million m³. Based on the above replenishment estimations, M/s CMPDI has indicated the replenishment status vis-a-vis annual planned production for each of the case. In case of this proposal of M/s. Pradeep Sethi, it is estimated that "Replenishment will be less than planned annual production."

The Committee noted that apart from the above estimations, M/s CMPDI has made certain conclusions and recommendations, the salient features of which are as below: - i. The rivers of Rajasthan are ephemeral in nature and not replenished annually as compared to perennial rivers and therefore, the concept of annual replenishment is not applicable. There is a need to consider appropriate change in the policy applicable for annual replenishment of rivers vis-à-vis mine capacity permits in case of Rajasthan. ii. Due to erratic and uncertain occurrence of rainfall in the State, there exists appreciable variation in the amount of replenishment of the rivers. The replenishment achieved at one point of time may be utilized over more than a year depending upon requirement which needs to be considered while linking annual production with annual replenishment of the rivers in the State of Rajasthan. iii. As per their considered opinion, M/s CMPDI mentioned that there is a need to consider the concept of resource accounting of bajri/ sand in the rivers of Rajasthan and take the replenishment as a measure for resource augmentation. The permissible level of bajri/ sand in each stretch need to be identified and each year, the resource augmentation based on the replenishment of the river need to be added onto it for updating the bajri/sand. Based on such estimation, quantum of further permits may be decided by State Government. iv. Apart from the above, system of Environment Accounting has also been propagated by United Nations (UN) with System of Environment – Economic Accounting 2012-Central Framework (SEEA-Central Framework) which is a statistical framework consisting of a comparable statistics and indicators for policy making etc. It is a tool that helps in tackling natural resource depletion and

environmental degradation. For sand mining projects of Rajasthan, Physical Supply Use Tables (PSUT), as provided in SEEA-Central Framework of UN, may be utilized for sustainable use of sand mining and grant of mining permits. The mining lease in Rajasthan occurs in paleo sand deposits and use of PSUT will be appropriate in this case. v. The installation of observation points may be appropriately considered for determination of replenishment level in each tract of river under consideration. The observation points may be installed at strategic locations and rise in the level of Bajri/ sand may be monitored.

The Committee made detailed deliberations and noted that there is a requirement of identification of active mining area within leased river stretches and subsequent identification and preparation of cross-section for assessing replenishment of sand in coming years. Hence, mining permission is technically required to be granted so as to conduct replenishment studies in future and demonstrate the same to State Govt. to regulate mining of paleo deposits in future. Accordingly, EAC recommended mining of river sand/ bajri to up to 25% capacity of the annual proposed production capacity **subject to submission** of information and undertaking as below:

- (i) DMG, State Government to submit demarcated river stretch through latitudes and longitudes (out of the total lease) where river sand/ bajri mining can be permitted based on available reserves and Original Ground Level (OGL) at each cross section in consultation with State Irrigation Department;
- (ii) PPs and M/s CMPDI to submit latitudes and longitudes of the identified cross section, duly authenticated by State Government, which shall be used for replenishment study in future for calculation of replenishment amount/ rate;
- (iii) PP to give undertaking that only Scrapers shall be used for mining to ensure that the mining depth be maintained as 1.0 meters (max.) from Original Ground Level and No other heavy machinery like bucket excavators, JCB machines etc. shall be used which may adversely impact the aquatic biota;
- (iv) State Government of Rajasthan shall regulate the mining operations by PPs and submit report to MoEFCC on quarterly basis. It shall also be ensured that levelled cross section is made before the onset of next rainfall season; and
- (v) State Deptt. Of Mines & Geology and PPs are required to submit District Survey Report (DSR) in line with provisions made in Ministry's notification dated 15.01.2016.

Further, the Environmental Clearance Proposals for mining of Sand/Bajri which were received from the State of Rajasthan were at various stages of consideration before the Expert Appraisal Committee (EAC) under the provisions of the EIA Notification, 2006. These Proposals were deliberated and discussed by the EAC in its meeting held

during May 30-31, 2018. The detailed Minutes of EAC meeting may kindly be seen at <http://environmentclearance.nic.in> , the summary of which is as follows:

“The Member Secretary has informed to the Committee that the issues related to replenishment study on the sand/bajri mining projects were deliberated by the EAC in its meeting held during October 24-25, 2016 wherein the Committee deliberated the issues w.r.t. replenishment study for the sand/bajri mining projects received from State of Rajasthan and the Committee suggested that Project Proponents shall first conduct a scientific replenishment study and submit the report before the EAC for further consideration of amount of production for mining of sand/bajri on yearly basis. Therefore, the Committee had deferred all such sand/bajri mining proposals of State of Rajasthan.

The Member Secretary has appraised the Committee that the 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.

*The Member Secretary has also informed that Government of Rajasthan has issued the Rajasthan Minor Mineral Concession (Amendment) Rules, 2018 on 28th February, 2018 and has amended Rule 5 and 6 of the Rajasthan Minor Mineral Concession Rules, 2017 w.r.t, existing expression “one year”, to “thirteen months” i.e. all LOI of minor mineral issued are only valid up to 31.03.2018. Government of Rajasthan, vide letter no. 14(4) Mines/Gr. II/2014, dated 9th April 2018, has submitted the status of 82 bajri mining cases. Out of 82 LOIs, 42 LOIs are cancelled/lapsed, 10 LOIs are sanctioned the lease/executed, and 30 LOIs are under stay in the Hon’ble High Court at Jodhpur w.r.t. regard to validity of LOI. **The Committee deliberated the issues and is of the view that Department of Mines and Geology, Government of Rajasthan shall first confirm whether the instant LOI/Lease is valid or not before consideration of the Proposal.***

*The Member Secretary has informed that the Ministry is receiving the projects of Bajri/Sand mining from the State of Rajasthan and requested the EAC to suggest further course of action. The Committee has also observed that similar proposals from the State of Rajasthan were considered by the EAC in its meetings held on **8th January 2018 and May 30-31, 2018** (this meeting) wherein the Committee has asked the following certain **information/clarifications and undertaking** from the State Government of Rajasthan/Project Proponent: -*

- i. Complete appraisal of the EIA/EMP report along with TOR compliance and other mitigation measures, if not done earlier.*
- ii. Details of Scientific Replenishment Study report needs to be presented with other requisite information.*

- iii. DMG, State Government to submit demarcated river stretch through latitudes and longitudes (out of the total lease) where river sand/bajri mining can be permitted based on available reserves and Original Ground Level (OGL) at each cross section in consultation with State Irrigation Department;*
- iv. PP and Consultant to submit latitudes and longitudes of the identified cross section, duly authenticated by State Government, which shall be used for replenishment study in future for calculation of replenishment amount/ rate;*
- v. PP to give undertaking that only Scrapers shall be used for mining to ensure that the mining depth to be maintained as 1.0 meters (max.) from Original Ground Level and No other heavy machinery like bucket excavators, JCB machines etc. shall be used which may adversely impact the aquatic biota;*
- vi. State Government of Rajasthan shall regulate the mining operations made by PP and submit report to MoEF&CC on quarterly basis. It shall also be ensured that leveled cross section is made before the onset of next rainfall season; and*
- vii. State Department of Mines & Geology and PP are required to submit District Survey Report (DSR) in line with provisions made in Ministry's notification dated 15.01.2016.*
- viii. The Committee deliberated the issues and is of the view that Department of Mines and Geology, Government of Rajasthan shall first confirm whether the instant LOI/ Lease is valid or not before consideration of the Proposal.*
- ix. The PP is required to submit the sections clearly marking the lateral and depth extents of present ground profile as well as proposed excavation profile at individual sections. The same needs to be verified/ approved by the State Mines and Geology Department, Govt. of Rajasthan.*
- x. The PP needs to submit a database in structured tabulated form clearly mentioning the nomenclature of the section line, latitude and longitude of both the extents of section line, chianages and respective levels (RL, AMSL) of all the points taken on that section line. That means with the help of this database profile of ground at that section line can be drawn with the help of suitable CAD software.*
- xi. Thus with the help of existing ground profile and proposed extents of excavation considering the stipulations of lateral extents of sustainable sand mining guidelines, as mentioned above, The PP shall estimate the proposed quantum of excavation in tonnages with the help of Specific Gravity verified by the State DMG between every two consecutive sections. Such estimation shall be furnished by the PP in tabular form which includes the nomenclature of section lines, area proposed for*

excavation, distance between two consecutive section lines, volume, specific gravity, tonnage of the mineral, maximum depth extent from existing ground profile. Respective plans shall also be submitted clearly marking the area to be excavated. The same needs to be verified by the State Mines and Geology Department, Govt. of Rajasthan. In addition to this a composite plan mentioning the above proposed excavation zones for the entire mine lease area also needs to be submitted. Thus PP needs to submit a plan clearly showing the area to be put in under excavation and no excavation zones. Respective KML files of such lateral extents of excavation and no excavation zone within ML shall also be submitted by the PP.

- xii. PP needs to submit a plan clearly mentioning the width of river, lease boundaries, area left under safety zones as prescribed as per Sustainable Sand Mining Management Guidelines, 2016, as per statutory requirements under Rajasthan Minor Mineral Concession Rules and other competent authority.
- xiii. The plans and sections should be depicting the dates (period) of survey further in order to ensure the ground survey. PP should submit the dates (period) of survey, the model no & details of the instrument used for such survey, field recordings and observations along with name, signatures and contact details of the Surveyor explicitly be mentioned and recorded in the field book as well as in Plan & Sections.
- xiv. In addition to this soft copy (Excel or CSV file, DWG file) of all such survey recordings should also be submitted in proper order & sequence in order to cross check & verification samples checks of sections.
- xv. The Committee deliberated the issues w.r.t. erection of pillars and accordingly suggested that the PP needs to erect the pillars with the following specifications and submit the details (in table form) of the same along with photographs. The specifications inter-alia are as (a) the distance between two adjacent pillars shall not be more than 100 meters; (b) the pillars shall be of square pyramid frustum shaped above the surface and cuboid shaped below the surface; (c) each pillar shall be of reinforced cement concrete; (d) the pillars shall have a base of 0.30m X 0.30m and height of 1.30m of which 0.70m shall be above ground level and 0.60m below the ground; (e) all the pillars shall be painted in yellow colour and the top ten cm in red colour by enamel paint and shall be grouted with cement concrete; (f) on all the pillars, distance and bearing to the forward and backward pillars and latitude and longitude shall be marked; (g) each pillar shall have serial number in a clockwise direction and the number shall be engraved on the pillars; (h) the number of pillar shall be the number of the individual pillar upon the total number of pillars in the lease; and (i) the tip of all pillars shall be a square of 15 cm on which a permanent circle of 10 cm diameter shall be drawn by paint or engraved and the actual boundary point shall be intersection of two diameters drawn at 90 degrees.

- xvi. PP shall submit the compliances as per the Ministry's Office Memorandum No.3- 50/2017-IA.TII(Pt.), dated 30.05.2018 by an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

The Committee has made the detailed deliberations in the EAC held during **May 30- 31, 2018**. The representatives of State Government of Rajasthan were also present during the meeting. Based on the detailed deliberations and discussions, **the Committee is of the view that the complete appraisal may be done once the information as sought in the similar cases of State of Rajasthan for bajri/sand mining project may be submitted by the State Govt. of Rajasthan and Project Proponent. In view of the above, the Committee suggested that first State Govt. of Rajasthan and Project Proponent shall submit the above mentioned information for all similar case of the State of Rajasthan. Thereafter the proposals may be considered. The Committee also suggested that the proposals can only be considered before the EAC once all the complete information received from State Govt. of Rajasthan and Project Proponents.**

The Committee suggested that the Ministry first seek the above mentioned information from PPs and State Govt. in all similar cases from State of Rajasthan and afterwards placed before the EAC.

The matter was examined in the Ministry and accordingly Project Proponent and Department of Mines and Geology, Govt. of Rajasthan were requested vide letter dated 18.06.2018 (uploaded on PARIVESH on 19.06.2018) to submit the above mentioned requisite information online to the Ministry for further necessary action on the matter."

In view of above, the Ministry informed the PP on 07.10.2019 to "upload all the information sought by EAC in its meeting held on Jan-2018 and May 2018 in respect of sand mining project from State of Rajasthan. Upload the actual replenishment study report. Recommendation of Sub-Divisional Committee as per S.O. 141(E) dated 15.01.2016."

In response to above deliberation and ADS raised, PP has now replied on 16.05.2020 stating that Replenishment study report has been prepared and verified by Irrigation as well as Department of Mines & Geology, Rajasthan Complying. PP has further provided the following compliance w.r.t. the points asked during the 32nd EAC meeting held on May 30-31, 2018:

S. No.	INFORMATION/CLARIFICATION	COMPLIANCE
1)	Complete appraisal of the EIA/EMP report along with ToR compliance and other mitigation measures, if not done earlier	Complete Appraisal of EIA/EMP Done on EAC Meeting held on 25 August 2015 and

		EAC Recommended the Proposal for EC.
2)	Details of Scientific Replenishment Study report needs to be presented wither other requisite information.	Details of Scientific Replenishment Study report along with other requisite information is enclosed by PP.
3)	DMG, State Government to submit demarcated river stretch through latitudes and longitudes (out of the total lease) where river sand/bajri mining can be permitted based on available reserves and Original Ground Level (OGL) at each cross section in consultation with State Irrigation Department	DMG, State Govt. submitted demarcated river stretch through latitude and longitudes (out of total lease) where river sand / Bajri mining can be permitted based on available reserves and original ground level(OGL) at each cross-section in consultation with irrigation department. PP has enclosed the document.
4)	PP and Consultant to submit latitudes and longitudes of the identified cross section, duly authenticated by State Government, which shall be used for replenishment study in future for calculation of replenishment amount/ rate	Project proponent and consultant submitted the latitude and longitudes of the identified cross-section duly authenticated by state govt. which used for replenishment study and for calculation of replenishment amount/rate. PP has enclosed the document.
5)	PP to give undertaking that only Scrapers shall be used for mining to ensure that the mining depth be maintained as 1.0 meters (max.) from Original Ground Level and No other heavy machinery like bucket excavators, JCB machines etc. shall be used which may adversely impact the aquatic biota	An undertaking is attached here with regarding the use of scrapper for mining to ensure mining depth be maintained as 1.0 meter (max) from original ground level and other heavy machinery like bucket excavators, JCB machines etc. will not be used. This may adversely impact the aquatic bio data. <u>PP has submitted the Undertaking dated 26.02.2020.</u>
6)	State Government of Rajasthan shall regulate the mining	As the mining operations suspended by honorable

	operations made by PP and submit report to MoEF&CC on quarterly basis. It shall also be ensured that levelled cross section is made before the onset of next rainfall season; and	supreme court thus leveled cross section not prepared and submitted before the onset of next rainfall season.
7)	State Department of Mines & Geology and PP are required to submit District Survey Report (DSR) in line with provisions made in Ministry's notification dated 15.01.2016.	District Survey Report (DSR) is <u>Enclosed by the PP which is complete copy.</u>
8)	The Committee deliberated the issues and is of the view that Department of Mines and Geology, Government of Rajasthan shall first confirm whether the instant LOI/Lease is valid or not before consideration of the Proposal.	LOI issued by the state Govt. is valid vide letter no. P10 (9) Mine/Group-2/2013 dated 27.02.2013 issued by Department of Mines & Geology, Government of Rajasthan. (Enclosed by PP. LOI is valid for 5 years only).
9)	The PP is required to submit the sections clearly marking the lateral and depth extents of present ground profile as well as proposed excavation profile at individual sections. The same needs to be verified/approved by the State Mines and Geology Department, Govt. of Rajasthan	Plan & Sections clearly Showing the lateral and depth extents the Material will be excavated, present ground profile as well as proposed excavation profile at individual sections duly verified/Approved by State Mines & Geology Department, Govt. of Rajasthan is Enclosed by PP.
10)	The PP needs to submit a database in structured tabulated form clearly mentioning the nomenclature of the section line, latitude and longitude of both the extents of section line, chainages and respective levels (RL, AMSL) of all the points taken on that section line. That means with the help of this database profile of ground at that section line can be drawn with the help of suitable CAD software.	A database is structured tabulated from clearly mentioning the nomenclature of the section line, latitude and longitude of both the extents of section line, Chainage and respective level RL of all the points taken on that section line with the help of this database profile of ground at that section line can be drawn with the help of CAD

		software. Enclosed by PP (Section wise CSV)
11)	<p>Thus with the help of existing ground profile and proposed extents of excavation considering the stipulations of lateral extents of sustainable sand mining guidelines, as mentioned above, The PP shall estimate the proposed quantum of excavation in tonnages with the help of Specific Gravity verified by the State DMG between every two consecutive sections. Such estimation shall be furnished by the PP in tabular form which includes the nomenclature of section lines, area proposed for excavation, distance between two consecutive section lines, volume, specific gravity, tonnage of the mineral, maximum depth extent from existing ground profile. Respective plans shall also be submitted clearly marking the area to be excavated. The same needs to be verified by the State Mines and Geology Department, Govt. of Rajasthan. In addition to this a composite plan mentioning the above proposed excavation zones for the entire mine lease area also needs to be submitted. Thus PP needs to submit a plan clearly showing the area to be put in under excavation and no excavation zones. Respective KML files of such lateral extents of excavation and no excavation zone within ML shall also be submitted by the PP.</p>	<p>Estimation of Proposed Quantum of excavation in Tonne with the help of specific gravity verified by State Department of Mines & Geology between every two consecutive sections done with the help of existing ground profile and proposed extents of excavation considering the stipulations of lateral extents & Sustainable Sand Mining Guidelines given at</p> <p>Estimation of quantity furnishable in tabular form and includes the nomenclature of section lines, Volume, Specific gravity, tonnage of the mineral, Maximum depth extent from existing ground profile, Plans showing the area to be excavated is given in Plate No-5 in Replenishment Report.</p>
12)	<p>PP needs to submit a plan clearly mentioning the width of river, lease boundaries, area left under safety zones as prescribed as per Sustainable Sand Mining Management Guidelines, 2016, as per statutory requirements under</p>	<p>A plan clearly showing the width of river lease boundary area left under safety zone as prescribed as per Sustainable Sand Mining Management Guidelines 2016.</p>

	Rajasthan Minor Mineral Concession Rules and other competent authority.	
13)	It was found that the plans and sections were not depicting the dates (period) of survey further in order to ensure the ground survey PP should submit the dates (period) of survey, the model no & details of the instrument used for such survey, field recordings and observations along with name, signatures and contact details of the Surveyor explicitly be mentioned and recorded in the field book as well as in Plan & Sections.	Plan & Sections the dates of Survey. A field Book showing the date (period) of Survey, The model Number & detail of the instruments used. Field recordings and observations along with name, Signature and contacts details of the Surveyor mentioned and recorded in the field book is enclosed by PP.
14)	In addition to this soft copy (Excel or CSV file, DWG file) of all such survey recordings should also be submitted in proper order & sequence in order to cross check & verification samples checks of sections.	PP has submitted that CD of the Soft Copy of excel or CSV file, DWG files of all Survey recordings area in proper order & sequence will be submitted during presentation.
15)	The Committee deliberated the issues w.r.t. erection of pillars and accordingly suggested that the PP needs to erect the pillars with the following specifications and submit the details (in table form) of the same along with photographs. The specifications inter-alia are as (a) the distance between two adjacent pillars shall not be more than 100 meters; (b) the pillars shall be of square pyramid frustum shaped above the surface and cuboid shaped below the surface; (c) each pillar shall be of reinforced cement concrete; (d) the pillars shall have a base of 0.30m X 0.30m and height of 1.30m of which 0.70m shall be above ground level and 0.60m below the ground; (e) all the pillars shall be painted in yellow colour and the top ten cm in red colour by enamel paint and shall	Project Proponent erected the pillars with the following specifications: i. The distance between two adjoining pillars is not more than 100 meters. ii. The pillars are of square pyramid frustum shaped above the surface & cuboid shaped below the surface. iii. Each Pillars are of Reinforced cement concrete. iv. Each pillars having base of 0.3mtrs x0.3mtrs and height of 1.30mtrs of which 0.7mtrs are above ground & 0.6mtrs below ground.

	<p>be grouted with cement concrete; (f) on all the pillars, distance and bearing to the forward and backward pillars and latitude and longitude shall be marked; (g) each pillar shall have serial number in a clockwise direction and the number shall be engraved on the pillars; (h) the number of pillar shall be the number of the individual pillar upon the total number of pillars in the lease; and (i) the tip of all pillars shall be a square of 15 cm on which a permanent circle of 10 cm diameter shall be drawn by paint or engraved and the actual boundary point shall be intersection of two diameters drawn at 90 degrees.</p>	<p>v. All Pillars are painted in yellow colour and top 10cm in red by enamel paint and grouted with cement concrete.</p> <p>vi. Distance backward & forward bearing with latitude & longitude marked on the pillar.</p> <p>vii. Each Pillar are numbered in clockwise direction and number engraved on the pillar.</p> <p>viii. The Number of pillars is the number of individual pillars upon the total number of pillars in the lease.</p> <p>ix. The tip of the pillar is square of 15 cm on which a permanent Circle of 10cm diameter drawn.</p> <p>(PP has submitted that Pillar photographs will be submitted during the presentation)</p>
<p>16)</p>	<p>PP shall submit the compliances as per the Ministry's Office Memorandum No.350/2017-IA.III(Pt.), dated 30.05.2018 by an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. w.r.t. judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.</p>	<p>PP has submitted the affidavit vide No. AW 454298 dated 26.02.2020.</p>

The proposal was placed in the 18th EAC (Non-coal Mining) held during 22-24 June, 2020. The EAC deliberated on the submissions made by the

project proponent and presentation made by the consultant in the meeting and **deferred** the proposal and advised the project proponent to submit the following information, as sought for the proposals deliberated during the 5th - 6th May, 2020, for further consideration:

- i. In the replenishment study report details such as area under 7.5 meters statutory barrier, area under $\frac{1}{4}$ width of the river, area under $\frac{3}{4}$ width of the river for both lease area and area demarcated by DMG needs to be mentioned. In addition to these details of the reserve available and block therein needs to be provided along with plan and section for area demarcated by DMG. In the study report the safe extractable volume and tonnage needs to be defined after the deducting the block reserves. The slice plan for the mining in the safe extractable zone needs to be provided in the report. The field book for pre & post monsoon needs to be provided as same was not included in the presentation.
- ii. The details of the area to be utilized & not to be utilized for mining, as approved mining plan at the end of 5 years needs to be provided. Whether area demarcated by DMG comes under the utilized zone or un-utilized zone. In addition to this, area required for mining in the next 5 years needs to be provided with proper justification. The details of any prohibited area within the LOI area or demarcated area needs to be provided.
- iii. Mining is proposed in the small area and still large area is left how PP will ensure to curb illegal mining in the demarcated area and rest of the area falling in the lease (provision of Enforcement and Monitoring Guidelines for Sand Mining ,2020 shall be referred for the same). In addition to this budget for installation surveillance equipment like CCTV, security guards weigh bridge etc., needs to be provided. The mining intensity of the original proposal considering larger area and the current proposal shall be compared and explained, as there is significant difference in mining intensity per Ha area.
- iv. PP needs to submit the compliance of ToR points wherein certificate is required for involvement of no forest land, distance from the protected area, authenticated list of schedule-1 species, conservation plan for schedule-1 species and proof of its submission to Chief Wildlife Warden if not already submitted. PP shall ensure that all these documents along with Annexure to EIA Report and other documents submitted to the ministry should be uploaded online on PARIEVSH Portal for public viewing.
- v. PP needs to submit a letter from the State Government that there is no violation of Common Cause Judgment dated 2.08.2017 in respect of this mining proposal and there is no production before the SC Order dated 25.11.2013 & after SC Order dated 16.11.2017. An undertaking in this may also be submitted.

- vi. The PP needs to submit time-bound, activity-wise action plan for EMP, Occupational Health, Planation, and CER along with the budgetary provision. In addition to details of Environmental Management Cell to be established for implementation of EMP needs to be submitted along with details of manpower and cost.
- vii. PP needs to ascertain the impact of transportation and details of transportation route viz. (length of the road, type of road, passing through the village or habitation) and mitigative measures to be taken for abatement of pollution due to transportation. The budget for the same needs to be provided.
- viii. In case there any proposal for utilization of land outside the mining lease for transportation with a mutual agreement with villagers then details of the same needs to be provided along with proposed compensation details.
- ix. PP needs to re-estimate the requirement of water for plantation, dust suppression and domestic use. The source of water needs to be mentioned. The cost of water tanker etc. needs to be mentioned in EMP.
- x. PP needs to confirm that is there any other homogeneous mining lease within 500 meters of this lease and forming cluster. If, yes details of the same needs to be provided.
- xi. It has observed that PP has changed the consultant a letter in this regard needs to be submitted in pursuant to Ministry's O.M. No. J-11013/41/2006-IA. II(I) dated 17.03.2010.
- xii. PP has provided details of many court cases which are on various issues. Therefore, PP needs to provide status of the case wherein the case is pertaining to issue of grant of EC to present proposal, grant of LoI, illegal mining by PP etc. The Complete details and status of the same needs to be provided.

Further, Review on the status of the Sand Mining Proposals received from the State of Rajasthan is as follows:

1. *The committee also reviewed the status of the Sand Mining Proposals received from the State of Rajasthan. The Committee is of the view that the Hon'ble Supreme Court in its order dated 6.12.2019 asked for completing of the application and directed the Ministry to pass appropriate order, to expedite the process, a Special Meeting was also conducted on 12.06.2020 wherein two proposals from State of Rajasthan was recommended. The representative of State Government of Rajasthan in the previous meeting brought to the notice of the Committee that there is a scarcity of the mineral in the State. The Committee therefore desired to know the status of the remaining proposals.*

2. The Member Secretary informed the Committee the State Government in its letter dated 3.02.2020 mentioned that reports of 16 proposals have been submitted to the Ministry. Information for the remaining proposal is yet to be submitted by the State Government and Project Proponent. In order to facilitate the information uploading the Ministry also re-listed the projects but as the information was not submitted for more than 3 months the proposals were auto delisted from the PARIVESH Portal. Till dated Ministry did not receive any request from Project Proponent /State Government for re-listing of these proposals.
3. The Committee is of the opinion that the Ministry may write to State Government and Project Proponent, to submit the requisite information as early as possible, so that appraisal of the projects can be completed.

In view of the same, **PP vide its letter dated 10.07.2020** has submitted the following information:

S.NO	INFORMATION/ CLARIFICATION	COMPLIANCE
1)	In the replenishment study report details such as area under 7.5meters statutory barrier, area under ¼ width of the river, area under ¾ width of the river for both lease area and area demarcated by DMG needs to be mentioned. In addition to these details of the reserve available and block therein needs to be provided along with plan and section for area demarcated by DMG. In the study report the safe extractable volume and tonnage needs to be defined after the deducting the block reserves. The slice plan for the mining in the safe extractable zone	<p>I. Lease Area- 624.39 Hact.</p> <ul style="list-style-type: none"> • Area under 7.5meters Statutory is- 63.22 Hect. • Area under ¼ width of the river- 156.0975 Hect. • Area under ¾ width of the river- - 468.2925 Hect. <p>II. (Stretch-I) Demarcated Area- 28.4808 Ha.</p> <ul style="list-style-type: none"> • Area under 7.5meters Statutory Barrier- 0.02849 Hect. • Area under ¼ Width of the River- 3.813 Hect. • Area under ¾ Width of the River-24.668 Hect. • Geological Reserve 9, 59,417.9475 Tonnes. • Reserve Available in ¾ Width of the River - 8,31,413.7141 Tonnes • Reserve Blocked in 7.5meter area- 898.5625 Tonnes • Reserve Blocked in ¼th Width of River- 1,27,099.7566 Tonnes

	<p>needs to be provided in the report. The field book for pre & post monsoon needs to be provided as same was not included in the presentation.</p>	<p>(Stretch-II) Demarcated Area- 36.8559 Hect.</p> <ul style="list-style-type: none"> • Area under 7.5meters Statutory Barrier- 0.3806 Hect. • Area under ¼ Width of the River- 6.2359 Hect. • Area under ¾ Width of the River- 30.62 Hect.. • Geological Reserve 13, 67,358.415Tonnes. • Reserve Available in ¾ Width of the River - 11,37,053.179 Tonnes • Reserve Blocked in 7.5meter area- 14,491.8525 Tonnes <p>Reserve Blocked in ¼th Width of River-</p>
		<p>2,15,808.0066 Tonnes</p> <p>(Stretch-III) Demarcated Area- 8.4474 Hect.</p> <ul style="list-style-type: none"> • Area under 7.5meters Statutory Barrier -0.0674 Hect • Area under ¼ Width of the River- 0.8744 Hect. • Area under ¾ Width of the River- 7.573 Hect. • Geological Reserve 2, 90,522.293 Tonnes. • Reserve Available in ¾ Width of the River - 2,57,136.473 Tonnes • Reserve Blocked in 7.5meter area- 4,243.2675 Tonnes • Reserve Blockd in ¼th Width of River- 29,490.92926 Tonnes <p>Plan & Section attached as Annexure-1 to the letter by PP.</p> <p>Safe extractable volume and tonnage determined after deducting the blocked</p>

		<p>reserve.</p> <p>Geological Reserve Estimation in given as Annexure No.-2 to the letter by PP.</p> <p>Mineable Reserve Estimation in given as Annexure No.-3 to the letter by PP.</p> <p>Mineral Blocked in 1/4th of river bed Estimation Is given as Annexure No.-3A to the letter by PP.</p> <p>The slice plan for Mining in the safe extractable Zone drawn is given in Annexure 3B to the letter by PP.</p> <p>Reserve Blocked in 7.5meter area Estimation in given as Annexure No. 3C to the letter by PP</p> <p>The Field Book for Pre & Post is given Annexure No. - 4 & 5 to the letter by PP.</p> <p>Replenishment Studyreport is enclosed as Annexure No.19 to the letter by PP.</p>
2)	<p>The details of the area to be utilized & not to be utilized for mining, as Approved mining plan at the end of 5 years needs to be provided. Whether area demarcated by DMG comes under the utilized zone or un-utilized zone. In addition to this, area required for mining in the next 5 years needs to be provided with proper justification. The details of any prohibited area within the LOI area or demarcated area needs to be Mining is proposed in the small area where mining will be done as per condition of</p>	<p>The details of the area to be utilized as per Approved mining plan is 100.0 Hect. Thus area not to be utilized is 524.39 Hect. Annexure No.-5A to the letter by PP.</p> <p>Area Demarcated by Department of Mines & Geology comes under-utilized zone Annexure-6 to the letter by PP.</p> <p>The area required under Mining will be same as approved in the Mining Plan. The justification is given as Annexure No.-7 to the letter by PP. There is no prohibited area within the LOI area/demarcated area.</p>

	<p>environment clearance, sustainable Sand Mining Guideline 2016. Environment & Monitoring Guideline for Sand Mining and RMMCR, 2017. To curb the illegal Mining in the remaining area. There are Eighteen entry point (Roads) from where river can be provided.</p>	
<p>3)</p>	<p>Mining is proposed in the small area and still large area is left how PP will ensure to curb illegal mining in the demarcated area and rest of the area falling in the lease (provision of Enforcement and Monitoring Guidelines for Sand Mining ,2020 shall be referred for the same). In addition to this budget for installation surveillance equipment like CCTV, security guards weigh bridge etc., needs to be provided. The mining intensity of the original proposal considering larger area and the current proposal shall be compared and explained, as there is significant difference in mining</p>	

	intensity per ha. Area.	
4)	PP needs to submit the compliance of ToR points wherein certificate is required for involvement of no forest land, distance from the protected area, authenticated list of schedule-1 species, conservation plan for schedule-1 species and proof of its submission to Chief Wildlife Warden if not already submitted. PP shall ensure that all these documents along with Annexure to EIA Report and other documents submitted to the ministry should be uploaded online on PARIEVSH Portal for public viewing.	<p>The compliance of ToR wherein certificate is required for involvement of no forest land in given as Annexure-8 to the letter by PP.</p> <p>Distance from the protected area is given in Annexure-9 to the letter by PP.</p> <p>Authenticated list of Schedule I Species and proof of its submission to Chief Wildlife Warden is given in Annexure no.-10 to the letter by PP. It is ensured that annexure to EIA Report and other documents submitted to the ministry uploaded online on PARIEVSH Portal for public viewing.</p>
5)	PP needs to submit a letter from the State Government that there is no violation of Common Cause Judgment dated 2.08.2017 in respect of this mining proposal and there is no production before the SC Order dated 25.11.2013 & after SC Order dated 16.11.2017. An undertaking in this may also be submitted.	<p>After from the State Government that there is no violation of Common Cause Judgment dated 2.08.2017 in this matter and A certificate that then is no production before the SC Order dated 25.11.2013</p> <p>& after SC Order dated 16.11.2017 is given as annexure no.11 to the letter by PP. Undertaking in this regarding is also given in annexure no.12 to the letter by PP.</p>

6)	<p>The PP needs to submit time-bound, activity-wise action plan for EMP, Occupational Health, Plantation, and CER along with the budgetary provision. In addition to details of Environmental Management Cell to be established for implementation of EMP needs to be submitted along with details of manpower and cost.</p>	<p>Time-bound, activity-wise action plan for EMP, Occupational Health, Plantation, and CER along with the budgetary provision is given in annexure No.13 to the letter by PP. Along with Environmental Management Cell to be established for implementation of EMP needs to be submitted along with details of manpower and cost.</p>
7)	<p>PP needs to ascertain the impact of transportation and details of transportation route viz. (length of the road, type of road, passing through the village or habitation) and mitigative measures to be taken for abatement of pollution due to transportation. The budget for the same needs to be provided.</p>	<p>Impact of the transportation of mineral on local transport infrastructure averred and found to be in excellent. State highway adjoining to lease.</p> <p>There is a 3.7 Km Kacha road in SE direction. No habitation/Villages located around this Kacha road. The Width of Road is about 6 mtr. Considering 20 Tonnes capacity and 240 days working about 85 trucks will ply on this Kacha Road. A Budget of Rs.</p> <p>8.50 Lacs per annum has been proposed for maintenance of 3.7 km Kacha road and water will be sprinkled twice daily and plantation is also proposed on both side of Kacha Road. Around 8,880 Trees will be planted on the both side of three layers. For these Rs 8.50 lacs for Dust Suppression and Rs.90.0 Lacs per annum for plantation has been proposed in EMP project.</p> <p>Transportation map in Attached as Annexure no.14 to the letter by PP</p>
8)	<p>In case there any proposal for utilization of land outside the mining lease for transportation with a mutual agreement</p>	<p>There no proposal for utilization of land outside the mining lease for transportation</p>

	with villagers then details of the same needs to be provided along with proposed compensation details.	
9)	PP needs to re-estimate the requirement of water for plantation, dust suppression and domestic use. The source of water needs to be mentioned. The cost of water tanker etc. needs to be mentioned in EMP.	Requirement of water re-estimate for plantation dust suppression and domestic use. The cost of water tanker is Rs. 900 per tanker for Annexure No.-15 to the letter by PP.
10)	PP needs to confirm that is there any other homogeneous mining lease within 500 meters of this lease and forming cluster. If, yes details of the same needs to be provided.	A certificate that there is homogeneous Mining lease within 500 meters of this lease is given in Annexure no-16 to the letter by PP.
11)	It has observed that PP has changed the consultant a letter in this regard needs to be submitted in pursuant to Ministry's O.M. No. J- 11013/41/2006-IA. II (I) dated 17.03.2010.	After compliance of Mining O.M. No. J-11013/41/2006-IA. II(I) dated 17.03.2010 is given as annexure no.17 to the letter by PP
12	PP has provided details of many court cases which are on various issues. Therefore, PP needs to provide status of the case wherein the case is pertaining to issue	The statues of the court cases pertaining to issue of grant of EC to present proposal, grant of LoI, illegal mining by PP is given by as annexure no.-18.

	<p>of grant of EC to present proposal, grant of LoI, illegal mining by PP etc. The Complete details and status of the same needs to be provided.</p>	
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5. PP has submitted that the mine lease area is 624.39ha which is Khari and Mashhi River. No forest land is involved. Letter of Intent (LOI) for grant of mining lease for minor mineral Bajri over an area of 624.39 ha has been granted by the Director of Mines and Geology Department, Govt. of Rajasthan, vide letter dated 27.03.2013 for the period of 5 year. The river area spreads in 17 villages of Shahpura Tehsil, Bhilwara district.

The Committee observed that the EAC in its minutes of meeting held during 30.05.2018 inter-alia mentioned that “The Committee deliberated the issues and is of the view that Department of Mines and Geology, Government of Rajasthan shall first confirm whether the instant LOI/Lease is valid or not before consideration of the Proposal.”

PP in its reply submitted on 16.05.2020 mentioned that LOI issued by the state Govt. is valid vide letter no. P10 (9) Mine/Group2/2013 dated 27.02.2013 issued by Department of Mines & Geology, Government of Rajasthan. As per the letter LOI is valid for 5 years only.

6. PP has submitted that the Mining Plan is approved by SME, Bhilwara Circle, Bhilwara vide letter no. SME/ BHL-C12/F/Mining Plan/ Mining Scheme/ 3762 dated 27.08.2013.

Committee previously asked that “The details of the area to be utilized & not to be utilized for mining, as Approved mining plan at the end of 5 years needs to be provided. Whether area demarcated by DMG comes under the utilized zone or unutilized zone. In addition to this, area required for mining in the next 5 years needs to be provided with proper justification. The details of any prohibited area within the LOI area or demarcated area needs to be provided.”

PP in its reply submitted on 10.07.2020 mentioned that “The details of the area to be utilized as per Approved mining plan is 100.0 Hect. Thus area not to be utilized is 524.39 Hect. (Annexure No.-5A). Area Demarcated by Department of Mines & Geology comes under-utilized zone (Annexure-6). The area required under Mining will be same as approved in the Mining Plan (The justification is given as Annexure No.-7). There is no prohibited area within the LOI area/demarcated area.”

As it appears from the submission that large area remains un-utilized the Committee previously asked the PP that “Mining is proposed in the small area and still large area is left how PP will ensure to curb illegal mining in the demarcated area and rest of the area falling in the lease (provision of

Enforcement and Monitoring Guidelines for Sand Mining, 2020 shall be referred for the same). In addition to this budget for installation surveillance equipment like CCTV, security guards weigh bridge etc., needs to be provided. The mining intensity of the original proposal considering larger area and the current proposal shall be compared and explained, as there is significant difference in mining intensity per ha. Area.”

PP in its reply dated 10.07.2020 submitted that the “Mining is proposed in the small area where mining will be done as per condition of environment clearance, sustainable Sand Mining Guidelines 2016. Environment & Monitoring Guidelines,2020 for Sand Mining and RMMCR, 2017. To curb the illegal Mining in the remaining area. There are eighteen entry point (Roads) from where river can be approached. Therefore, eighteen numbers of night vision camera will be installed and data will be made available to state government. Apart from this the Project Proponent takes the responsibility that no illegal Mining will be allowed/ done for remaining area. The budget required to curb the illegal Mining will be as follows:-

Budget for Surveillance equipment: i) Transport Permit (Rs 4.0 Lakh), ii) CCTV Camera (Rs 8.0 Lakh-Capital and 0.8 lakh recurring), iii) Weigh bridge (Rs 25.0 Lakh-Capital and Rs 2.5 Lakh-recurring), iv) Personal Computer with power backup (Rs 3.0 Lakh-Capital and Rs 0.3 Lakh-recurring), v) Mobile Application Barcode Scanner (Rs 3.0 Lakh-Capital and Rs 0.3 Lakh-recurring), vi) Radio Frequency identification tags (RFID) and Global Positioning System (GPS) tracking (Rs 4.0 Lakh-Capital and Rs 0.4 Lakh-recurring), v) Annual audit of each lease (Rs 4.0 Lakh-recurring) , and vi) Security Guard (Rs 129.6 Lakh-recurring).

Compassion between original proposed & Current Proposed

S.no	Details	Original Proposed	Current Proposed
1	Mining Area	624.39 Ha.	50.1307 Ha.
2	Reserve	11.31 Million tonne	2.22 Million tonne
3	Production	0.84 Million Tonne	0.82 Million Tonne
4	EMP Cost	11.50 Lacs	200 lacs
5	CSR /CER Cost	10.50 Lacs	167 lacs
6	Water requirement	13 KLD	17.14 KLD
7	Project Cost	1.40 Cr	3.20 Cr.

The Committee observed that to achieve a production of 0.84 MTPA the area required is very less as compared to LOI allocated area or area demarcated by DMG. The Committee asked State Government that why a larger area is provided. The Representative of the State Government informed the Committee that it’s the policy of Rajasthan Government to grant large area tehsil wise and for the remaining un-utilized area the onus of preventing illegal mining is with PP & State Government. The Committee is of the view that SOP in this regard may be submitted by the State Government.

In addition to above, Committee is also of the view that policy of granting large mining area tehsil wise is not feasible as it blocks the mineral resource and lead to shortage of supply of the sand in the State and also the loss of revenue to State Government. The State Government may look into the policies and grant only that much area which is sufficient for the said production or as per demand of the sand in the State.

Committee observed that PP in its submission made to the Ministry mentioned that “The extractable Replenished quantity per Hectare is about 34257.74 Tonne. So to achieve 0.84 million Tonnes per annum the net area required will be 24.52 Hectare. So total net area required during the next five years will be 73.56 ha. The area worked during 1st years and 2nd Year will be worked out in the 4th & 5th year respectively.” The Committee is of the view that area required to achieve 0.84 million TPA of production is 73.56 Ha.

7. The Proponent has submitted that Method of mining is semi - mechanized opencast method. Excavation will be carried out up to a maximum depth of 3.0 meters from surface of deposit and not less than one meter. from the water level of the River Khari and Mashhi whichever is reached earlier. Proponent informed that 100 ha area will be used for excavation; 12.06 ha for safety zone against bridges (9 nos.); 30.24 ha for permanent roads (21 nos.) and 67.39 ha for wells (103 nos.). Project Proponent reported that mining will be done leaving a safety distance from the banks i.e. 7.5m of the width of the River from both the banks. No ponding will take place. Mining will be done only during day time and completely stopped in monsoon season. No mining will be done in the zone of 45m on either side of the structure/ bridge. Project Proponent reported that there will be temporary rest shelters during operational phase. Mineral will be transported through road. Project Proponent has made the traffic analysis survey and reported that no. of trucks will be deployed 150 per day (20 tonnes capacity each) which increase 250 PCUs per day and the level of service (LOS) remains as “A”. Project Proponent reported that roads will be repaired regularly and maintained in good conditions. A supervisor will be appointed to regulate the traffic movement near site. Speed breakers and signage will be maintained at the sensitive places.

The Committee observed that EAC in its meeting held during 8.01.2018 interalia mentioned that “PP to give undertaking that only Scrapers shall be used for mining to ensure that the mining depth to be maintained as 1.0 meters (max.) from Original Ground Level and No other heavy machinery like bucket excavators, JCB machines etc. shall be used which may adversely impact the aquatic biota”. In compliance to this condition the PP also submitted an undertaking on its letter-head dated 26.02.2020 wherein inter-alia it has mentioned that PP shall use only scraper for mining and no excavator & JCB will be used for mining.

The Committee observed that in last EAC meeting “The Member Secretary informed the Committee that Ministry has received a representation on 4.05.2020 from Bajri Mining Lease Holders Association wherein it was requested for mechanized mining, mining in night hours and considering the

proposal based on the recommendation already made by EAC. One of the PP also reiterated the same by addressing the EAC and informed the Committee there is sufficient material available for mining and requested for grant of EC.”

The Committee is of the view that now PP has submitted an actual replenishment study which shows that there is some deposition of mineral. PP also submitted the action to be taken for the prevention of illegal mining, State Government is also sensitized for the requirement of replenishment study and methodology for the same, area is already demarcated by State Government, the PP has also increased the budget for the Environmental Management Plan. Therefore, the Committee is of the view the use of machine with bucket capacity of 1.0 m³ and boom length not more than 3 meters may be allowed for this project. Regarding timing of the mining the Committee is of the view that mining shall be restricted to day hours only (9 AM to 6 PM) till the time PP demonstrate the compliance of EC conditions and effective measures to be taken for the protection of environment as per EC Conditions. The depth of mining shall not be more than 1 meter from OGL (un mined area).

8. PP submitted that the site elevation is 362 MSL highest and working level will be 359 MSL (3 m bgl). The ground water is at 353 MSL (10 m bgl). There will be no intersection of ground water table as mining activity will be restricted up to 3.0m from bed level or 1.0m above the ground water table. PP has submitted that the daily water demand will be 13.0 KLD, out of which 3.0 KLD will be used for domestic purpose and 10.0 KLD for dust suppression. Water will be obtained through tanker supply from near village. NOC from Gram Panchayat for water supply will be obtained shortly.

The Committee previously asked that PP needs to re-estimate the requirement of water for plantation, dust suppression and domestic use. The source of water needs to be mentioned. The cost of water tanker etc. needs to be mentioned in EMP.

PP in its reply submitted on 10.07.2020 re-estimated the water requirement and it has mentioned that total water requirement will be 17.14 KLD (0.3 KLD for domestic use, 16.65 KLD for dust suppression and 0.0185 KLD for plantation). The cost of water tanker is Rs. 900 per tanker.

The Committee is of the view that water requirement for dust suppression is only for one cycle of spraying but for effective dust suppression at least 3 cycles/day is required and thus the water consumption from the project will be around 50.435 KLD (0.3KLD for domestic, 49.95 KLD for dust suppression and 0.185 KLD for plantation).

9. PP has submitted that the lease area is in the river bed and devoid of any vegetation. Mining activities will not cause any harm to riparian vegetation cover as the working will not extend beyond the offset left against the banks. Plantation will be carried out as social forestry programme in villages, school and the areas allocated by the Panchayat / State authorities. Plantation has been proposed on both sides of the roads as greenbelt to

provide cover against dust dissemination. A massive plantation will be done nearby the mine area to mitigate the ill-effects of mining and to improve environment of its surrounding area. Native plants like Neem, Pipal, Khejri, Mango and other local species will be planted. The management will give emphasis on plantation and will also motivate local persons for plantation during rainy season. This will also increase the consciousness in workers and near-by villagers for greenery. Fruit trees can contribute towards their financial gains. PP has submitted a 5 year action plan for Green Belt Development with a plantation rate of 1560 saplings/year. A total of about 7,800 trees of native species along with some fruit bearing and medicinal trees will be planted at various places in a span of five years. The green belt development will be carried out by Project Proponent and maintenance will be done by the villagers/ NGO's with their active participations. PP has earmarked a budget of Rs. 0.5 Lakhs towards plantation.

The Committee is the last EAC meeting asked that "The PP needs to submit timebound, activity-wise action plan for EMP, Occupational Health, Planation, and CER along with the budgetary provision. In addition to details of Environmental Management Cell to be established for implementation of EMP needs to be submitted along with details of manpower and cost".

PP in its reply dated 10.07.2020 submitted that 3 Layer plantations on both side of the kachha road will increase the floral diversity of The area. Sufficient availability of Water will be ensured for green belt. The green belt area once marked will not be disturbed during life of mine. The lease area is devoid of any vegetation. Total of about 8,880 trees of native species along with some fruit bearing and medicinal trees will be planted at various places in a span of five Years. Total budget of Rs. 90 Lakhs has been earmarked for 5 years towards Greenbelt.

The Committee is of the view that PP shall plant not less than 4000 saplings of within a period of 2 years. The height of seedlings shall not be less than 2 meters. Species such as Azadirachta indica (Neem), Ailanthus excels (Ardu) Albizia lebbeck(Siris), Ficus religiosa (Peepal), Lasora (Cordia dicotoma), Dalbergia sissoo (Shisham), Tamarindus indica (Imli), Morus alba (Shahtoot), Ziziphus mauritiana (Ber), Syzygium cumini (Jamun), Mangifera indiacca (Mango), Diospyros melanoxylon (Tendu), Annona squamosal (Sitafal), Pithecelabium dulce etc.(Jungle jalebi) . The Plantation shall be carried out along the road side, banks of river and public places under social forestry programme in consultation of local authorities in five year". The budget proposed for plantation shall not be less than Rs 90 Lakh and the same may be increased if required.

10. PP submitted that there is no forest land involved in the lease area. Project Proponent reported that There is no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/ Elephant Reserves (existing) is situated within 10km of the mining lease area as per the primary survey and the available secondary data. A certificate has been obtained stating that the above mentioned, from the Office of Deputy Conservator of Forests, Bhilwara vide letter no. F()Survey/Uvas/2062 dated 11.03.2015. PP has also reported

that a certificate is issued regarding the mine site not falling in Aravali Hills, authenticated by Department of Mines and Geology vide letter dated 06.02.2014. The area is not covered under Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.

The Committee in the previous meeting asked the PP to submit the certificate w.r.t involvement of forest area in the mining lease.

The PP in its reply dated 10.07.2020 submitted the letter No F()Survey/Uvas/2062 dated 11.03.2015 issued by DFO, Bhilwara wherein it has mentioned that said land is not falling under forest area. In the same letter it has mentioned that there is no National Park, Sanctuary, Biosphere Reserve, Wildlife Corridor, Tiger/ Elephant Reserve (existing as well as proposed) within 10 km radius of the mine lease.

11. PP submitted that a detailed biological study of flora and fauna (core and buffer zone) has been carried out. The authenticated list of flora and fauna has been obtained from the Office of Deputy Conservator of Forest, Bhilwara vide letter no. F() tak/Uvas/206 2 dated 11.03.2015. Schedule – 1 fauna Peafowl has been reported in the buffer zone during the study period. The conservation plans for Peafowl has been prepared by in-house expert. An amount of Rs. 2.0 lacs have been earmarked for the conservation of schedule – 1 species.

The Committee in the previous meeting asked the PP to submit authenticated list of schedule-1 species, conservation plan for schedule-1 species and proof of its submission to Chief Wildlife Warden if not already submitted.

PP in its reply dated 10.07.2020 submitted a list of flora and fauna in the Core and Buffer Zone which also includes Schedule-I Species authenticated by DCF, Bhilwara vide letter no. F()Survey/Uvas/2062 dated 11.03.2015. Further, PP submitted a letter written to Chief Wildlife Warden vide letter dated 02.06.2020 for approval of conservation plan.

12. PP on 16.05.2020 submitted the District Survey Report of District Tonk, in pursuant to MoEFCC Notification dated 15.01.2016.

13. PP has submitted that Baseline data for ambient air quality (PM10, PM2.5, SO₂ & NO₂), water quality, noise level, soil and flora & fauna was generated for the period during October 2013 to December 2013. The criteria of the baseline data collection were based on the impact zone on both the sides of the river bank which was expected to be around the 2-3km from both the sides. The stations were considered based on their sensitivity by considering the close proximity with the sensitive zones like reserve forests and expected high pollutant concentration zones like Naka etc. The results obtained for the collected surface water samples indicate that the surface water qualities were found to be well within the prescribed standards Limits (Class C). The analysis results indicate that hardness ranges from 64 to 2280 mg/L in the ground water study and pH and conductivity of the groundwater was in range of 6.87 – 7.32 and 1436-4176 µS/cm. The TDS were found to be

in the range of 582 – 8016 mg/l. Other parameters like chlorides and sulphate were observed to be well within the prescribed limits but sulphate is found to be little high in village Swaroopgun (436.1 mg/l). The physic – chemical analysis for some of the parameters has exceeded the standards as per IS: 10500. The water quality is not potable in nature and needs necessary treatment before drinking. The necessary treatment required to minimize the impact has been mentioned in EMP and cost to be borne by the Project Proponent has been given in CSR activities. An auto weather monitoring stations was installed at mine site during the study period to record various meteorological parameters on hourly basis to understand the wind pattern, temperature variation and relative humidity variation. The average wind speed recorded during the study period was 0.76 m/s. Calm conditions prevailed for 36.78 %. The prevalent wind direction accounting for maximum length of time is N to S, W to E and NNW to SSE. The results of the monitored data indicate that the ambient air quality of the region in general is in conformity with respect to norms of National Ambient Air Quality standards of CPCB, at all locations monitored. It is observed that the day time noise levels are in accordance to the prescribed limit of 55 dB(A) and that the night time noise levels at mine site were found to little very high due to vehicular movement, within the prescribed standard of 45 dB(A).

The Committee in the previous meeting asked that i) PP needs to ascertain the impact of transportation and details of transportation route viz. (length of the road, type of road, passing through the village or habitation) and mitigative measures to be taken for abatement of pollution due to transportation. The budget for the same needs to be provided and ii) In case there any proposal for utilization of land outside the mining lease for transportation with a mutual agreement with villagers then details of the same needs to be provided along with proposed compensation details.

PP in its reply submitted on 10.07.2020 mentioned that the Impact of the transportation of mineral on local transport infrastructure averred and found to be in excellent. State highway adjoining to lease. There is a 3.7 Km Kacha road in SE direction. No habitation/Villages located around this Kacha road. The Width of Road is about 6 mtr. Considering 20 Tonnes capacity and 240 days working about 85 trucks will ply on this Kacha Road. A Budget of Rs. 8.50 Lacs per annum has been proposed for maintenance of 3.7 km Kacha road and water will be sprinkled twice daily and plantation is also proposed on both side of Kacha Road. Around 8,880 Trees will be planted on the both side of three layers. For these Rs 8.50 lacs for Dust Suppression and Rs.90.0 Lacs per annum for plantation has been proposed in EMP project. PP also submitted that there is no proposal for utilization of land outside the mining lease for transportation.

The Committee is of the view that saplings shall be planted in 3 rows and distance between the saplings should not be more than 2.5 meters. In addition to this seedling of height not less than 2 meters to be planted. The plantation along the road side should be completed in 1st year only.

14. The Project Proponent reported that the Public Hearing for the proposed Project was conducted on 07.11.2014 at 4:00 PM at Tehsil Office, Tehsil – Shahpura, District – Bhilwara. The Public hearing was presided over by Shri Giriraj Verma, Additional District Magistrate, Bhilwara. The representative from the Rajasthan State Pollution Control Board was also present. Notice for the Public Hearing was published in “Rajasthan Patrika” & “Hindustan Times” on dated 04.10.2014 & 05.10.2014. The issues raised during the Public Hearing were also considered and discussed during the meeting, which inter-alia, included that depletion of bajri, water level going down, maintain of roads/rasta, effective implementation of measures will be adopted. Project Proponent has made the action plan with budgetary provisions. *The Committee deliberated in EAC held in Aug 2015 and was of the view that PP needs to implement the action plan and the Implementation Report has to be submit to the Regional Office of the MoEFCC every six month.*

15. PP has made a budgetary provision towards Corporate Social Responsibility (CSR) as Rs. 14.0 Lakhs as capital cost. This includes 1) Health Checkup at camps – Rs. 4.0 lakhs, 2) Surveillance Programme of the Workers - Rs. 2 lakhs, 3) Assistance to Local Schools, Scholarships to Students - Rs. 2 lakhs, 4) Sanitation and Drinking Water Facilities - Rs. 2 lakhs, 5) Vocational Training to persons for income generation - Rs. 2 lakhs and 6) Assistance to Self Help Groups - Rs. 2 lakhs.

The Committee previously asked the PP to submit the time bound action plan and budget for CER/CSR.

The PP in its reply submitted on 10.07.2020 mentioned that budget earmarked for CER/CSR is Rs 33.4 Lakh which includes i) Rs 4.0 Lakh for Health checkup camps for villagers (every six months), ii) Rs 5.0 Lakh for Surveillance Programme of the worker (annually), iii) Rs 5.0 Lakh for assistance to Local Schools, Scholarships to Students (annually) , iv) Rs 6.0 Lakh for Drinking Water Facilities [Financial aid will be provided to resume the water supply by ground water and PHD supply Water supply through tanker in villages Near Villages. V) 3.0 lacs for assistance to self help group.vi) 4.0 lacs for vocational training to person for income generation. vii) Rs 4.0 Lakh for Construction and Maintenance of Drainage system in the Nearby Villages with the help of Village Panchyat., viii) Rs 2 Lakh construction of Rain water harvesting structure ix) Rs. 2 Lakhs for Construction and maintenance of toilets for boys/girls in Government Schools.

Observation of EAC: *The Committee observed that similar activities is proposed by the other project and there should not be any duplication of activities and other activities such as i) installation of solar light in the school and villages, ii) providing computers with internet connection and furniture to nearby government schools, iii) distribution of sanitary napkins in villages, iv) construction of additional room in schools etc. may be done under CER fund.*

16. Project Proponent reported that there is no R&R plan is applicable for this project as the mine lease area lies entirely on the River bed and there is no establishment on the site.

17. The Project Proponent has earmarked Rs. 11.50 lacs towards Environmental Protection Measures. This cost will be spending phase wise along with the growth of project. This will include 1) Pollution Monitoring – Air, Water, Noise - ₹ 4.0 Lakhs, 2) Dust Suppression (Water Sprinkling) - ₹ 3.0 Lakhs, 3) Wire Fencing at Plantation Sites - ₹ 0.5 Lakhs, 4) Plantation Including Maintenance - ₹ 0.5 Lakhs, 5) Rain Water Harvesting - ₹ 2 Lakhs and 6) Haul Road Other Roads Repair and Maintenance - ₹ 1.5 Lakhs.

The Committee previously asked the PP to submit the time bound action plan and budget for EMP.

PP in its reply submitted on 10.07.2020 submitted the revised budget for EMP as Rs 112.0 Lakh which includes i) Rs.1.30 Lakh/annum for Environmental Pollution Monitoring i.e. Water, Air, soil & Noise etc. [Air Sample 6 Location 6 x2x3500=42,000/- Water Sample 8 Location 8x2x2500= 40,000/- Noise Sample 6 Location 6x2x2000= 24,000/- Soil Sample 6 Location 6x2x2000= 24,000/- Total cost of monitoring year wise 1, 30,000/ ; frequency of monitoring half yearly], ii) Rs 8.50 Lakh/annum for Dust Suppression (Water Sprinkling) (frequency daily); iii) Rs 4.0 Lakh for Environmental Awareness Programme (monthly), iv) Rs 3.0 Lakh for Occupational Health and Safety Mine worker (Health camps, training etc) and v) Rs 90.0 Lakh for Green Belt & plantation. PP also submitted that cost of water tanker is Rs 900/Tanker.

18. PP has submitted that the occupational health impacts of river bed sand mining is very remote. However, such evidences have not been proven so far, though the mining is undertaken for years. No records for any occupational health problems were reported during the primary survey. However, in case of health implications will be reported, following mitigation measures will be adopted - All employees will be trained, educated and encouraged to follow best and safe work practices in their working environment. Personnel Protective Equipments like face mask, earmuffs, ear plugs, gloves, safety goggles and safety boots is being provided. All workers will be subjected to Initial Medical Examination as per Mines Rule 1955 both at times of appointment and Periodical Medical Examination at least once in five years. First aid trained personnel's, first aid stations fully equipped as per Mines Rules 1955 and first aid kits will be made available all the time. Awareness programme regarding the use, maintenance and up-keep of respirators will be conducted on regular basis so that employees are trained to handle the equipment properly.

The Committee previously asked the PP to submit the time bound action plan and budget for Occupational Health Plan.

PP in its reply submitted on 10.07.2020 mentioned that for the Persons working in dusty area to be provided with protective wears such as helmets, dust masks, ear muff, Heat stroke. Continuous sitting driving vehicle the

Backaches. Hearing loss. Body electrical resistance damage. Regular water sprinkling at dust Generating areas, Haul roads. Occupational health check-up of all workers Working in mine and Pulmonary function test for workers working In dusty areas. Ergonomic factor & noise issue will be taken up during the perches of machines. A budget of Rs 3.0 Lakh is earmarked for occupational health plan.

19. PP submitted that there is no litigation is pending against the project / applicant in any court of law. However, there is a PIL in the High Court of Rajasthan filed by an NGO, Nature Club of Rajasthan. The order was passed on dated 16 April' 2013 by Hon'ble Court giving directions to State Govt. to finalize the allotment of mining leases of Bajri in the State within a period of six months as per new rules and adopt procedure for revenue collection under new rules only.

The Project Proponent has also made a submission that in accordance to Hon'ble Supreme Court of India's orders dated 25.11.2013, 24.02.2014 and 27.03.2014 (In Civil Appeal No. 9703-9706 of 2013) production of ~ 19534 Tons of Bajri has been made during January 2014 to March 2014 and ~ 43,830 Tons of Bajri has been made during April 2014 to March 2015.

The Committee observed that in the instant case as reported by PP and State Government the LOI issued by the state Govt. is valid as per the Hon'ble Supreme Court order dated 10.05.2019 & 06.12.2019. Although PP has provided the list of cases on various issues wherein the project proponent is a party. During the meeting the Committee confirmed from the PP that whether there is any case which is directly pertaining to grant of EC. The PP informed that there is no such court case.

20. PP has submitted the affidavit vide Certificate No. AW 454298 dated 26.02.2020 as per the Ministry's Office Memorandum No.350/2017-IA.III(Pt.), dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

The Consultant in the EIA report has given a declaration that they confirm that they shall be fully accountable for any misleading information mentioned in the statement.

Further, PP has given undertaking in EC Report that they hereby give undertaking that the data and information given in the application and enclosures are true to be best of their knowledge and belief and they are aware that if any part of the data and information found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at their risk and cost.

The Committee observed that in the previous meeting the Member Secretary informed the Committee about the complaint received from the Sr. Advocate wherein the issue raised is regarding applicability of Common Cause Judgment

*dated 2.08.2017 and illegal mining in the sand mining cases from the State of Rajasthan. Due to this the Committee in its meeting held during 06.05.2020 asked the PP to submit **“a letter from the State Government that there is no violation of Common Cause Judgment dated 2.08.2017 in respect of this mining proposal and there is no production before the SC Order dated 25.11.2013 & after SC Order dated 16.11.2017. An undertaking in this may also be submitted.”***

PP in its reply submitted on 10.07.2020 submitted that after from the State Government that there is no violation of Common Cause Judgment dated 2.08.2017 in this matter and A certificate that there is no production before the SC Order dated 25.11.2013 & after SC Order dated 16.11.2017 has been provided vide letter No. Adm/JPR/courtcase/2020/165 dated 10.06.2020 wherein it has mentioned that project proponent has undertaken mining activities on the lease hold area in term of the temporary working permits issued by the State of Rajasthan vide order dated 19.12.2013, which was issued as per the direction of the Hon'ble Apex Court dated 25.11.2013 in S.L.P.(Civil) No.34134/2013 titled as State of Rajasthan Vs Nature Club of Rajasthan and others and as such the project proponent has not undertaken mining activity without due permission. Mining activity was carried out under the order of Hon'ble Apex Court and thus is not in violation of common cause judgment. No mining has been carried out by project proponent in the lease area before the Hon'ble Supreme Court Order dated 25.11.2013 in S.L.P (Civil) No.34134/2013 titled as State of Rajasthan Vs Nature Club of Rajasthan and after order dated 16.11.2017 in S.L.P (Civil) No.34811/2013 titled as Naveen Sharma Vs State of Rajasthan.

PP has further submitted the affidavit vide Certificate No. AV 278823 dated 11.06.2020 as per the Ministry's Office Memorandum No.350/2017-IA.III(Pt.), dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

The Committee in the previous meeting also asked the PP to submit a letter regarding change of consultant in pursuant to Ministry's O.M. No. J11013/41/2006-IA. II (I) dated 17.03.2010.

PP, in compliance of Ministry Office Memorandum No.-J-11013/412006-IA.II (I) dated 17.03.2010 submitted a letter wherein it has mentioned that “I hereby submit the Intimation regarding the change of Environment Consultants from Enkay Enviro Services Pvt. Ltd Jaipur to Overseas Min-Tech Consultants Jaipur”

21. The Proponent submitted that total project cost will be approx. Rs. 1.40 Crores. Total employment in the mining lease will be around 61 people. The local villagers will be preferred for employment.

22. **Replenishment Study:**

i) Dendy Boltan formula: The Ministry granted ToR vide letter No. J-11015/286/2013-IA.II (M) dated 09.12.2013 wherein one the condition was for submission of detailed replenishment study. The PP in EIA/EMP Report submitted some details in EIA/EMP Report based on Dandy-Bolton formula. The EAC in its meeting held during 24-25 Oct 2016 inter-alia mentioned that *“The EIA/EMP reports on sand mining proposals estimate replenishment rates based on theoretical Dendy–Boltan formula and not on actual replenishment studies. The Dendy Boltan formula is not very useful to estimate replenishment rates at a particular stretch of a river. Its application to cases such as those of Rajasthan, where river is not perennial, is even more problematic”. “In case of Sand/Bajri mining projects from the State of Rajasthan, Project Proponents shall first conduct a scientific replenishment study and submit the report before the EAC for further consideration of amount of production for mining of sand/bajari on yearly basis. Therefore, the Committee deferred all such sand/bajri mining proposals of State of Rajasthan.”*

ii) Meyer-Peter’s equation: The PP did not submit the revised EIA/EMP Report. But based on the above meeting entrusted the task of replenishment study to CMPDI and submitted the same to MoEF&CC online on 03.04.2018. The Committee during EAC meeting held during 08.01.2018 observed that CMPDI conducted a replenishment study of the entire mining lease area during 2017 which is based on the Meyer-Peter’s equation.

Comment of PD: As per the Replenishment report submitted by PP on 03.04.2018 (CMPDI-Phase-II, February, 2018), the details such as lease dimensions, Estimated Bed Load, Estimated deposition or replenishment, Sediment Load Deposition per month, Annual Replenishment, Estimated Annual Replenishment, Estimates Reserve, Annual Production Capacity envisaged (as per mining plan), Estimated Annual replenishment, Replenishment Status vis-à-vis planned production have not been detailed out in the report for this particular lease.

a) As per the EIA/EMP Report the details of the geological & Mineable Reserves are as follows:

<u>Geological Reserves</u>	<u>Mineable Reserves</u>	<u>Annual Production (MTPA)</u>	<u>Life of Mine (Years)</u>
16.58 MCM (16583075 m3)	11.31 MCM	0.84	5 years

b) In the EAC meeting held during 8.1.2018 the then EAC noted the submissions of the Consultant and observed that the present exercise is essentially an empirical attempt of estimating sand replenishment from Meyer’s Peter equation. The Committee also enquired about the extent of over-estimation already included in the formula vis-a-vis the

actual figures. M/s CMPDI submitted that Meyer Peter's equation takes into account an overestimation of 25-30% on conservative basis. The Committee thus observed that the estimations arrived at by M/s CMPDI in Para 4 are already overstated in comparison to actual figures. However, the Committee also noted the submissions of M/s CMPDI that the sand/ bajri existing in the river beds in State of Rajasthan are paleo sand deposits rather than annually replenished sand as the rainfall pattern is not regular in the state and therefore, does not lead to annual replenishment.

- c) In the EAC meeting held on 08.01.2018 the then Committee also interacted with the representatives of the State Government of Rajasthan and noted their submissions. The officials of State Government submitted that due to stoppage of river sand/ bajri mining in the State, many infrastructure projects (covering Government as well as Private) have come to a halt. Additionally, the State Government is also loosing revenue (royalty, license fee etc.). Further, being a mineral rich State, the said order has adversely affected the socio-economic situation w.r.t. loss of jobs/ livelihood etc.
- d) The then Committee made detailed deliberations and observed that the river sand mining proposals for the State of Rajasthan cannot be governed by annual river replenishment studies alone and there is a need for caution in sand/ bajri mining of these paleo deposits. The Committee also observed that M/s CMPDI has not presented its data in the Scientific Replenishment Study report as the same was accepted to be rough estimate and non-representative of the actual replenishment status.
- e) The then Committee made detailed deliberations on the issues and noted that there is a requirement of identification of active mining area within leased river stretches and subsequent identification and preparation of cross section for assessing replenishment of sand in coming years. Hence, mining permission is technically required to be granted so as to conduct replenishment studies in future and demonstrate the same to State Govt. to regulate mining of paleo deposits in future. Accordingly, EAC recommended mining of river sand/ bajri to up to 25% capacity of the annual proposed production capacity subject to submission of information and undertaking. The Committee observed that 25% of annual proposed capacity for this project comes out to be 0.21 MTPA (25% of 0.84 MTPA).
- f) Based on the recommendations made by EAC in its meeting held during 8.01.2018 , the Ministry, vide letter dated 05.02.2018 has requested Department of Mines and Geology, Government of Rajasthan/Project Proponent to submit the above mentioned information. In this context, the Department of Mines and Geology, Government of Rajasthan, vide letter dated 20.04.2018 has submitted the information for 18 LOIs and as the information was technical in nature the proposal was placed before EAC in its meeting held during 30-31 May, 2018 wherein the

State Government submitted the details of identified the mineable block of 100.00 Ha for this mining lease and surveyed area is 73.7841 Ha. The Committee deferred the proposal and sought requisite information with respect to validity of LoI and other details.

- g) In view of the requisite information as sought during 8.01.2018 & 30.05.2018 EAC meetings, the PP submitted the replenishment study report on 03.04.2018. As complete information was not uploaded an EDS was raised on 07.10.2019, the PP submitted the desired information on 16.05.2020 and the proposal was considered in EAC meeting held during 23.06.2020 wherein the Committee deferred the proposal for want of requisite information. PP submitted the information on 11.07.2020 and the the proposal is considered in the EAC meeting held during 19.08.2020.
- h) The Committee observed that technical deliberation on feasibility of project for mining of 0.84 MTPA was almost completed during 2015-16 but replenishment details submitted by PP was based on the Dandy and Bolton formula therefore Committee asked PP to submit the revised EIA/EMP. The PP did not submit the same. The issue thereafter remains is submission of replenishment study report and finalization of safe extractable quantity for this mining lease. The Committee observed that replenishment study for the entire mining lease area has already done by CMPDI and results of which shows that there is a replenishment of the mineral. Although, the said study was based on theoretical calculations but still it gives rough estimates about the replenishment of the mineral in the area.

iii) Replenishment Study based on Pre & Post Monsoon Data: The State Government demarcated the area for mining and PP has also conducted replenishment study based on pre-monsoon and post monsoon data of 2018 over an area which was identified by the State Government. In the EAC meeting held during 24.06.2020 the Committee observed that quantity of the mineral proposed to be excavated as per replenishment study report is 2.19 million TPA (as against 0.84 MTPA). The Committee observed that Replenishment Study Report submitted with EIA/EMP does not give any insight of safe extractable quantity as the blocked reserves in the safety zone is not provided in the report. In the replenishment study report details such as area under 7.5 meters statutory barrier, area under $\frac{1}{4}$ width of the river, area under $\frac{3}{4}$ width of the river for both lease area and area demarcated by DMG needs to be mentioned. The PP in its reply submitted on 16.05.2020 inter-alia mentioned that out of total mining lease area of 624.39 Ha the area under $\frac{3}{4}$ width of river is 468.2925 Ha, area under $\frac{1}{4}$ width of river is 156.0975 Ha and area under 7.5 safety zone is 63.22 Ha. Further, the area demarcated by DMG for Stretch -I is 28.4808 Ha out of this area falling under 7.5 statutory barrier is 0.02849, area under $\frac{1}{4}$ width of the river is 3.813 Ha and area under $\frac{3}{4}$ width of the river is 24.668 Ha. The reserves blocked under $\frac{1}{4}$ th width of river is 1,27,099.7566 Tonne and Reserves available under $\frac{3}{4}$ width of the river is 8,31,413.7141 Tonnes. The

area demarcated by DMG for Stretch -II is 36.8559 Ha out of this area falling under 7.5 statutory barrier is 0.3806, area under $\frac{1}{4}$ width of the river is 6.2359 Ha and area under $\frac{3}{4}$ width of the river is 30.62 Ha. The reserves blocked under $\frac{1}{4}$ th width of river is 2,15,808.0066 Tonne and Reserves available under $\frac{3}{4}$ width of the river is 11,37,053.179 Tonnes. The area demarcated by DMG for Stretch -III is 8.4474 Ha out of this area falling under 7.5 statutory barrier is 0.0674, area under $\frac{1}{4}$ width of the river is 0.8744 Ha and area under $\frac{3}{4}$ width of the river is 7.573 Ha. The reserves blocked under $\frac{1}{4}$ th width of river is 29,490.92926 Tonne and Reserves available under $\frac{3}{4}$ width of the river is 2,57,136.473 Tonnes.

The PP also submitted that the extractable Replenished quantity per Hectare is about 34257.74 Tonne. So to achieve 0.84 Million Tonnes per annum the net area required will be 24.52 Hectare. So total net area required during the next five years will be $24.52 \times 3 = 73.56$ ha. The area worked during 1st years and 2nd Year will be worked out in the 4th & 5th year respectively.

The Committee observed that as per mining plan the depth of mining is 3 meters. But the average deposition of mineral as per replenishment study is about 1.37 meters. The PP in the study report proposed a mining with slice of 1 meter. The Committee therefore restricts the depth of mining as 3 meter or water level whichever is less.

As per approved mining plan light weight excavators will be deployed for extraction. Mineral will be loaded in trucks of 20 tonnes capacity trucks and equipment, earth movers will be on hire basis. During EAC meeting held on 8.01.2018 as the actual replenishment study was not available the Committee suggested use of scrappers and also asked for an undertaking from PP in this regard. But now as the replenishment study is available & as per request made by Bajri LOI Holder Association the Committee agreed for use of excavators having bucket capacity not more than 1.0 m³ and boom length not more than 3 meters for this project.

23. Based on the deliberations held during August 25- 27, 2015, 24-25 Oct 2016, January 8, 2018, May 30-31, 2018, 22-24 June, 2020 and document submitted by the PP dated 03.04.2018, 16.05.2020, 10.07.2020, the Committee **recommended** the proposal for production of **0.84 MTPA of Sand/Bajri from 24.31 ha each year (maximum area of 72.93 Ha in 5 years)** from the area demarcated by Department of Mines and Geology, Rajasthan, for the lease of **Shri Ashu Singh Bhati, located at Revenue villages of Tehsil Shahpura, District-Bhilwara, Rajasthan** subject to the following specific conditions in addition to Standard EC conditions (given at Annexure-III) and also the relevant special conditions as per Sustainable Sand Mining Management Guidelines 2016 and Enforcement & monitoring Guidelines for sand mining 2020:

- 1) Permissible Mining of River Bed Material (Sand/Bajri) shall be limited to 0.84 MTPA from an effective mineable area of 24.31 ha, with a

maximum minable depth of 1 meter from the original ground level as reported in the replenishment study. The permissible minable material of 0.84 Million Ton will be valid till one year from the day of issuance of the EC.

- 2) For subsequent period, project proponent shall submit fresh annual replenishment study to MoEF&CC for amendment in EC for mineable quantity and maximum permission depth for mining based on the scientific findings of replenishment study. Such study shall be placed before EAC for appraisal for next three years to assess rate of deposition and accordingly, minable production capacity and depth can be prescribed based on trends analysis, provided it is found scientifically satisfactory by the EAC. The placing of the study report before EAC is mandatory for initial three years.
- 3) The project proponent shall take all measures for the surveillance as proposed by the PP. The status of implementation with documentary proof needs to be submitted to Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 4) Not more than 17.14 KLD water shall be used for this project. Water shall be sourced from legal suppliers and record of water supplier and trips shall be maintained on daily bases. At least 3 times day water shall be sprayed to avoid fugitive emission. The water tanker having mist generator system shall be used for conservation of water. PP shall submit the status report for implementation along with photograph to Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 5) PP shall plant at least 8800 saplings of within a period of 2 years. The height of seedlings shall not be less than 2 meters. Species such as *Azadirachta indica* (Neem), *Ailanthus excels* (Ardu) *Albizia lebbeck*(Siris), *Ficus religiosa* (Peepal), *Lasora* (*Cordia dicotoma*), *Dalbergia sissoo* (Shisham), *Tamarindus indica* (Imli), *Morus alba* (Shahtoot), *Ziziphus mauritiana* (Ber), *Syzygium cumini* (Jamun), *Mangifera indica* (Mango), *Diospyros melanoxylon* (Tendu), *Annona squamosal* (Sitafal), *Pithecelabium dulce* etc.(Jungle jalebi). The Plantation shall be carried out along the road side, banks of river and public places under social forestry programme in consultation of local authorities. PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 6) The conservation plan in consultation with the Forest Department shall be implemented and compliance of the same shall be submitted to Regional Office of MoEF&CC before 1st July of every year.

- 7) The PP shall implement the mitigation measure to control the impact due to transportation viz. Kaccha road of 3.7 Km, transportation of sand from villages having habitation should be avoided, regular water sprinkling (3 times a day) before transportation of mineral, plantation (not less than 8880 sapling having height of not less than 2 meters) on the both side of this road should be completed within 1 year , trucks shall not be overloaded, spillage of the mineral to be avoided, covered transportation. Implementation report with supporting documents & photographs before and after shall be submitted to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 8) The project Proponent shall implement the committed activities under Corporate Environment Responsibility and implementation report with supporting documents & photographs before and after shall be submitted to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 9) The project proponent shall implement all mitigative measures envisaged in the **Environmental Management Plan (EMP)** and committed during the presentation and subsequent submissions. The water shall be sourced from legal water supplier and record of the same needs to be maintained. In addition to this PP shall also keep a record of water spraying trips on daily basis. A separate Environment management cell (EMC) shall be created with suitable staff having relevant qualification in environment with supporting staff. Implementation report with supporting documents, test reports, geo-locations & photographs before and after and composition of EMC shall be submitted to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 10) PP shall implement the occupational health plan and provide personal protective equipment to all the workers (*helmets, dust masks, ear muffs*), provision of safe drinking water to workers, shelters for rest etc. In addition to this Occupational health check-up of all workers working in mine, and pulmonary function test for workers working in dusty areas. Implementation report with supporting documents & photographs before and after shall be submitted to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 11) The PP shall implement the conditions prescribed in **Enforcement & Monitoring Guidelines for Sand Mining 2020, as applicable for PP** and also SoP issued by the Rajasthan State Government for prevention of illegal river sand mining in the state. Implementation report with supporting documents & photographs before and after shall be submitted to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

2.2 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

The proposal of lessee Shri Abhishek Chaudhary, Bhilwara, Rajasthan is for mining of Bajri (Minor Mineral) with proposed production capacity of 1.12 Million TPA (ROM). The mine lease area is located at Revenue Villages of Tehsil –Raipur, District–Bhilwara in the mine lease area of 836.13ha. The mine lease area lies on Kothari River. The Latitudes and Longitudes of the mine lease area lies between 25°23'32.61" N to 25°20'41.03" N and 74°01'7.64" E to 74°18'52.35" E on Survey of India toposheet numbers 45 K/2, 45 K/3, 45 K/6, 45 K/7. 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.

The Committee previously asked the PP to confirm that is there any other homogeneous mining lease within 500 meters of this lease and forming cluster. If, yes details of the same needs to be provided.

PP in its reply dated 11.07.2020 submitted Cluster Certificate issued by Mining Officer, Bhilwara vide its Lr. No 219 dated 15.06.2020 wherein it has mentioned that there is one mining lease within 500 meters as per following details:

M.L. No.	Tehsil	District	Area (in ha)	Name of LOI Holder
114/2012	Mandal	Bhilwara	995.00	Shri. Abhimanyu Chaudhary

3. The proposal of TOR was considered by the Expert Appraisal Committee in its 11th Meeting held during 25th - 27th September, 2013 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TOR was issued by MoEFCC vide letter no. J-11015/ 232/ 2013-IA.II (M) dated 17.10.2013.

4. PP vide Proposal No. IA/RJ/MIN/20302/2013 dated 01.04.2015 applied for Environmental Clearance for Bajri Mine (Minor Mineral) Production Capacity 1.12 million TPA located at Revenue Village(s) of Tehsil Tonk, District Tonk, Rajasthan (836.13ha). The Proponent submitted the EIA/ EMP Report online to Ministry for seeking Environmental Clearance after conducting Public Hearing. The proposal was considered in the EAC Meeting held during August 29-30, 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 **1.12 Million**

TPA (ROM). The Committee recommended additional specific conditions viz. (i) Excavation will be carried out up to a maximum depth of 3 meters from surface of mineral deposit and not less than one meter from the water level of the River channel whichever is reached earlier; (ii) Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical checkup and once in six months and necessary medical care/preventive measures under taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted; (iii) Project Proponent shall appoint a Monitoring Committee to monitor the replenishment study, traffic management, levels of production, River Bank erosion and maintenance of Road etc.; (iv) Transport of minerals shall be done either by dedicated road or it should be ensured that the trucks/dumpers carrying the mineral should not be allowed to pass through the villages; (v) Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density; (vi) Implementation of Action Plan on the issues raised during the Public Hearing. The Proponent shall complete all the tasks as per the Action Plan submitted with the budgetary provisions during the Public Hearing; (vii) The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centre; Washing of all transport vehicle should be done inside the mining lease; and (viii) Permanent pillars has to be constructed to demarcate width of extraction of ROM leaving 25% of River width from the bank with depth of 1.5m below the ground and 1.2 m above the ground to observe its stability.

Additional details were sought from the PP vide letter dated 02.01.2017 to conduct a scientific replenishment study citing the following:

“The matter was examined in the Ministry w.r.t. replenishment study and noted that the Ministry has issued the terms of reference and inter-alia mentioned a condition that the Project Proponent shall conduct a detailed replenishment study and submit the report along with the EIA/EMP. However, the Project Proponent has made a theoretical study based on Dendy Bolton’s Replenishment Formula. In view of the above, the Ministry requested the EAC to recommend the amount of production on yearly basis based on a duly conducted scientific replenishment study before recommending Environmental Clearance. Accordingly, the proposal was discussed for the replenishment study issues related to sand/bajri mining projects and have been re-considered before the EAC meeting held during October 24-25, 2016.

The Committee deliberated the issues and opined that Replenishment of the sand is a natural process in the perennial rivers. The sand moves along with the water streams and is deposited in the void created in the mined out areas. Replenishment rates vary depending on nature of watershed, nature of soil and rainfall etc. and mining beyond the natural replenishment rate results into

damage of river bed leading to adverse environmental consequences. Mining proposals under the category of river mining are received for Environmental Clearance mainly from States such as Uttarakhand, Himachal Pradesh, Uttar Pradesh, Jammu and Kashmir, Haryana, Bihar and Rajasthan. Analysis of these proposals reveals that the proposals of sand mining from Rajasthan are not in perennial rivers. These are, in effect, paleo sand deposits and are not replenished annually during monsoon season. The mined-out areas are not replenished adequately and may turn into permanent depressions.

The Committee noted that the EIA/EMP reports on sand mining proposals estimate replenishment rates based on theoretical Dendy—Boltan formula and not on actual replenishment studies. The Dendy- Boltan formula is not very useful to estimate replenishment rates at a particular stretch of a river and its application to cases such as those of Rajasthan, where rivers are not perennial, is even more problematic. In view of the above, there is a need, therefore, to treat the river sand mining proposals from Rajasthan differently from those of other States. The Committee deliberated the issues w.r.t. replenishment study and is of the view that in case of Sand/Bajri mining projects from the State of Rajasthan, Project Proponents shall first conduct a scientific replenishment study and submit the report before the EAC for further consideration of amount of production for mining of sand/bajri on yearly basis. Therefore, the Committee deferred all such sand/bajri mining proposals of State of Rajasthan.”

In response to the ADS dated 02.01.2017, PP uploaded the “Scientific Replenishment Study Report for Bajri/Sand Mine Leases in The State of Rajasthan (Phase-II Report)” dated February, 2018 on PARIVESH on 03.04.2018.

Notably, the proposals of River Sand/Bajri Mining in State of Rajasthan were considered by the Special EAC meeting held on 08.01.2018 pursuant to the judgement of Hon’ble Supreme Court, dated 16.11.2017. These proponents had submitted Scientific Replenishment Study Report prepared by the Central Mine Planning & Design Institute (CMPDI). Apart from M/s CMPDI and PPs, the officials of the State Government of Rajasthan namely Shri Deepak Tanwar, Senior Mining Engineer, Bharatpur and Shri D. P. Gaur, Senior Mining Engineer, Jaipur were invited to attend the EAC meeting.

The Member Secretary appraised the Committee that the 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. The above 19 PPs are covered under 82 LoI holders who have been restrained from carrying out river sand/ bajri mining.

The Consultant, M/s CMPDI, on behalf of PPs submitted that it has carried out three-stage study to estimate the replenishment of sand in the State of Rajasthan (as detailed in the minutes). Based on the study, M/s CMPDI estimated the annual replenishment of sand w.r.t. each of the proposals. For this proposal of M/s. Pradeep Sethi Estimated the Annual Replenishment was found to be 1.61

Million m³. Based on the above replenishment estimations, M/s CMPDI has indicated the replenishment status vis-a-vis annual planned production for each of the case. In case of this proposal of M/s. Pradeep Sethi, it is estimated that “Replenishment will be less than planned annual production.”

The Committee noted that apart from the above estimations, M/s CMPDI has made certain conclusions and recommendations, the salient features of which are as below:- i. The rivers of Rajasthan are ephemeral in nature and not replenished annually as compared to perennial rivers and therefore, the concept of annual replenishment is not applicable. There is a need to consider appropriate change in the policy applicable for annual replenishment of rivers vis-à-vis mine capacity permits in case of Rajasthan. ii. Due to erratic and uncertain occurrence of rainfall in the State, there exists appreciable variation in the amount of replenishment of the rivers. The replenishment achieved at one point of time may be utilized over more than a year depending upon requirement which needs to be considered while linking annual production with annual replenishment of the rivers in the State of Rajasthan. iii. As per their considered opinion, M/s CMPDI mentioned that there is a need to consider the concept of resource accounting of bajri/ sand in the rivers of Rajasthan and take the replenishment as a measure for resource augmentation. The permissible level of bajri/ sand in each stretch need to be identified and each year, the resource augmentation based on the replenishment of the river need to be added onto it for updating the bajri/ sand. Based on such estimation, quantum of further permits may be decided by State Government. iv. Apart from the above, system of Environment Accounting has also been propagated by United Nations (UN) with System of Environment – Economic Accounting 2012-Central Framework (SEEA-Central Framework) which is a statistical framework consisting of a comparable statistics and indicators for policy making etc. It is a tool that helps in tackling natural resource depletion and environmental degradation. For sand mining projects of Rajasthan, Physical Supply Use Tables (PSUT), as provided in SEEA-Central Framework of UN, may be utilized for sustainable use of sand mining and grant of mining permits. The mining lease in Rajasthan occurs in paleo sand deposits and use of PSUT will be appropriate in this case. v. The installation of observation points may be appropriately considered for determination of replenishment level in each tract of river under consideration. The observation points may be installed at strategic locations and rise in the level of Bajri/ sand may be monitored.

The Committee made detailed deliberations and noted that there is a requirement of identification of active mining area within leased river stretches and subsequent identification and preparation of cross-section for assessing replenishment of sand in coming years. Hence, mining permission is technically required to be granted so as to conduct replenishment studies in future and demonstrate the same to State Govt. to regulate mining of paleo deposits in future. Accordingly, EAC recommended mining of river sand/ bajri to up to 25% capacity of the annual proposed production capacity **subject to submission** of information and undertaking as below:

- (i) DMG, State Government to submit demarcated river stretch through latitudes and longitudes (out of the total lease) where river sand/ bajri mining

can be permitted based on available reserves and Original Ground Level (OGL) at each cross section in consultation with State Irrigation Department;

(ii) PPs and M/s CMPDI to submit latitudes and longitudes of the identified cross section, duly authenticated by State Government, which shall be used for replenishment study in future for calculation of replenishment amount/ rate;

(iii) PP to give undertaking that only Scrapers shall be used for mining to ensure that the mining depth to be maintained as 1.0 meters (max.) from Original Ground Level and No other heavy machinery like bucket excavators, JCB machines etc. shall be used which may adversely impact the aquatic biota;

(iv) State Government of Rajasthan shall regulate the mining operations by PPs and submit report to MoEFCC on quarterly basis. It shall also be ensured that levelled cross section is made before the onset of next rainfall season; and

(v) State Deptt. Of Mines & Geology and PPs are required to submit District Survey Report (DSR) in line with provisions made in Ministry's notification dated 15.01.2016.

Further, the Environmental Clearance Proposals for mining of Sand/Bajri which were received from the State of Rajasthan were at various stages of consideration before the Expert Appraisal Committee (EAC) under the provisions of the EIA Notification, 2006. These Proposals were deliberated and discussed by the EAC in its meeting held during May 30-31, 2018. The detailed Minutes of EAC meeting may kindly be seen at <http://environmentclearance.nic.in> , the summary of which is as follows:

“The Member Secretary has informed to the Committee that the issues related to replenishment study on the sand/bajri mining projects were deliberated by the EAC in its meeting held during October 24-25, 2016 wherein the Committee deliberated the issues w.r.t. replenishment study for the sand/bajri mining projects received from State of Rajasthan and the Committee suggested that Project Proponents shall first conduct a scientific replenishment study and submit the report before the EAC for further consideration of amount of production for mining of sand/bajri on yearly basis. Therefore, the Committee had deferred all such sand/ bajri mining proposals of State of Rajasthan.

The Member Secretary has appraised the Committee that the 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.

The Member Secretary has also informed that Government of Rajasthan has issued the Rajasthan Minor Mineral Concession (Amendment) Rules, 2018 on 28th February, 2018 and has amended Rule 5 and 6 of the Rajasthan Minor Mineral Concession Rules, 2017 w.r.t, existing expression “one year”, to “thirteen months” i.e. all LOI of minor mineral issued are only valid up to 31.03.2018. Government of Rajasthan, vide letter no. 14(4)Mines/Gr.II/2014, dated 9th April

2018, has submitted the status of 82 bajri mining cases. Out of 82 LOIs, 42 LOIs are cancelled/lapsed, 10 LOIs are sanctioned the lease/executed, and 30 LOIs are under stay in the Hon'ble High Court at Jodhpur w.r.t. regard to validity of LOI. **The Committee deliberated the issues and is of the view that Department of Mines and Geology, Government of Rajasthan shall first confirm whether the instant LOI/Lease is valid or not before consideration of the Proposal.**

The Member Secretary has informed that the Ministry is receiving the projects of Bajri/ Sand mining from the State of Rajasthan and requested the EAC to suggest further course of action. The Committee has also observed that similar proposals from the State of Rajasthan were considered by the EAC in its meetings held on **8th January 2018 and May 30-31, 2018** (this meeting) wherein the Committee has asked the following certain **information/clarifications and undertaking** from the State Government of Rajasthan/ Project Proponent: -

- i. Complete appraisal of the EIA/EMP report along with TOR compliance and other mitigation measures, if not done earlier.
- ii. Details of Scientific Replenishment Study report needs to be presented with other requisite information.
- iii. DMG, State Government to submit demarcated river stretch through latitudes and longitudes (out of the total lease) where river sand/bajri mining can be permitted based on available reserves and Original Ground Level (OGL) at each cross section in consultation with State Irrigation Department;
- iv. PP and Consultant to submit latitudes and longitudes of the identified cross section, duly authenticated by State Government, which shall be used for replenishment study in future for calculation of replenishment amount/rate;
- v. PP to give undertaking that only Scrapers shall be used for mining to ensure that the mining depth to be maintained as 1.0 meters (max.) from Original Ground Level and No other heavy machinery like bucket excavators, JCB machines etc. shall be used which may adversely impact the aquatic biota;
- vi. State Government of Rajasthan shall regulate the mining operations made by PP and submit report to MoEF&CC on quarterly basis. It shall also be ensured that leveled cross section is made before the onset of next rainfall season; and
- vii. State Department of Mines & Geology and PP are required to submit District Survey Report (DSR) in line with provisions made in Ministry's notification dated 15.01.2016.
- viii. The Committee deliberated the issues and is of the view that Department of Mines and Geology, Government of Rajasthan shall first confirm

whether the instant LOI/ Lease is valid or not before consideration of the Proposal.

- ix. The PP is required to submit the sections clearly marking the lateral and depth extents of present ground profile as well as proposed excavation profile at individual sections. The same needs to be verified/approved by the State Mines and Geology Department, Govt. of Rajasthan.*
- x. The PP needs to submit a database in structured tabulated form clearly mentioning the nomenclature of the section line, latitude and longitude of both the extents of section line, chianages and respective levels (RL, AMSL) of all the points taken on that section line. That means with the help of this database profile of ground at that section line can be drawn with the help of suitable CAD software.*
- xi. Thus with the help of existing ground profile and proposed extents of excavation considering the stipulations of lateral extents of sustainable sand mining guidelines, as mentioned above, The PP shall estimate the proposed quantum of excavation in tonnages with the help of Specific Gravity verified by the State DMG between every two consecutive sections. Such estimation shall be furnished by the PP in tabular form which includes the nomenclature of section lines, area proposed for excavation, distance between two consecutive section lines, volume, specific gravity, tonnage of the mineral, maximum depth extent from existing ground profile. Respective plans shall also be submitted clearly marking the area to be excavated. The same needs to be verified by the State Mines and Geology Department, Govt. of Rajasthan. In addition to this a composite plan mentioning the above proposed excavation zones for the entire mine lease area also needs to be submitted. Thus PP needs to submit a plan clearly showing the area to be put in under excavation and no excavation zones. Respective KML files of such lateral extents of excavation and no excavation zone within ML shall also be submitted by the PP.*
- xii. PP needs to submit a plan clearly mentioning the width of river, lease boundaries, area left under safety zones as prescribed as per Sustainable Sand Mining Management Guidelines, 2016, as per statutory requirements under Rajasthan Minor Mineral Concession Rules and other competent authority.*
- xiii. The plans and sections should be depicting the dates (period) of survey further in order to ensure the ground survey. PP should submit the dates (period) of survey, the model no & details of the instrument used for such survey, field recordings and observations along with name, signatures and contact details of the Surveyor explicitly be mentioned and recorded in the field book as well as in Plan & Sections.*
- xiv. In addition to this soft copy (Excel or CSV file, DWG file) of all such survey recordings should also be submitted in proper order & sequence in order to cross check & verification samples checks of sections.*

- xv. The Committee deliberated the issues w.r.t. erection of pillars and accordingly suggested that the PP needs to erect the pillars with the following specifications and submit the details (in table form) of the same along with photographs. The specifications inter-alia are as (a) the distance between two adjacent pillars shall not be more than 100 meters; (b) the pillars shall be of square pyramid frustum shaped above the surface and cuboid shaped below the surface; (c) each pillar shall be of reinforced cement concrete; (d) the pillars shall have a base of 0.30m X 0.30m and height of 1.30m of which 0.70m shall be above ground level and 0.60m below the ground; (e) all the pillars shall be painted in yellow colour and the top ten cm in red colour by enamel paint and shall be grouted with cement concrete; (f) on all the pillars, distance and bearing to the forward and backward pillars and latitude and longitude shall be marked; (g) each pillar shall have serial number in a clockwise direction and the number shall be engraved on the pillars; (h) the number of pillar shall be the number of the individual pillar upon the total number of pillars in the lease; and (i) the tip of all pillars shall be a square of 15 cm on which a permanent circle of 10 cm diameter shall be drawn by paint or engraved and the actual boundary point shall be intersection of two diameters drawn at 90 degrees.
- xvi. PP shall submit the compliances as per the Ministry's Office Memorandum No.3- 50/2017-IA.TII(Pt.), dated 30.05.2018 by an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

The Committee has made the detailed deliberations in the EAC held during **May 30- 31, 2018**. The representatives of State Government of Rajasthan were also present during the meeting. Based on the detailed deliberations and discussions, **the Committee is of the view that the complete appraisal may be done once the information as sought in the similar cases of State of Rajasthan for bajri/sand mining project may be submitted by the State Govt. of Rajasthan and Project Proponent. In view of the above, the Committee suggested that first State Govt. of Rajasthan and Project Proponent shall submit the above-mentioned information for all similar case of the State of Rajasthan. Thereafter the proposals may be considered. The Committee also suggested that the proposals can only be considered before the EAC once all the complete information received from State Govt. of Rajasthan and Project Proponents.**

The Committee suggested that the Ministry first seek the above-mentioned information from PPs and State Govt. in all similar cases from State of Rajasthan and afterwards placed before the EAC.

The matter was examined in the Ministry and accordingly Project Proponent and Department of Mines and Geology, Govt. of Rajasthan were requested vide letter dated 18.06.2018 (uploaded on PARIVESH on 19.06.2018) to submit the above-

mentioned requisite information online to the Ministry for further necessary action on the matter.”

In view of above, the Ministry informed the PP on 07.10.2019 to “upload all the information sought by EAC in its meeting held on Jan-2018 and May 2018 in respect of sand mining project from State of Rajasthan. Upload the actual replenishment study report. Recommendation of Sub-Divisional Committee as per S.O. 141(E) dated 15.01.2016.”

In response to above deliberation and ADS raised, PP has now replied on 16.05.2020 stating that Replenishment study report has been prepared and verified by Irrigation as well as Department of Mines & Geology, Rajasthan Complying. PP has further provided the following compliance w.r.t. the points asked during the 32nd EAC meeting held on May 30-31, 2018:

S. No.	INFORMATION/CLARIFICATION	COMPLIANCE
1)	Complete appraisal of the EIA/EMP report along with ToR compliance and other mitigation measures, if not done earlier	Complete Appraisal of EIA/EMP Done on EAC Meeting held on 25 August 2015 and EAC Recommended the Proposal for EC.
2)	Details of Scientific Replenishment Study report needs to be presented wither other requisite information.	Details of Scientific Replenishment Study report along with other requisite information is enclosed by PP.
3)	DMG, State Government to submit demarcated river stretch through latitudes and longitudes (out of the total lease) where river sand/bajri mining can be permitted based on available reserves and Original Ground Level (OGL) at each cross section in consultation with State Irrigation Department	DMG, State Govt. submitted demarcated river stretch through latitude and longitudes (out of total lease) where river sand / Bajri mining can be permitted based on available reserves and original ground level(OGL) at each cross-section in consultation with irrigation department. PP has enclosed the document.
4)	PP and Consultant to submit latitudes and longitudes of the identified cross section, duly authenticated by State Government, which shall be used for replenishment study in future for calculation of replenishment amount/ rate	Project proponent and consultant submitted the latitude and longitudes of the identified cross-section duly authenticated by state govt. which used for replenishment study and for calculation of replenishment amount/rate.

		PP has enclosed the document.
5)	PP to give undertaking that only Scrapers shall be used for mining to ensure that the mining depth be maintained as 1.0 meters (max.) from Original Ground Level and No other heavy machinery like bucket excavators, JCB machines etc. shall be used which may adversely impact the aquatic biota	An undertaking is attached here with regarding the use of scrapper for mining to ensure mining depth be maintained as 1.0 meter (max) from original ground level and other heavy machinery like bucket excavators, JCB machines etc. will not be used. This may adversely impact the aquatic bio data. <u>PP has submitted the Undertaking dated 26.02.2020.</u>
6)	State Government of Rajasthan shall regulate the mining operations made by PP and submit report to MoEF&CC on quarterly basis. It shall also be ensured that levelled cross section is made before the onset of next rainfall season; and	As the mining operations suspended by honorable supreme court thus leveled cross section not prepared and submitted before the onset of next rainfall season.
7)	State Department of Mines & Geology and PP are required to submit District Survey Report (DSR) in line with provisions made in Ministry's notification dated 15.01.2016.	District Survey Report (DSR) is <u>Enclosed by the PP which is incomplete copy.</u>
8)	The Committee deliberated the issues and is of the view that Department of Mines and Geology, Government of Rajasthan shall first confirm whether the instant LOI/Lease is valid or not before consideration of the Proposal.	LOI issued by the state Govt. is valid vide letter no. P10 (1) Mine/Group-2/2013 dated 27.02.2013 issued by Department of Mines & Geology, Government of Rajasthan. (Enclosed by PP. LOI is valid for 5 years only).
9)	The PP is required to submit the sections clearly marking the lateral and depth extents of present ground profile as well as proposed excavation profile at individual sections. The same needs to be verified/approved by the State Mines and Geology Department, Govt. of Rajasthan	Plan & Sections clearly Showing the lateral and depth extents the Material will be excavated, present ground profile as well as proposed excavation profile at individual sections duly verified/Approved by State Mines & Geology Department,

		Govt. of Rajasthan is Enclosed by PP.
10)	The PP needs to submit a database in structured tabulated form clearly mentioning the nomenclature of the section line, latitude and longitude of both the extents of section line, chainages and respective levels (RL, AMSL) of all the points taken on that section line. That means with the help of this database profile of ground at that section line can be drawn with the help of suitable CAD software.	A database is structured tabulated from clearly mentioning the nomenclature of the section line, latitude and longitude of both the extents of section line, Chainage and respective level RL of all the points taken on that section line with the help of this database profile of ground at that section line can be drawn with the help of CAD software. Enclosed by PP (Section wise CSV)
11)	Thus with the help of existing ground profile and proposed extents of excavation considering the stipulations of lateral extents of sustainable sand mining guidelines, as mentioned above, The PP shall estimate the proposed quantum of excavation in tonnages with the help of Specific Gravity verified by the State DMG between every two consecutive sections. Such estimation shall be furnished by the PP in tabular form which includes the nomenclature of section lines, area proposed for excavation, distance between two consecutive section lines, volume, specific gravity, tonnage of the mineral, maximum depth extent from existing ground profile. Respective plans shall also be submitted clearly marking the area to be excavated. The same needs to be verified by the State Mines and Geology Department, Govt. of Rajasthan. In addition to this a composite plan mentioning the above proposed excavation zones for the entire mine lease area also needs to be submitted. Thus PP needs to submit a plan clearly	<p>Estimation of Proposed Quantum of excavation in Tonne with the help of specific gravity verified by State Department of Mines & Geology between every two consecutive sections done with the help of existing ground profile and proposed extents of excavation considering the stipulations of lateral extents & Sustainable Sand Mining Guidelines given at</p> <p>Estimation of quantity furnishable in tabular form and includes the nomenclature of section lines, Volume, Specific gravity, tonnage of the mineral, Maximum depth extent from existing ground profile, Plans showing the area to be excavated is given in Plate No-5 in Replenishment Report.</p>

	showing the area to be put in under excavation and no excavation zones. Respective KML files of such lateral extents of excavation and no excavation zone within ML shall also be submitted by the PP.	
12)	PP needs to submit a plan clearly mentioning the width of river, lease boundaries, area left under safety zones as prescribed as per Sustainable Sand Mining Management Guidelines, 2016, as per statutory requirements under Rajasthan Minor Mineral Concession Rules and other competent authority.	A plan clearly showing the width of river lease boundary area left under safety zone as prescribed as per Sustainable Sand Mining Management Guidelines 2016 (Enclosed by PP).
13)	It was found that the plans and sections were not depicting the dates (period) of survey further in order to ensure the ground survey PP should submit the dates (period) of survey, the model no & details of the instrument used for such survey, field recordings and observations along with name, signatures and contact details of the Surveyor explicitly be mentioned and recorded in the field book as well as in Plan & Sections.	Plan & Sections the dates of Survey. A field Book showing the date (period) of Survey, The model Number & detail of the instruments used. Field recordings and observations along with name, Signature and contacts details of the Surveyor mentioned and recorded in the field book is enclosed by PP.
14)	In addition to this soft copy (Excel or CSV file, DWG file) of all such survey recordings should also be submitted in proper order & sequence in order to cross check & verification samples checks of sections.	PP has submitted that CD of the Soft Copy of excel or CSV file, DWG files of all Survey recordings area in proper order & sequence will be submitted during presentation.
15)	The Committee deliberated the issues w.r.t. erection of pillars and accordingly suggested that the PP needs to erect the pillars with the following specifications and submit the details (in table form) of the same along with photographs. The specifications inter-alia are as (a) the distance	Project Proponent erected the pillars with the following specifications: <ul style="list-style-type: none"> x. The distance between two adjoining pillars is not more than 100 meters. xi. The pillars are of square pyramid frustum shaped above the surface &

	<p>between two adjacent pillars shall not be more than 100 meters; (b) the pillars shall be of square pyramid frustum shaped above the surface and cuboid shaped below the surface; (c) each pillar shall be of reinforced cement concrete; (d) the pillars shall have a base of 0.30m X 0.30m and height of 1.30m of which 0.70m shall be above ground level and 0.60m below the ground; (e) all the pillars shall be painted in yellow colour and the top ten cm in red colour by enamel paint and shall be grouted with cement concrete; (f) on all the pillars, distance and bearing to the forward and backward pillars and latitude and longitude shall be marked; (g) each pillar shall have serial number in a clockwise direction and the number shall be engraved on the pillars; (h) the number of pillar shall be the number of the individual pillar upon the total number of pillars in the lease; and (i) the tip of all pillars shall be a square of 15 cm on which a permanent circle of 10 cm diameter shall be drawn by paint or engraved and the actual boundary point shall be intersection of two diameters drawn at 90 degrees.</p>	<p>cuboid shaped below the surface.</p> <p>xii. Each Pillars are of Reinforced cement concrete.</p> <p>xiii. Each pillars having base of 0.3mtrs x0.3mtrs and height of 1.30mtrs of which 0.7mtrs are above ground & 0.6mtrs below ground.</p> <p>xiv. All Pillars are painted in yellow colour and top 10cm in red by enamel paint and grouted with cement concrete.</p> <p>xv. Distance backward & forward bearing with latitude & longitude marked on the pillar.</p> <p>xvi. Each Pillar are numbered in clockwise direction and number engraved on the pillar.</p> <p>xvii. The Number of pillars is the number of individual pillars upon the total number of pillars in the lease.</p> <p>xviii. The tip of the pillar is square of 15 cm on which a permanent Circle of 10cm diameter drawn. (PP has submitted that Pillar photographs will be submitted during the presentation)</p>
<p>16)</p>	<p>PP shall submit the compliances as per the Ministry's Office Memorandum No.350/2017-IA.III(Pt.), dated 30.05.2018 by an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. w.r.t. judgment of Hon'ble Supreme</p>	<p>PP has submitted the affidavit vide No. AX 931519 dated 26.02.2020.</p>

	Court dated the 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.	
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The proposal was placed in the 18th EAC (Non-coal Mining) held during 22-24 June, 2020. The EAC deliberated on the submissions made by the project proponent and presentation made by the consultant in the meeting and **deferred** the proposal and advised the project proponent to submit the following information, as sought for the proposals deliberated during the 5th - 6th May, 2020, for further consideration:

- i. In the replenishment study report details such as area under 7.5 meters statutory barrier, area under $\frac{1}{4}$ width of the river, area under $\frac{3}{4}$ width of the river for both lease area and area demarcated by DMG needs to be mentioned. In addition to these details of the reserve available and block therein needs to be provided along with plan and section for area demarcated by DMG. In the study report the safe extractable volume and tonnage needs to be defined after the deducting the block reserves. The slice plan for the mining in the safe extractable zone needs to be provided in the report. The field book for pre & post monsoon needs to be provided as same was not included in the presentation.
- ii. The details of the area to be utilized & not to be utilized for mining, as approved mining plan at the end of 5 years needs to be provided. Whether area demarcated by DMG comes under the utilized zone or un-utilized zone. In addition to this, area required for mining in the next 5 years needs to be provided with proper justification. The details of any prohibited area within the LOI area or demarcated area needs to be provided.
- iii. Mining is proposed in the small area and still large area is left how PP will ensure to curb illegal mining in the demarcated area and rest of the area falling in the lease (provision of Enforcement and Monitoring Guidelines for Sand Mining ,2020 shall be referred for the same). In addition to this budget for installation surveillance equipment like CCTV, security guards weigh bridge etc., needs to be provided. The mining intensity of the original proposal considering larger area and the current proposal shall be compared and explained, as there is significant difference in mining intensity per Ha area.
- iv. PP needs to submit the compliance of ToR points wherein certificate is required for involvement of no forest land, distance from the protected area, authenticated list of schedule-1 species, conservation plan for schedule-1 species and proof of its submission to Chief Wildlife Warden if not already submitted. PP shall ensure that all these documents along with Annexure to EIA Report and other documents submitted to the

ministry should be uploaded online on PARIEVSH Portal for public viewing.

- v. PP needs to submit a letter from the State Government that there is no violation of Common Cause Judgment dated 2.08.2017 in respect of this mining proposal and there is no production before the SC Order dated 25.11.2013 & after SC Order dated 16.11.2017. An undertaking in this may also be submitted.
- vi. The PP needs to submit time-bound, activity-wise action plan for EMP, Occupational Health, Planation, and CER along with the budgetary provision. In addition to details of Environmental Management Cell to be established for implementation of EMP needs to be submitted along with details of manpower and cost.
- vii. PP needs to ascertain the impact of transportation and details of transportation route viz. (length of the road, type of road, passing through the village or habitation) and mitigative measures to be taken for abatement of pollution due to transportation. The budget for the same needs to be provided.
- viii. In case there any proposal for utilization of land outside the mining lease for transportation with a mutual agreement with villagers then details of the same needs to be provided along with proposed compensation details.
- ix. PP needs to re-estimate the requirement of water for plantation, dust suppression and domestic use. The source of water needs to be mentioned. The cost of water tanker etc. needs to be mentioned in EMP.
- x. PP needs to confirm that is there any other homogeneous mining lease within 500 meters of this lease and forming cluster. If, yes details of the same needs to be provided.
- xi. It has observed that PP has changed the consultant a letter in this regard needs to be submitted in pursuant to Ministry's O.M. No. J-11013/41/2006-IA. II(I) dated 17.03.2010.
- xii. PP has provided details of many court cases which are on various issues. Therefore, PP needs to provide status of the case wherein the case is pertaining to issue of grant of EC to present proposal, grant of LoI, illegal mining by PP etc. The Complete details and status of the same needs to be provided.

In view of the same, **PP vide its letter dated 02.06.2020 has submitted the following information online on 11.07.2020:**

S.N O.	INFORMATION/CLARIFICATION	COMPLIANCE
1)	In the replenishment study report details such as area under 7.5 meters	I. Lease Area- 836.13 Hact. • Area under 7.5meters Statutory is- 88.5849 Hect.

	<p>statutory barrier, area under ¼ width of the river, area under ¾ width of the river for both lease area and area demarcated by DMG needs to be mentioned. In addition to these details of the reserve available and block therein needs to be provided along with plan and section for area demarcated by DMG. In the study report the safe extractable volume and tonnage needs to be defined after the deducting the block reserves. The slice plan for the mining in the safe extractable zone needs to be provided in the report. The field book for pre & post monsoon needs to be provided as same was not included in the presentation.</p>	<ul style="list-style-type: none"> • Area under ¼ width of the river- 209.0325 Hect. • Area under ¾ width of the river- - 627.0975 Hect. <p>II. (Stretch-I) Demarcated Area- 12.083 Ha.</p> <ul style="list-style-type: none"> • Area under 7.5 meters Statutory Barrier-0.2947 Hect. • Area under ¼ Width of the River- 2.173 Hect. • Area under ¾ Width of the River- 9.91 Hect.. • Geological Reserve 7,68,291.0842 Tonnes. • Reserve Available in ¾ Width of the River - 6,30,438.9910 Tonnes • Reserve Blocked in 7.5meter area- 24,517.86755 Tonnes • Reserve Blocked in ¼th Width of River- 113334.7336 Tonnes <p>(Stretch-II) Demarcated Area- 18.473 Hect.</p> <ul style="list-style-type: none"> • Area under 7.5meters Statutory Barrier-0.5437 Hect. • Area under ¼ Width of the River- 3.523 Hect. • Area under ¾ Width of the River- 14.95 Hect.. • Geological Reserve 6, 58,456.8170 Tonnes. • Reserve Available in ¾ Width of the River - 5,27,369.3553 Tonnes • Reserve Blocked in 7.5meter area- 23,635.81643 Tonnes • Reserve Blocked in ¼th Width of River- 107452.597 Tonnes <p>(Stretch-III) Demarcated Area- 19.57 Hect.</p> <ul style="list-style-type: none"> • Area under 7.5meters Statutory Barrier-0.8610 Hect. • Area under ¼ Width of the River- 4.31 Hect. • Area under ¾ Width of the River- 15.26 Hect. • Geological Reserve 9, 50,457.5455 Tonnes.
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		<ul style="list-style-type: none"> • Reserve Available in $\frac{3}{4}$ Width of the River - 7,42,210.5261 Tonnes • Reserve Blocked in 7.5meter area- 43,578.76925 Tonnes • Reserve Blockd in $\frac{1}{4}$th Widthof River- 164668.2502Tonnes <p>Plan & Section attached as Annexure-1 to the letter by PP. Safe extractable volume and tonnage determined after deducting the blocked reserve. Geological Reserve Estimation in given as Annexure No.-2 to the letter by PP. Mineable Reserve Estimation in given as Annexure No.-3 to the letter by PP. Mineral Blocked in 1/4th of river bed Estimation In given as Annexure No.-3A to the letter by PP. The slice plan for Mining in the safe extractable Zone drawn is given in Annexure 3B to the letter by PP. Reserve Blocked in 7.5meter area Estimation in given as Annexure No. 3C to the letter by PP The Field Book for Pre & Post is given Annexure No. - 4 & 5 to the letter by PP. Replenishment Study report is enclosed as Annexure No.19 to the letter by PP.</p>
2)	<p>The details of the area to be utilized & not to be utilized for mining, as approved mining plan at the end of 5 years needs to be provided. Whether area demarcated by DMG comes under the utilized zone or un-utilized zone. In addition to this, area required for mining in the next 5 years needs to be provided with proper justification. The details of any prohibited area within the LOI area or</p>	<p>The details of the area to be utilized as per Approved mining plan is 133.33 Hect. Thus area not to be utilized is 702.8 Hect. Annexure No.-5A to the letter by PP. Area Demarcated by Department of Mines & Geology comes under-utilized zone Annexure-6 to the letter by PP. The area required under Mining will be same as approved in the Mining Plan. The justification is given as Annexure No.-7 to the letter by PP. There is no prohibited area within the LOI area/demarcated area.</p>

	demarcated area needs to be provided.																																		
3)	<p>Mining is proposed in the small area and still large area is left how PP will ensure to curb illegal mining in the demarcated area and rest of the area falling in the lease (provision of Enforcement and Monitoring Guidelines for Sand Mining ,2020 shall be referred for the same). In addition to this budget for installation surveillance equipment like CCTV, security guards weigh bridge etc., needs to be provided. The mining intensity of the original proposal considering larger area and the current proposal shall be compared and explained, as there is significant difference in mining intensity per Ha area.</p>	<p>Mining is proposed in the small area where mining will be done as per condition of environment clearance, sustainable Sand Mining Guideline 2016. Enforcement & Monitoring Guideline,2020 for Sand Mining and RMMCR, 2017. To curb the illegal Mining in the remaining area. There are Thirteen entry point (Roads) from where river can be approached. Therefore Thirteen numbers of night vision camera will be installed and data will be made available to state government. Apart from this the Project Proponent takes the responsibility that no illegal Mining will be allowed/ done for remaining area. The budget required to curb the illegal Mining will be as follows:-</p> <p>Budget for Surveillance equipment</p> <table border="1"> <thead> <tr> <th>S. N</th> <th>Particulars</th> <th>Capital cost</th> <th>Recurring Cost</th> </tr> </thead> <tbody> <tr> <td>i.</td> <td>Transport Permit</td> <td>4.0 Lacs</td> <td>-</td> </tr> <tr> <td>ii.</td> <td>CCTV Camera</td> <td>6.0 Lacs</td> <td>0.6 Lacs</td> </tr> <tr> <td>iii.</td> <td>Weight bridge</td> <td>25.0Lacs</td> <td>2.50 Lacs</td> </tr> <tr> <td>iv.</td> <td>Personal Computer with power backup</td> <td>2 .00Lacs</td> <td>0.2 Lacs</td> </tr> <tr> <td>v.</td> <td>Mobile Application Barcode Scanner</td> <td>3.0 Lacs</td> <td>0.3 Lacs</td> </tr> <tr> <td>vi.</td> <td>Radio Frequency identification tags (RFID) and Global Positioning System (GPS) tracking</td> <td>4.0 Lacs</td> <td>0.4 Lacs</td> </tr> <tr> <td>vii.</td> <td>Annual</td> <td>-</td> <td>4 Lacs</td> </tr> </tbody> </table>	S. N	Particulars	Capital cost	Recurring Cost	i.	Transport Permit	4.0 Lacs	-	ii.	CCTV Camera	6.0 Lacs	0.6 Lacs	iii.	Weight bridge	25.0Lacs	2.50 Lacs	iv.	Personal Computer with power backup	2 .00Lacs	0.2 Lacs	v.	Mobile Application Barcode Scanner	3.0 Lacs	0.3 Lacs	vi.	Radio Frequency identification tags (RFID) and Global Positioning System (GPS) tracking	4.0 Lacs	0.4 Lacs	vii.	Annual	-	4 Lacs	
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vii.	Annual	-	4 Lacs																																

			audit of each lease		
		viii	Security Guard	-	93.6Lacs
			Total	44.0 Lacs	101.6 Lacs
		Compassion between original proposal & Current Proposal			
		S. No	Details	Original Proposal	Current Proposal
		1	Mining Area	836.13 Ha.	50.1307 Ha.
		2	Reserve	20.61 Million tonne	2.37 Million tonne
		3	Production	1.12 MT	1.119937707 Tonne say 1.12 Million Tonne
		4	EMP Cost	12.30 Lacs	306.2Lacs
		5	CSR /CER Cost	13.0 Lacs	175 Lacs
		6	Water requirement	16.5 KLD	35.89 KLD
4)	PP needs to submit the compliance of ToR points wherein certificate is required for involvement of no forest land, distance from the protected area, authenticated list of schedule-1 species, conservation plan for schedule-1 species and proof of its submission to Chief Wildlife Warden if not already submitted. PP shall ensure that all these documents along with Annexure to EIA Report and other documents		<p>The compliance of ToR where in certificate is required for involvement of no forest land in given as Annexure-8 to the letter by PP.</p> <p>Distance from the protected area is given in Annexure-9 to the letter by PP.</p> <p>Authenticated list of Schedule I Species and proof of its submission to Chief Wildlife Warden is given in Annexure no.-10 to the letter by PP. It is ensured that annexure to EIA Report and other documents submitted to the ministry uploaded online on PARIEVSH Portal for public viewing.</p>		

	submitted to the ministry should be uploaded online on PARIEVSH Portal for public viewing.	
5)	PP needs to submit a letter from the State Government that there is no violation of Common Cause Judgment dated 2.08.2017 in respect of this mining proposal and there is no production before the SC Order dated 25.11.2013 & after SC Order dated 16.11.2017. An undertaking in this may also be submitted.	After from the State Government that there is no violation of Common Cause Judgment dated 2.08.2017 in this matter and A certificate that then is no production before the SC Order dated 25.11.2013 & after SC Order dated 16.11.2017 is given as annexure no.11 to the letter by PP . Undertaking in this regarding is also given in annexure no.12 to the letter by PP .
6)	The PP needs to submit time-bound, activity-wise action plan for EMP, Occupational Health, Planation, and CER along with the budgetary provision. In addition to details of Environmental Management Cell to be established for implementation of EMP needs to be submitted along with details of manpower and cost.	Time-bound, activity-wise action plan for EMP, Occupational Health, Planation, and CER along with the budgetary provision is given in annexure No.13 to the letter by PP . Along with Environmental Management Cell to be established for implementation of EMP needs to be submitted along with details of manpower and cost.
7)	PP needs to ascertain the impact of transportation and details of transportation route viz. (length of the road, type of road, passing through the village or habitation) and mitigative measures to be taken for abatement of pollution due to transportation. The budget for the same needs to be provided.	Impact of the transportation of mineral on local transport infrastructure averred and found to be in excellent. State highway adjoining to lease. There is a 7.8 Km Kacha road in SE direction. No habitation/Villages located around this Kacha road. The Width of Road is about 6 mtr. Considering 20 Tonnes capacity and 240 days working about 118 trucks will ply on this Kacha Road. A Budget of Rs. 15 Lacs per annum has been proposed for maintenance of 7.8 km Kacha road and water will be sprinkled twice daily and plantation is also proposed on both side of Kacha Road. Around 18,720 Trees will be planted on the both side of three layers. For these Rs.15.00 lacs for

		Dust Suppression and Rs.187 Lacs for plantation has been proposed in EMP project. Transportation map in Attached as Annexure no.14 to the letter by PP.
8)	In case there any proposal for utilization of land outside the mining lease for transportation with a mutual agreement with villagers then details of the same needs to be provided along with proposed compensation details.	There no proposal for utilization of land outside the mining lease for transportation.
9)	PP needs to re-estimate the requirement of water for plantation, dust suppression and domestic use. The source of water needs to be mentioned. The cost of water tanker etc. needs to be mentioned in EMP.	Requirement of water re-estimate for plantation dust suppression and domestic use. The cost of water tanker is Rs. 900 per tanker for Annexure No.-15 to the letter by PP
10)	PP needs to confirm that is there any other homogeneous mining lease within 500 meters of this lease and forming cluster. If, yes details of the same needs to be provided.	A certificate that there is homogeneous Mining lease within 500 meters of this lease is given in Annexure no-16 to the letter by PP.
11)	It has observed that PP has changed the consultant a letter in this regard needs to be submitted in pursuant to Ministry's O.M. No. J11013/41/2006-IA. II(I) dated 17.03.2010.	After compliance of Mining O.M. No. J-11013/41/2006-IA. II(I) dated 17.03.2010 is given as annexure no.17 to the letter by PP.
12)	PP has provided details of many court cases which are on various issues. Therefore, PP needs to provide status of the case wherein the case is pertaining to issue of grant of EC to present proposal, grant of LoI, illegal mining by PP etc. The Complete	The statues of the court cases pertaining to issue of grant of EC to present proposal, grant of LoI, illegal mining by PP is given by as annexure no.-18 to the letter by PP.

	details and status of the same needs to be provided.	
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5. PP has submitted that the Letter of Intent has been issued by the Joint Secretary, Administration, Govt. of Rajasthan, in favor of Mr. Abhishek Chaudhary vide letter no P.10(8) Khan/ Gr. – 2/ 2013, Jaipur dated 27.02.2013 for removal of Sand (Minor Mineral) from Gair Mumkin Nadi Nallah. The proposed lease area is 836.13 ha (excluding prohibited area). The validity of lease area is 5 years. The river area spreads in 28 villages of Raipur Tehsil, Bhilwara district. Lease area was demarcated along the course of the Kothari River.

The Committee observed that the EAC in its minutes of meeting held during 30.05.2018 inter-alia mentioned that “The Committee deliberated the issues and is of the view that Department of Mines and Geology, Government of Rajasthan shall first confirm whether the instant LOI/Lease is valid or not before consideration of the Proposal.” Comment of PD: In response to EAC deliberation and ADS raised in the minutes of the EAC meeting held during 30th May, 2018 to 31st May, 2018, PP submitted the Replenishment Study Report.

PP in its reply submitted on 16.05.2020 mentioned that LOI issued by the state Govt. is valid vide letter no.P10 (1) Mine/ Group-2/ 2013 dated 27.02.2013 issued by Department of Mines & Geology, Government of Rajasthan. As per the letter LOI is valid for 5 years only.

6. PP has submitted that the Mining Plan along with Progressive Mine Closure Plan has been approved by SME, Bhilwara Circle, Bhilwara vide letter no. SME/BHL-C12/F/Mining Plan/Mining Scheme/ 3776 dated 27.08.2013.

Committee previously asked that “The details of the area to be utilized & not to be utilized for mining, as Approved mining plan at the end of 5 years needs to be provided. Whether area demarcated by DMG comes under the utilized zone or unutilized zone. In addition to this, area required for mining in the next 5 years needs to be provided with proper justification. The details of any prohibited area within the LOI area or demarcated area needs to be provided.”

PP in its reply submitted on 10.07.2020 mentioned that “The details of the area to be utilized as per Approved mining plan is 133.33 Hect. Thus area not to be utilized is 702.8 Hect. (Annexure No.-5A). Area Demarcated by Department of Mines & Geology comes under-utilized zone (Annexure-6). The area required under Mining will be same as approved in the Mining Plan (The justification is given as Annexure No.-7). There is no prohibited area within the LOI area/demarcated area.”

As it appears from the submission that large area remains un-utilized the Committee previously asked the PP that “Mining is proposed in the small area and still large area is left how PP will ensure to curb illegal mining in the demarcated area and rest of the area falling in the lease (provision of Enforcement and Monitoring Guidelines for Sand Mining, 2020 shall be referred for the same). In addition to this budget for installation surveillance equipment

like CCTV, security guards weigh bridge etc., needs to be provided. *The mining intensity of the original proposal considering larger area and the current proposal shall be compared and explained, as there is significant difference in mining intensity per ha. Area.*”

PP in its reply dated 11.07.2020 submitted that the “Mining is proposed in the small area where mining will be done as per condition of environment clearance, sustainable Sand Mining Guideline 2016. Environment & Monitoring Guideline for Sand Mining and RMMCR, 2017. To curb the illegal Mining in the remaining area. There are Thirteen entry point (Roads) from where river can be approached. Therefore, thirteen numbers of night vision camera will be installed and data will be made available to state government. Apart from this the Project Proponent takes the responsibility that no illegal Mining will be allowed/ done for remaining area. The budget required to curb the illegal Mining will be as follows: -

Budget for Surveillance equipment: i) Transport Permit (Rs 4.0 Lakh), ii) CCTV Camera (Rs 6.0 Lakh-Capital and Rs. 0.6 Lakhs-recurring), iii) Weigh bridge (Rs 25.0 Lakh-Capital and Rs 2.50 Lakh-recurring), iv) Personal Computer with power backup (Rs 2.0 Lakh-Capital and Rs 0.2 Lakh-recurring), v) Mobile Application Barcode Scanner (Rs 3.0 Lakh-Capital and Rs 0.3 Lakh-recurring), vi) Radio Frequency identification tags (RFID) and Global Positioning System (GPS) tracking (Rs 4.0 Lakh-Capital and Rs 0.4 Lakh-recurring), v) Annual audit of each lease (Rs 4.0 Lakh-recurring) , and vi) Security Guard (Rs 93.6 Lakh-recurring).

Compassion between original proposed & Current Proposed

S.no	Details	Original Proposed	Current Proposed
1	Mining Area	624.39 Ha.	50.1307 Ha.
2	Reserve	11.31 Million tonne	2.22 Million tonne
3	Production	0.84 Million Tonne	0.82 Million Tonne
4	EMP Cost	11.50 Lacs	200 lacs
5	CSR /CER Cost	10.50 Lacs	167 lacs
6	Water requirement	13 KLD	17.14 KLD
7	Project Cost	1.40 Cr	3.20 Cr.

The Committee observed that to achieve a production of 1.12 MTPA the area required is very less as compared to LOI allocated area or area demarcated by DMG. The Committee asked State Government that why a larger area is provided. The Representative of the State Government informed the Committee that it’s the policy of Rajasthan Government to grant large area tehsil wise and for the remaining un-utilized area the onus of preventing illegal mining is with PP & State Government. The Committee is of the view that SOP in this regard may be submitted by the State Government.

In addition to above, Committee is also of the view that policy of granting large mining area tehsil wise is not feasible as it blocks the mineral resource and lead to shortage of supply of the sand in the State and also the loss of revenue to

State Government. The State Government may look into the policies and grant only that much area which is sufficient for the said production or as per demand of the sand in the State.

Committee observed that PP in its submission made to the Ministry mentioned that “The extractable Replenished quantity per Hectare is about 36577 Tonne. So to achieve 1.2 million Tonnes per annum the net area required will be 30.62 Hectare. So total net area required during the next five years will be 30.62 x 3 = 91.86 ha. The area worked during 1st years and 2nd Year will be worked out in the 4th & 5th year respectively.” The Committee is of the view that area required to achieve 1.2 million TPA of production is 30.62 Ha.

7. The Proponent has submitted that the proposed project is confined to dry bed extraction of sand from the river bed. The operation will be carried out by semi-mechanized method. Mine lease area will be worked in blocks for ease of operation. However, as the digging depth will be restricted to 3.0 m only or 1.0 m above the ground water table, material will still be available below. This will be further replenished to some extent during rainy season. Blocks will be worked systematically as the width is limited while length is much more. As the lease period is 5 years, some of the area will be left un-worked at the end of lease period. Thickness of the bench is limited to 3.0 m only and width will be more than the height of the bench. River bank side will be protected by 7.5 m offset on each side on Kothari River and smaller tributaries. Bank side natural slope will not be disturbed. This will prevent collapse of bank and erosion. However, the height of the bank with respect to river bed is varying from 1.0 to 7.0 m only. The pit limit is restricted up to 3.0 m below the ground level or 1.0 m above the water table. Roads in the lease area for the movement of loaded trippers / trucks will not have slopes more than 1 in 20. Roads will be properly made and sprayed by water sprinkling will be done for dust suppression. Every block will have its own approach roads, which already exists and is well connected to main highways. Light weight excavators will be used for loading of mineral in trippers / trucks. No OB / waste material will be produced. No drilling / blasting required as the material is loose in nature. No processing of mineral will be done.

The Committee observed that EAC in its meeting held during 8.01.2018 interalia mentioned that *“PP to give undertaking that only Scrapers shall be used for mining to ensure that the mining depth be maintained as 1.0 meters (max.) from Original Ground Level and No other heavy machinery like bucket excavators, JCB machines etc. shall be used which may adversely impact the aquatic biota”. In compliance to this condition the PP also submitted an undertaking on nonjudicial stamp paper of Rs 100 bearing No AX 931520 dated 26.02.2020 wherein inter-alia it has mentioned that PP shall use only scraper for mining and no excavator & JCB will be used for mining.*

The Committee observed that in last EAC meeting “The Member Secretary informed the Committee that Ministry has received a representation on 4.05.2020 from Bajri Mining Lease Holders Association wherein it was requested for mechanized mining, mining in night hours and considering the proposal based on the recommendation already made by EAC. One of the PP also reiterated the

same by addressing the EAC and informed the Committee there is sufficient material available for mining and requested for grant of EC.”

The Committee is of the view that now PP has submitted an actual replenishment study which shows that there is some deposition of mineral. PP also submitted the action to be taken for the prevention of illegal mining, State Government is also sensitized for the requirement of replenishment study and methodology for the same, area is already demarcated by State Government, the PP has also increased the budget for the Environmental Management Plan. Therefore, the Committee is of the view the use of machine with bucket capacity of 1.0 m³ and boom length not more than 3 meters may be allowed for this project. Regarding timing of the mining the Committee is of the view that mining shall be restricted to day hours only (9 AM to 6 PM) till the time PP demonstrate the compliance of EC conditions and effective measures to be taken for the protection of environment as per EC Conditions. The depth of mining shall not be more than 1 meter from OGL (un mined area).

8. PP submitted that the site elevation is 578 MSL highest and working level will be 575 MSL (3 m bgl). The ground water is at 570 MSL (8 m bgl). The working depth of mining will be restricted to 3.0m from river bed or 1.0m above the ground water table, whichever is less. Hence, ground water table will not be intersected. PP has submitted that the daily water demand will be 16.5 KLD, out of which 3.5 KLD will be used for domestic purpose and 13.0 KLD for dust suppression. Water will be obtained through tanker supply from near village. NOC from Gram Panchayat for water supply has been obtained.

The Committee previously asked that PP needs to re-estimate the requirement of water for plantation, dust suppression and domestic use. The source of water needs to be mentioned. The cost of water tanker etc. needs to be mentioned in EMP.

PP in its reply submitted on 11.07.2020 re-estimated the water requirement and it has mentioned that total water requirement will be 35.89 KLD (0.4 KLD for domestic use, 35.1 KLD for dust suppression and 0.39 KLD for plantation). The cost of water tanker is Rs. 900 per tanker.

The Committee is of the view that water requirement for dust suppression is only for one cycle of spraying but for effective dust suppression at least 3 cycles/day is required and thus the water consumption from the project will be around 106.09 KLD (0.4 KLD for domestic, 105.3 KLD for dust suppression and 0.39 KLD for plantation).

9. PP has submitted that the project is linear dry bed mining confined to river bed only. Thus, there is no scope for plantation in the lease area. It is proposed to develop social forestry in the approach villages at public places like school, PHC's, Panchayat Bhawan with due permission from Panchayat and in consultation with Forest Department. Predominance will be given to school and PHC's. Mining activities will not cause any harm to riparian vegetation cover as the working will not extend beyond the offset left against the banks. Plantation has been proposed on both sides of the roads as greenbelt to provide cover

against dust dissemination. A massive plantation will be done nearby the mine area to mitigate the ill-effects of mining and to improve environment of its surrounding area. Native plants like Neem, Pipal, Khejri, Mango and other local species will be planted. The management will give emphasis on plantation and will also motivate local persons for plantation during rainy season. This will also increase the consciousness in workers and near-by villagers for greenery. Fruit trees can contribute towards their financial gains. PP has submitted a 5 year action plan for Green Belt Development with a plantation rate of 3200 saplings/year. A total of about 18,720 trees of native species along with some fruit bearing and medicinal trees will be planted at various places in a span of five years. The green belt development will be carried out by Project Proponent and maintenance will be done by the villagers/ NGO's with their active participations. PP has earmarked a budget of Rs. 187 Lakhs towards plantation including maintenance.

The Committee in the last EAC meeting asked that "The PP needs to submit timebound, activity-wise action plan for EMP, Occupational Health, Planation, and CER along with the budgetary provision. In addition to details of Environmental Management Cell to be established for implementation of EMP needs to be submitted along with details of manpower and cost".

PP in its reply dated 11.07.2020 submitted that 3 Layer plantations on both side of the kachha road Will increase the floral diversity of the area. Sufficient availability of Water will be ensured for green belt. The green belt area once marked will not be disturbed during life of mine. The lease area is devoid of any vegetation. Total of about 18,720 trees of native species along with some fruit bearing and medicinal trees will be planted at various places in a span of five Years. Total budget of Rs. 187 Lakhs has been earmarked for 5 years towards Greenbelt.

The Committee is of the view that PP shall plant not less than 4000 saplings of within a period of 2 years. The height of seedlings shall not be less than 2 meters. Species such as Azadirachta indica (Neem), Ailanthus excels (Ardu) Albizia lebbeck(Siris), Ficus religiosa (Peepal), Lasora (Cordia dicotoma), Dalbergia sissoo (Shisham), Tamarindus indica (Iml), Morus alba (Shahtoot), Ziziphus mauritiana (Ber), Syzygium cumini (Jamun), Mangifera indiaca (Mango), Diospyros melanoxylon (Tendu), Annona squamosal (Sitafal), Pithecelabium dulce etc.(Jungle jalebi) . The Plantation shall be carried out along the road side, banks of river and public places under social forestry programme in consultation of local authorities in five year". The budget proposed for plantation shall not be less than Rs 187 Lakh and the same may be increased if required.

10. PP submitted that there is no forest land involved in the lease area. Project Proponent reported that there is no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/ Elephant Reserves (existing) is situated within 10km of the mining lease area as per the primary survey and the available secondary data. A certificate has been obtained stating that the above mentioned, from the Office of Deputy Conservator of Forests, Bhilwara vide letter no. F()Survey/Uvas/2060 dated 11.03.2015. PP has also reported that a certificate is issued regarding the mine site not falling in Aravali Hills,

authenticated by Department of Mines and Geology vide letter no. 115/2012/87 dated 06.02.2014. The area is not covered under Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.

The Committee in the previous meeting asked the PP to submit the certificate w.r.t involvement of forest area in the mining lease.

The PP in its reply dated 11.07.2020 submitted the letter No F)Survey/Uvas/2060 dated 11.03.2015 issued by DFO, Bhilwara, wherein it has mentioned that said land is not falling under forest area. In the same letter it has mentioned that there is no National Park, Sanctuary, Biosphere Reserve, Wildlife Corridor, Tiger/Elephant Reserve (existing as well as proposed) within 10 km radius of the mine lease.

11. PP submitted that a detailed biological study of flora and fauna (core and buffer zone) has been carried out. The authenticated list of flora and fauna has been obtained from the Office of Deputy Conservator of Forest, Tonk vide letter no. F) tak/Uvas/2060 dated 11.03.2015. Schedule – 1 fauna Peafowl has been reported in the buffer zone during the study period. The conservation plans for Peafowl has been prepared by in-house expert. An amount of Rs. 14.50 lacs have been earmarked for the conservation of schedule – 1 species.

The Committee in the previous meeting asked the PP to submit authenticated list of schedule-1 species, conservation plan for schedule-1 species and proof of its submission to Chief Wildlife Warden if not already submitted.

PP in its reply dated 11.07.2020 submitted a list of flora and fauna in the Core and Buffer Zone which also includes Schedule-I Species authenticated by DCF, Bhilwara vide letter no. F) Survey/Uvas/2060 dated 11.03.2015. Further, PP submitted a letter written to Chief Wildlife Warden vide letter dated 02.06.2020 for approval of conservation plan.

12. PP on 16.05.2020 submitted the District Survey Report of District Tonk, in pursuant to MoEFCC Notification dated 15.01.2016.

13. PP has submitted that Baseline data for ambient air quality (PM10, PM2.5, SO₂ & NO₂), water quality, noise level, soil and flora & fauna was generated for the period during October 2013 to December 2013. The criteria of the baseline data collection were based on the impact zone on both the sides of the river bank which was expected to be around the 2-3km from both the sides. The stations were considered based on their sensitivity by considering the close proximity with the sensitive zones like reserve forests and expected high pollutant concentration zones like Naka etc. The results obtained for the collected surface water samples indicate that the surface water qualities were found to be well within the prescribed standards Limits (Class C). The analysis results indicate that pH and conductivity of the groundwater was to be in range of 6.98 – 7.32 and 1986 - 5568 µS/cm. The TDS were found to be in the range of <500 mg/l in all samples. Other parameters like chlorides and sulphate were observed to be well within the prescribed limits. The physic – chemical analysis

for some of the parameters has exceeded the standards as per IS: 10500. The water quality is not potable in nature and needs necessary treatment before drinking. The necessary treatment required to minimize the impact has been mentioned in EMP and cost to be borne by the Project Proponent has been given in CSR activities. An auto weather monitoring stations was installed at Nathidiyas village during the study period to record various meteorological parameters on hourly basis to understand the wind pattern, temperature variation and relative humidity variation. The average wind speed recorded during the study period was 0.78 m/s. Calm conditions prevailed for 44.20 %. The prevalent wind direction accounting for maximum length of time is NW to SE, NE to SW and E to W. The results of the monitored data indicate that the ambient air quality of the region in general is in conformity with respect to norms of National Ambient Air Quality standards of CPCB, at all locations monitored. It is observed that the day time noise levels are in accordance to the prescribed limit of 55 dB(A) and While, during night time, the maximum sound level was observed 43.7 dB(A) at Dhulkera (N2) and minimum 35.0 dB(A) at N2, N3 & N4. The sound level was found within the permissible limit of CPCB standard at all the monitoring stations in the study area.

The Committee in the previous meeting asked that i) PP needs to ascertain the impact of transportation and details of transportation route viz. (length of the road, type of road, passing through the village or habitation) and mitigative measures to be taken for abatement of pollution due to transportation. The budget for the same needs to be provided and ii) In case there any proposal for utilization of land outside the mining lease for transportation with a mutual agreement with villagers then details of the same needs to be provided along with proposed compensation details.

PP in its reply submitted on 11.07.2020 mentioned that the Impact of the transportation of mineral on local transport infrastructure averred and found to be in excellent. State highway adjoining to lease. There is a 7.8 Km Kacha road in SE direction. No habitation/Villages located around this Kacha road. The Width of Road is about 6 mtr. Considering 20 Tonnes capacity and 240 days working about 118 trucks will ply on this Kacha Road. A Budget of Rs. 15 Lacs per annum has been proposed for maintenance of 7.8 km Kacha road and water will be sprinkled twice daily and plantation is also proposed on both side of Kacha Road. Around 18,720 Trees will be planted on the both side of three layers. For these Rs.15.00 lacs for Dust Suppression and Rs.187 Lacs for plantation has been proposed in EMP project. PP also submitted that there is no proposal for utilization of land outside the mining lease for transportation.

The Committee is of the view that saplings shall be planted in 3 rows and distance between the saplings should not be more than 2.5 meters. In addition to this seedling of height not less than 2 meters to be planted. The plantation along the road side should be completed in 1st year only.

14. The Project Proponent reported that the Public Hearing was conducted on 11.12.2014, 11:00 AM at Tehsil Office, Tehsil – Raipur, District – Bhilwara, Rajasthan as per the guidelines of EIA Notification 14th September’ 2006 and its subsequent amendments. This meeting was conducted for the Bajri Mine

(Lease Area – 836.13 ha.; Production – 1.12 MMTPA), presided by Sh. Suresh Kumar, Additional District Collector; Bhilwara in the presence of Sh. Mahaveer Mehta, Regional Officer, Rajasthan State Pollution Control Board, Bhilwara. Notice for the Public Hearing was published in “Rajasthan Patrika” & “Hindustan Times” on dated 08.11.2014 & 09.11.2014. The issues raised during the Public Hearing were also considered and discussed during the meeting, which inter-alia, included that request to start the mining as soon as possible, No water retain in the wells, Mining should be legalize, Royalty should be start, Employment, Plantation etc. effective implementation of measures will be adopted. Project Proponent has made the Action Plan with budgetary provisions. *The Committee deliberated in EAC held in Aug 2015 and was of the view that PP needs to implement the action plan and the Implementation Report has to be submit to the Regional Office of the MoEFCC every six month.*

15. PP has made a budgetary provision towards Corporate Social Responsibility (CSR) as Rs. 11.0 Lakhs as capital cost and 1.10 Lakhs as recurring cost/annum. This includes 1) Health Checkup at camps – Rs. 2.0 lakhs (Capital) & Rs. 0.20 lakhs (recurring/annum), 2) Surveillance Programme of the Workers - Rs. 1.5 lakhs (Capital) & Rs. 0.15 lakhs (recurring/annum), 3) Assistance to Local Schools, Scholarships to Students - Rs. 2.5 lakhs (Capital) & Rs. 0.25 lakhs (recurring/annum), 4) Sanitation and Drinking Water Facilities - Rs. 3.0 lakhs (Capital) & Rs. 0.30 lakhs (recurring/annum), 5) Vocational Training to persons for income generation - Rs. 1.0 lakhs (Capital) & Rs. 0.10 lakhs (recurring/annum) and 6) Assistance to Self Help Groups - Rs. 1.0 lakhs (Capital) & Rs. 0.10 lakhs (recurring/annum).

The Committee previously asked the PP to submit the time bound action plan and budget for CER/CSR.

The PP in its reply submitted on 11.07.2020 mentioned that budget earmarked for CER/CSR is Rs 175 Lakh which includes i) Rs 5.0 Lakh for Health checkup camps for villagers (every six months), ii) Rs 4.0 Lakh for Surveillance Programme of the worker (annually), iii) Rs 4.0 Lakh for assistance to Local Schools, Scholarships to Students (annually) , iv) Rs 6.0 Lakh for Sanitation & Drinking Water Facilities [Financial aid will be provided to resume the water supply by ground water and PHD supply Water supply through tanker in villages Near Villages. V) 3.0 lakhs for Assistance to self help group vi) Construction and maintenance of water Tank in Near villages Water filter will be provided in the villages], v) Rs 4.0 Lakh for Construction and Maintenance of Drainage system in the Nearby Villages with the help of Village Panchyat., vi) Rs 4.0 Lakh for Vocational Training to Person for Income Generation, vii)Rs.3.00 lakhs for Construction & maintenance of drainage water system,viii) Rs 3.0 Lakh for construction of Rain water harvesting structure, ix) Rs. 3.00 Lakhs for Construction and maintenance of toilets for boys/girls in Government Schools.

Observation of EAC: *The Committee observed that similar activities is proposed by the other project and there should not be any duplication of activities and other activities such as i) installation of solar light in the school and villages, ii) providing computers with internet connection and furniture to nearby government*

schools, iii) distribution of sanitary napkins in villages, iv) construction of additional room in schools etc. may be done under CER fund.

16. Project Proponent reported that as the mining is in river bed classified as Gair Mumkin Nadi Nallah. Hence, no R & R issues are involved.

17. The Project Proponent has earmarked Rs. 14.80 Lakhs towards Environmental Protection Measures. This cost will be spending phase wise along with the growth of project. This will include 1) Pollution Monitoring – Air, Water, Noise - ₹ 3.0 Lakhs, 2) Dust Suppression (Water Sprinkling) - ₹ 3.0 Lakhs, 3) Wire Fencing at Plantation Sites - ₹ 0.5 Lakhs, 4) Plantation Including Maintenance - ₹ 0.8 Lakhs, 5) Rain Water Harvesting - ₹ 5 Lakhs and 6) Haul Road Other Roads Repair and Maintenance - ₹ 2.5 Lakhs.

The Committee previously asked the PP to submit the time bound action plan and budget for EMP.

PP in its reply submitted on 11.07.2020 submitted the revised budget for EMP as Rs 306.25 Lakh which includes i) Rs 1.35 Lakh/annum for Environment al Pollution Monitoring i.e. Water, Air, soil & Noise etc. [Air Sample 6 Location 6 x2x3500=42,000/- Water Sample 9 Location 9x2x2500= 45,000/- Noise Sample 6 Location 6x2x2000= 24,000/- Soil Sample 6 Location 6x2x2000= 24,000/- Total cost of monitoring year wise 1,35,000/ ; frequency of monitoring half yearly], ii) Rs 15.0 Lakh/annum for Dust Suppression (Water Sprinkling) (frequency daily); iii) Rs 4.0 Lakh for Environmental Awareness Programme (monthly), iv) Rs 3.5 Lakh for Occupational Health and Safety Mine worker (Health camps, training etc) and v) Rs 187.0 Lakh for Green Belt & plantation. PP also submitted that cost of water tanker is Rs 900/Tanker.

18. PP has submitted that the occupational health impacts of river bed sand mining is very remote. However, such evidences have not been proven so far, though the mining is undertaken for years. No records for any occupational health problems were reported during the primary survey. However, in case of health implications will be reported, following mitigation measures will be adopted - All employees will be trained, educated and encouraged to follow best and safe work practices in their working environment. Personnel Protective Equipments like face mask, earmuffs, ear plugs, gloves, safety goggles and safety boots is being provided. All workers will be subjected to Initial Medical Examination as per Mines Rule 1955 both at times of appointment and Periodical Medical Examination at least once in five years. First aid trained personnel's, first aid stations fully equipped as per Mines Rules 1955 and first aid kits will be made available all the time. Awareness programme regarding the use, maintenance and up-keep of respirators will be conducted on regular basis so that employees are trained to handle the equipment properly. The schedule Pre-placement Medical Examination and Periodical Medical Examination has been planned.

The Committee previously asked the PP to submit the time bound action plan and budget for Occupational Health Plan.

PP in its reply submitted on 11.07.2020 mentioned that for the Persons working in dusty area to be provided with protective wears such as helmets, dust masks, ear muff, Heat stroke. Continuous sitting driving vehicle the Backaches. Hearing loss. Body electrical resistance damage. Regular water sprinkling at dust Generating areas, Haul roads. Occupational health check-up of all workers Working in mine and Pulmonary function test for workers working in dusty areas. Ergonomic factor & noise issue will be taken up during the perches of machines. A budget of Rs 3.5 Lakh is earmarked for occupational health plan.

19. PP submitted that there is No specific litigation is pending against the applicant and the lease area in any court of law to the best of our knowledge.

However, there is a PIL in the High Court of Rajasthan filed by an NGO, Nature Club of Rajasthan. The order was passed on dated 15th April' 2013 by Hon'ble Court giving directions to State Govt. to finalize the allotment of mining leases of bajri in the State within a period of six months as per new rules and adopt procedure for revenue collection under new rules only.

The Committee observed that in the instant case as reported by PP and State Government the LOI issued by the state Govt. is valid as per the Hon'ble Supreme Court order dated 10.05.2019 & 06.12.2019. Although PP has provided the list of cases on various issues wherein the project proponent is a party. During the meeting the Committee confirmed from the PP that whether there is any case which is directly pertaining to grant of EC. The PP informed that there is no such court case.

20. PP has submitted the affidavit vide Certificate No. AX 931519 dated 26.02.2020 as per the Ministry's Office Memorandum No.350/2017-IA.III(Pt.), dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

The Consultant in the EIA report has given a declaration that they confirm that they shall be fully accountable for any misleading information mentioned in the statement. Further, PP has given undertaking in EC Report that

they hereby give undertaking that the data and information given in the application and enclosures are true to be best of their knowledge and belief and they are aware that if any part of the data and information found to be false or misleading at at any stage, the project will be rejected and clearance given, if any to the project will be revoked at their risk and cost.

*The Committee observed that in the previous meeting the Member Secretary informed the Committee about the complaint received from the Sr. Advocate wherein the issue raised is regarding applicability of Common Cause Judgment dated 2.08.2017 and illegal mining in the sand mining cases from the State of Rajasthan. Due to this the Committee in its meeting held during 06.05.2020 asked the PP to submit **"a letter from the State Government that there is***

no violation of Common Cause Judgment dated 2.08.2017 in respect of this mining proposal and there is no production before the SC Order dated 25.11.2013 & after SC Order dated 16.11.2017. An undertaking in this may also be submitted.”

PP in its reply submitted on 11.07.2020 submitted that after from the State Government that there is no violation of Common Cause Judgment dated 2.08.2017 in this matter and A certificate that then is no production before the SC Order dated 25.11.2013 & after SC Order dated 16.11.2017 has been provided vide letter No. Adm/JPR/courtcase/2020/1523 dated 05.06.2020 wherein it has mentioned that project proponent has undertaken mining activities on the lease hold area in term of the temporary working permits issued by the State of Rajasthan vide order dated 19.12.2013, which was issued as per the direction of the Hon'ble Apex Court dated 25.11.2013 in S.L.P.(Civil) No.34134/2013 titled as State of Rajasthan Vs Nature Club of Rajasthan and others and as such the project proponent has not undertaken mining activity without due permission. Mining activity was carried out under the order of Hon'ble Apex Court and thus is not in violation of common cause judgment. No mining has been carried out by project proponent in the lease area before the Hon'ble Supreme Court Order dated 25.11.2013 in S.L.P (Civil) No.34134/2013 titled as State of Rajasthan Vs Nature Club of Rajasthan and after order dated 16.11.2017 in S.L.P (Civil) No.34811/2013 titled as Naveen Sharma Vs State of Rajasthan.

PP has further submitted the affidavit vide Certificate No. AV 278822 dated 11.06.2020 as per the Ministry's Office Memorandum No.350/2017-IA.III(Pt.), dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

The Committee in the previous meeting also asked the PP to submit a letter regarding change of consultant in pursuant to Ministry's O.M. No. J11013/41/2006-IA. II (I) dated 17.03.2010.

PP In compliance of Ministry Office Memorandum No.-J-11013/412006-IA.II (I) dated 17.03.2010 submitted a letter wherein it has mentioned that “I hereby submit the Intimation regarding the change of Environment Consultants from Enkay Enviro Services Pvt. Ltd Jaipur to Overseas Min-Tech Consultants Jaipur”.

21. The Proponent submitted that total project cost will be approx. Rs. 30 Lakhs. During the operational phase, about 78 people will be employed directly. The project will also provide some indirect employment to the people of nearby area of mine site. Some people will get engaged in some pet shops like tea shop, vehicle repair centre etc. It will also provide some need-based opportunity to the local public.

22. Replenishment Study:

i) Dendy Boltan formula: The Ministry granted ToR vide letter No. J-11015/232/ 2013-IA.II (M) dated 17.10.2013 wherein one the condition was for submission of detailed replenishment study. The PP in EIA/EMP Report submitted some details in EIA/EMP Report based on Dandy-Bolton formula. The EAC in its meeting held during 24-25 Oct 2016 inter-alia mentioned that *“The EIA/EMP reports on sand mining proposals estimate replenishment rates based on theoretical Dendy–Boltan formula and not on actual replenishment studies. The Dendy Boltan formula is not very useful to estimate replenishment rates at a particular stretch of a river. Its application to cases such as those of Rajasthan, where river is not perennial, is even more problematic”*. *“In case of Sand/Bajri mining projects from the State of Rajasthan, Project Proponents shall first conduct a scientific replenishment study and submit the report before the EAC for further consideration of amount of production for mining of sand/bajari on yearly basis. Therefore, the Committee deferred all such sand/bajri mining proposals of State of Rajasthan.”*

ii) Meyer-Peter’s equation: The PP did not submit the revised EIA/EMP Report. But based on the above meeting entrusted the task of replenishment study to CMPDI and submitted the same to MoEF&CC online on 03.04.2018. The Committee during EAC meeting held during 08.01.2018 observed that CMPDI conducted a replenishment study of the entire mining lease area during 2017 which is based on the Meyer-Peter’s equation.

Comment of PD: As per the Replenishment report submitted by PP on 03.04.2018 (CMPDI-Phase-II, February, 2018), the details such as lease dimensions, Estimated Bed Load, Estimated deposition or replenishment, Sediment Load Deposition per month, Annual Replenishment, Estimated Annual Replenishment, Estimates Reserve, Annual Production Capacity envisaged (as per mining plan), Estimated Annual replenishment, Replenishment Status vis-à-vis planned production have not been detailed out in the report for this particular lease.

- a) As per the EIA/EMP Report the details of the geological & Mineable Reserves are as follows:

<u>Geological Reserves</u>	<u>Mineable Reserves</u>	<u>Annual Production (MTPA)</u>	<u>Life of Mine (Years)</u>
22.33 MCM (2,23,28,873.56 m ³)	19.0 MCM	1.12	5 years

- b) In the EAC meeting held during 8.1.2018 the then EAC noted the submissions of the Consultant and observed that the present exercise is essentially an empirical attempt of estimating sand replenishment from Meyer’s Peter equation. The Committee also enquired about the extent of over-estimation already included in the formula vis-a-vis the actual figures. M/s CMPDI submitted that Meyer Peter’s equation takes into account an overestimation of 25-30% on conservative basis. The Committee thus observed that the estimations arrived at by M/s CMPDI

in Para 4 are already overstated in comparison to actual figures. However, the Committee also noted the submissions of M/s CMPDI that the sand/ bajri existing in the river beds in State of Rajasthan are paleo sand deposits rather than annually replenished sand as the rainfall pattern is not regular in the state and therefore, does not lead to annual replenishment.

- c) In the EAC meeting held on 08.01.2018 the then Committee also interacted with the representatives of the State Government of Rajasthan and noted their submissions. The officials of State Government submitted that due to stoppage of river sand/ bajri mining in the State, many infrastructure projects (covering Government as well as Private) have come to a halt. Additionally, the State Government is also loosing revenue (royalty, license fee etc.). Further, being a mineral rich State, the said order has adversely affected the socio-economic situation w.r.t. loss of jobs/ livelihood etc.
- d) The then Committee made detailed deliberations and observed that the river sand mining proposals for the State of Rajasthan cannot be governed by annual river replenishment studies alone and there is a need for caution in sand/ bajri mining of these paleo deposits. The Committee also observed that M/s CMPDI has not presented its data in the Scientific Replenishment Study report as the same was accepted to be rough estimate and non-representative of the actual replenishment status.
- e) The then Committee made detailed deliberations on the issues and noted that there is a requirement of identification of active mining area within leased river stretches and subsequent identification and preparation of cross section for assessing replenishment of sand in coming years. Hence, mining permission is technically required to be granted so as to conduct replenishment studies in future and demonstrate the same to State Govt. to regulate mining of paleo deposits in future. Accordingly, EAC recommended mining of river sand/ bajri to up to 25% capacity of the annual proposed production capacity subject to submission of information and undertaking. The Committee observed that 25% of annual proposed capacity for this project comes out to be 0.28 MTPA (25% of 1.12 MTPA).
- f) Based on the recommendations made by EAC in its meeting held during 8.01.2018, the Ministry, vide letter dated 05.02.2018 has requested Department of Mines and Geology, Government of Rajasthan/Project Proponent to submit the above-mentioned information. In this context, the Department of Mines and Geology, Government of Rajasthan, vide letter dated 20.04.2018 has submitted the information for 18 LOIs and as the information was technical in nature the proposal was placed before EAC in its meeting held during 30-31 May, 2018 wherein the State Government submitted the details of identified the mineable block of 50.13 Ha for this mining lease (Stretch-I, II & III). The Committee deferred the proposal and sought requisite information with respect to validity of LoI and other details.

- g) In view of the requisite information as sought during 8.01.2018 & 30.05.2018 EAC meetings, the PP submitted the replenishment study report on 03.04.2018. As complete information was not uploaded an EDS was raised on 07.10.2019, the PP submitted the desired information on 16.05.2020 and the proposal was considered in EAC meeting held during 23.06.2020 wherein the Committee deferred the proposal for want of requisite information. PP submitted the information on 11.07.2020 and the proposal is considered in the EAC meeting held during 19.08.2020.
- h) The Committee observed that technical deliberation on feasibility of project for mining of 1.12 MTPA was almost completed during 2015-16 but replenishment details submitted by PP was based on the Dandy and Bolton formula therefore Committee asked PP to submit the revised EIA/EMP. The PP did not submit the same. The issue thereafter remains is submission of replenishment study report and finalization of safe extractable quantity for this mining lease. The Committee observed that replenishment study for the entire mining lease area has already done by CMPDI and results of which shows that there is a replenishment of the mineral. Although, the said study was based on theoretical calculations but still it gives rough estimates about the replenishment of the mineral in the area.

iii). Replenishment Study based on Pre & Post Monsoon Data: The State Government demarcated the area for mining and PP has also conducted replenishment study based on pre-monsoon and post monsoon data of 2018 over an area which was identified by the State Government. In the EAC meeting held during 24.06.2020 the Committee observed that quantity of the mineral proposed to be excavated as per replenishment study report is 2.19 million TPA (as against 1.12 MTPA). The Committee observed that Replenishment Study Report submitted with EIA/EMP does not give any insight of safe extractable quantity as the blocked reserves in the safety zone is not provided in the report. In the replenishment study report details such as area under 7.5 meters statutory barrier, area under $\frac{1}{4}$ width of the river, area under $\frac{3}{4}$ width of the river for both lease area and area demarcated by DMG needs to be mentioned. The PP in its reply submitted on 02.06.2020 inter-alia mentioned that out of total mining lease area of 836.13 Ha the area under $\frac{3}{4}$ width of river is 627.0975 Ha, area under $\frac{1}{4}$ width of river is 209.0325 Ha and area under 7.5 safety zone is 88.5849 Ha. Further, the area demarcated by DMG for Stretch -I is 12.083 Ha out of this area falling under 7.5 statutory barrier is 0.2947, area under $\frac{1}{4}$ width of the river is 2.173 Ha and area under $\frac{3}{4}$ width of the river is 9.91 Ha. The reserves blocked under $\frac{1}{4}$ th width of river is 113334.7336 Tonne and Reserves available under $\frac{3}{4}$ width of the river is 6,30,438.9910 Tonnes. The area demarcated by DMG for Stretch -II is 18.473 Ha out of this area falling under 7.5 statutory barrier is 0.5437, area under $\frac{1}{4}$ width of the river is 3.523 Ha and area under $\frac{3}{4}$ width of the river is 14.95 Ha. The reserves blocked under $\frac{1}{4}$ th width of river is 107452.597 Tonne and Reserves available under $\frac{3}{4}$ width of the river is 5,27,369.3553 Tonnes. The area demarcated by DMG for Stretch -III is 19.57 Ha out of this area falling under 7.5 statutory barrier is 0.8610, area under $\frac{1}{4}$ width of the river is 4.31 Ha and area under $\frac{3}{4}$ width of the river

is 15.26 Ha. The reserves blocked under $\frac{1}{4}$ th width of river is 164668.2502 Tonne and Reserves available under $\frac{3}{4}$ width of the river is 7,42,210.5261 Tonnes.

The PP also submitted that the extractable Replenished quantity per Hectare is about 36577. Tonne. So to achieve 1.12 million Tonnes per annum the net area required will be 30.62 Hectare. So total net area required during the next five years will be $30.62 \times 3 = 91.86$ ha. The area worked during 1st years and 2nd Year will be worked out in the 4th & 5th year respectively.

The Committee observed that as per mining plan the depth of mining is 3 meters. But the average deposition of mineral as per replenishment study is about 1.44 meters. The PP in the study report proposed a mining with slice of 1 meter. The Committee therefore restricts the depth of mining as 3 meter or water level whichever is less.

As per approved mining plan light weight excavators will be deployed for extraction. Mineral will be loaded in trucks of 20 tonnes capacity trucks and equipment, earth movers will be on hire basis. During EAC meeting held on 8.01.2018 as the actual replenishment study was not available the Committee suggested use of scrapers and also asked for an undertaking from PP in this regard. But now as the replenishment study is available & as per request made by Bajri LOI Holder Association the Committee agreed for use of excavators having bucket capacity not more than 1.0 m³ and boom length not more than 3 meters for this project.

23. Based on the deliberations held during August 25-27, 2015, 24-25 Oct 2016, January 8, 2018, May 30-31, 2018, 22-24 June, 2020 and document submitted by the PP dated 3 Apr 2018, 16 May 2020, 10.07.2020 the Committee **recommended** the proposal for production of **0.6112 MTPA of Sand/Bajri from 16.71 ha each year (maximum area of 50.1307 Ha in 5 years) from the area demarcated by Department of Mines and Geology Rajasthan for the lease of Shri Abhishek Chaudhary located at Revenue Village(s) of Tehsil-Raipur, District-Bhilwara, Rajasthan** subject to the following specific conditions in addition to Standard EC conditions (given at Annexure-III) and also the relevant special conditions as per Sustainable Sand Mining Management Guidelines 2016 and Enforcement & monitoring Guidelines for sand mining 2020:

- 1) Permissible Mining of River Bed Material (Sand/Bajri) shall be limited to 0.6112 MTPA from an effective mineable area of 16.71 ha, with a maximum minable depth of 1 meter from the original ground level as reported in the replenishment study. The permissible minable material of 0.6112 Million Ton will be valid till one year from the day of issuance of the EC.
- 2) For subsequent period, PP shall submit fresh annual replenishment study to MoEF&CC for amendment in EC for mineable quantity and maximum permission depth for mining based on the scientific findings of replenishment study. Such study shall be placed before EAC for

appraisal for next three years to assess rate of deposition and accordingly, minable production capacity and depth can be prescribed based on trends analysis, provided it is found scientifically satisfactory by the EAC. The placing of the study report before EAC is mandatory for initial three years.

- 3) The project proponent shall take all measures for the surveillance as proposed by the PP. The status of implementation with documentary proof needs to be submitted to Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 4) Not more than 16.50 KLD water shall be used for this project. Water shall be sourced from legal suppliers and record of water supplier and trips shall be maintained on daily bases. At least 3 times day water shall be sprayed to avoid fugitive emission. The water tanker having mist generator system shall be used for conservation of water. PP shall submit the status report for implementation along with photograph to Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 5) PP shall plant at least 18720 saplings of within a period of 2 years. The height of seedlings shall not be less than 2 meters. Species such as *Azadirachta indica* (Neem), *Ailanthus excels* (Ardu) *Albizia lebbeck*(Siris), *Ficus religiosa* (Peepal), *Lasora* (*Cordia dicotoma*), *Dalbergia sissoo* (Shisham), *Tamarindus indica* (Imli), *Morus alba* (Shahtoot), *Ziziphus mauritiana* (Ber), *Syzygium cumini* (Jamun), *Mangifera indica* (Mango), *Diospyros melanoxylon* (Tendu), *Annona squamosa* (Sitafal), *Pithecelabium dulce* etc.(Jungle jalebi). The Plantation shall be carried out along the road side, banks of river and public places under social forestry programme in consultation of local authorities. PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 6) The conservation plan in consultation with the Forest Department shall be implemented and compliance of the same shall be submitted to Regional Office of MoEF&CC before 1st July of every year.
- 7) The PP shall implement the mitigation measure to control the impact due to transportation viz. Kaccha road of 12.71 Km, transportation of sand from villages having habitation should be avoided, regular water sprinkling (3 times a day) before transportation of mineral, plantation (not less than 8880 sapling having height of not less than 2 meters) on the both side of this road should be completed within 1 year , trucks shall not be overloaded, spillage of the mineral to be avoided, covered transportation. Implementation report with supporting documents & photographs before and after shall be submitted to the Regional Office

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

- 8) The project Proponent shall implement the committed activities under Corporate Environment Responsibility and implementation report with supporting documents & photographs before and after shall be submitted to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 9) The project proponent shall implement all mitigative measures envisaged in the **Environmental Management Plan (EMP)** and committed during the presentation and subsequent submissions. The water shall be sourced from legal water supplier and record of the same needs to be maintained. In addition to this PP shall also keep a record of water spraying trips on daily basis. A separate Environment management cell (EMC) shall be created with suitable staff having relevant qualification in environment with supporting staff. Implementation report with supporting documents, test reports, geo-locations & photographs before and after and composition of EMC shall be submitted to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 10) PP shall implement the occupational health plan and provide personal protective equipment to all the workers (*helmets, dust masks, ear muffs*), provision of safe drinking water to workers, shelters for rest etc. In addition to this Occupational health check-up of all workers working in mine, and pulmonary function test for workers working in dusty areas. Implementation report with supporting documents & photographs before and after shall be submitted to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 11) The PP shall implement the conditions prescribed in **Enforcement & Monitoring Guidelines for Sand Mining 2020, as applicable for PP** and also SoP issued by the Rajasthan State Government for prevention of illegal river sand mining in the state. Implementation report with supporting documents & photographs before and after shall be submitted to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

2.3 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 Shri Abhimanyu Choudhary is for mining of Bajri (Minor Mineral) with proposed production capacity of 1.68 Million TPA (ROM). The mine 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

lies on Kothari & Khari River and Survey of India toposheet number 45K/2, 45K/3, 45K/6, 45K/7. The Latitudes and Longitudes of the mine lease area are as below:

Zone	River	Latitude	Longitude
I.	Kothari	25°27'41.21" N to 25°25'36.27" N	74°12'38.46" E to 74°37'22.18" E
II.	Khari	25°36'1.10" N to 25°38'7.24" N	74°05'7.79" E to 74°11'41.47" E

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

3. The 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-11015/234/2013-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/19720/2013 dated 20.04.2015 applied for Environmental Clearance** for mining of Bajri (Minor Mineral) with proposed production capacity of 1.68 Million TPA (ROM). The mine lease area is located at Revenue village(s) of Tehsil – Mandal, District - Bhilwara, Rajasthan in the mine lease area of 995.0 ha.

The proposal of EC was appraised before the EAC in its meeting held during 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.**

The Committee recommended additional specific conditions viz. (i) Excavation will be carried out up to a maximum depth of 3 meters from surface of mineral deposit and not less than one meter from the water level of the River channel whichever is reached earlier; (ii) Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical checkup and once in six months and necessary medical care/preventive measures under taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted; (iii) Project Proponent shall appoint a Monitoring Committee to monitor the replenishment study, traffic management, levels of production, River Bank erosion and maintenance of Road etc.; (iv) Transport of minerals shall be done either by dedicated road or it should be ensured that the trucks/dumpers carrying the mineral should not be allowed to pass through the villages; (v) Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density; (vi) Implementation of Action Plan on the issues raised during the Public Hearing. The Proponent shall

complete all the tasks as per the Action Plan submitted with the budgetary provisions during the Public Hearing; (vii) The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centre; Washing of all transport vehicle should be done inside the mining lease; and (viii) Permanent pillars has to be constructed to demarcate width of extraction of ROM leaving 25% of River width from the bank with depth of 1.5m below the ground and 1.2 m above the ground to observe its stability.

In response to ADS raised, **PP vide its letter dated 29.09.2015 (uploaded on PARIVESH on 16.06.2016)** submitted the financial year wise production details for the period from December, 2013 to March, 2014 and April, 2014 to March, 2015.

Additional details were sought from the PP vide letter dated 20.01.2017 to conduct a scientific replenishment study citing the following:

“The matter was examined in the Ministry w.r.t. replenishment study and noted that the Ministry has issued the terms of reference and inter-alia mentioned a condition that the Project Proponent shall conduct a detailed replenishment study and submit the report along with the EIA/EMP. However, the Project Proponent has made a theoretical study based on Dendy Bolton’s Replenishment Formula. In view of the above, the Ministry requested the EAC to recommend the amount of production on yearly basis based on a duly conducted scientific replenishment study before recommending Environmental Clearance. Accordingly, the proposal to discuss the replenishment study issues related to sand/bajri mining projects have been re-considered before the EAC meeting held during October 24-25, 2016.

The Committee deliberated the issues and opined that Replenishment of the sand is a natural process in the perennial rivers. The sand moves along with the water streams and is deposited in the void created in the mined-out areas. Replenishment rates vary depending on nature of watershed, nature of soil and rainfall etc. and mining beyond the natural replenishment rate results into damage of river bed leading to adverse environmental consequences. Mining proposals under the category of river mining are received for Environmental Clearance mainly from States such as Uttarakhand, Himachal Pradesh, Uttar Pradesh, Jammu and Kashmir, Haryana, Bihar and Rajasthan. Analysis of these proposals reveals that the proposals of sand mining from Rajasthan are not in perennial rivers. These are, in effect, paleo sand deposits and are not replenished annually during monsoon season. The mined-out areas are not replenished adequately and may turn into permanent depressions.

The Committee noted that the EIA/EMP reports on sand mining proposals estimate replenishment rates based on theoretical Dendy—Boltan formula and not on actual replenishment studies. The Dendy- Boltan formula is not very useful to estimate replenishment rates at a particular stretch of a river and its

application to cases such as those of Rajasthan, where rivers are not perennial, is even more problematic. In view of the above, there is a need, therefore, to treat the river sand mining proposals from Rajasthan differently from those of other States. The Committee deliberated the issues w.r.t. replenishment study and is of the view that in case of Sand/Bajri mining projects from the State of Rajasthan, Project Proponents shall first conduct a scientific replenishment study and submit the report before the EAC for further consideration of amount of production for mining of sand/bajri on yearly basis. Therefore, the Committee deferred all such sand/bajri mining proposals of State of Rajasthan.”

In response to the ADS, PP uploaded the “Scientific Replenishment Study Report for Bajri/Sand Mine Leases in The State of Rajasthan (Phase-II Report)” dated February, 2018 on PARIVESH on 03.04.2018.

Notably, the proposals of River Sand/Bajri Mining in State of Rajasthan were considered by the Special EAC meeting held on 08.01.2018 pursuant to the judgement of Hon’ble Supreme Court, dated 16.11.2017. These proponents had submitted Scientific Replenishment Study Report prepared by the Central Mine Planning & Design Institute (CMPDI). Apart from M/s CMPDI and PPs, the officials of the State Government of Rajasthan namely Shri Deepak Tanwar, Senior Mining Engineer, Bharatpur and Shri D. P. Gaur, Senior Mining Engineer, Jaipur were invited to attend the EAC meeting.

The Member Secretary appraised the Committee that the 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. The above 19 PPs are covered under 82 LoI holders who have been restrained from carrying out river sand/ bajri mining.

The Consultant, M/s CMPDI, on behalf of PPs submitted that it has carried out three-stage study to estimate the replenishment of sand in the State of Rajasthan (as detailed in the minutes). Based on the study, M/s CMPDI estimated the annual replenishment of sand w.r.t. each of the proposals. For this proposal of M/s. Pradeep Sethi Estimated the Annual Replenishment was found to be 1.61 Million m³. Based on the above replenishment estimations, M/s CMPDI has indicated the replenishment status vis-a-vis annual planned production for each of the case. In case of this proposal of M/s. Pradeep Sethi, it is estimated that “Replenishment will be less than planned annual production.”

The Committee noted that apart from the above estimations, M/s CMPDI has made certain conclusions and recommendations, the salient features of which are as below: -i. The rivers of Rajasthan are ephemeral in nature and not replenished annually as compared to perennial rivers and therefore, the concept of annual replenishment is not applicable. There is a need to consider appropriate change in the policy applicable for annual replenishment of rivers vis-à-vis mine capacity permits in case of Rajasthan. ii. Due to erratic and uncertain occurrence of rainfall in the State, there exists appreciable variation in the amount of replenishment of the rivers. The replenishment achieved at one point of time may

be utilized over more than a year depending upon requirement which needs to be considered while linking annual production with annual replenishment of the rivers in the State of Rajasthan. iii. As per their considered opinion, M/s CMPDI mentioned that there is a need to consider the concept of resource accounting of bajri/ sand in the rivers of Rajasthan and take the replenishment as a measure for resource augmentation. The permissible level of bajri/ sand in each stretch need to be identified and each year, the resource augmentation based on the replenishment of the river need to be added onto it for updating the bajri/ sand. Based on such estimation, quantum of further permits may be decided by State Government. iv. Apart from the above, system of Environment Accounting has also been propagated by United Nations (UN) with System of Environment – Economic Accounting 2012-Central Framework (SEEA-Central Framework) which is a statistical framework consisting of a comparable statistics and indicators for policy making etc. It is a tool that helps in tackling natural resource depletion and environmental degradation. For sand mining projects of Rajasthan, Physical Supply Use Tables (PSUT), as provided in SEEA-Central Framework of UN, may be utilized for sustainable use of sand mining and grant of mining permits. The mining lease in Rajasthan occurs in paleo sand deposits and use if PSUT will be appropriate in this case. v. The installation of observation points may be appropriately considered for determination of replenishment level in each tract of river under consideration. The observation points may be installed at strategic locations and rise in the level of Bajri/ sand may be monitored.

The Committee made detailed deliberations and noted that there is a requirement of identification of active mining area within leased river stretches and subsequent identification and preparation of cross-section for assessing replenishment of sand in coming years. Hence, mining permission is technically required to be granted so as to conduct replenishment studies in future and demonstrate the same to State Govt. to regulate mining of paleo deposits in future. Accordingly, EAC recommended mining of river sand/ bajri to up to 25% capacity of the annual proposed production capacity **subject to submission** of information and undertaking as below:

(xi) DMG, State Government to submit demarcated river stretch through latitudes and longitudes (out of the total lease) where river sand/ bajri mining can be permitted based on available reserves and Original Ground Level (OGL) at each cross section in consultation with State Irrigation Department;

(xii) PPs and M/s CMPDI to submit latitudes and longitudes of the identified cross section, duly authenticated by State Government, which shall be used for replenishment study in future for calculation of replenishment amount/ rate;

(xiii) PP to give undertaking that only Scrapers shall be used for mining to ensure that the mining depth to be maintained as 1.0 meters (max.) from Original Ground Level and No other heavy machinery like bucket excavators, JCB machines etc. shall be used which may adversely impact the aquatic biota;

(xiv) State Government of Rajasthan shall regulate the mining operations by PPs and submit report to MoEFCC on quarterly basis. It shall also be ensured that levelled cross section is made before the onset of next rainfall season; and

(xv) State Deptt. Of Mines & Geology and PPs are required to submit District Survey Report (DSR) in line with provisions made in Ministry's notification dated 15.01.2016.

Further, the Environmental Clearance Proposals for mining of Sand/Bajri which were received from the State of Rajasthan were at various stages of consideration before the Expert Appraisal Committee (EAC) under the provisions of the EIA Notification, 2006. These Proposals were deliberated and discussed by the EAC in its meeting held during May 30-31, 2018. The detailed Minutes of EAC meeting may kindly be seen at <http://environmentclearance.nic.in> , the summary of which is as follows:

“The Member Secretary has informed to the Committee that the issues related to replenishment study on the sand/bajri mining projects were deliberated by the EAC in its meeting held during October 24-25, 2016 wherein the Committee deliberated the issues w.r.t. replenishment study for the sand/bajri mining projects received from State of Rajasthan and the Committee suggested that Project Proponents shall first conduct a scientific replenishment study and submit the report before the EAC for further consideration of amount of production for mining of sand/bajri on yearly basis. Therefore, the Committee had deferred all such sand/bajri mining proposals of State of Rajasthan.

The Member Secretary has appraised the Committee that the 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.

*The Member Secretary has also informed that Government of Rajasthan has issued the Rajasthan Minor Mineral Concession (Amendment) Rules, 2018 on 28th February, 2018 and has amended Rule 5 and 6 of the Rajasthan Minor Mineral Concession Rules, 2017 w.r.t, existing expression “one year”, to “thirteen months” i.e. all LOI of minor mineral issued are only valid up to 31.03.2018. Government of Rajasthan, vide letter no. 14(4)Mines/Gr.II/2014, dated 9th April 2018, has submitted the status of 82 bajri mining cases. Out of 82 LOIs, 42 LOIs are cancelled/lapsed, 10 LOIs are sanctioned the lease/executed, and 30 LOIs are under stay in the Hon'ble High Court at Jodhpur w.r.t. regard to validity of LOI. **The Committee deliberated the issues and is of the view that Department of Mines and Geology, Government of Rajasthan shall first confirm whether the instant LOI/Lease is valid or not before consideration of the Proposal.***

*The Member Secretary has informed that the Ministry is receiving the projects of Bajri/ Sand mining from the State of Rajasthan and requested the EAC to suggest further course of action. The Committee has also observed that similar proposals from the State of Rajasthan were considered by the EAC in its meetings held on **8th January 2018 and May 30-31, 2018** wherein the Committee has asked the following certain **information/clarifications and undertaking** from the State Government of Rajasthan/ Project Proponent. The Committee is of the*

view that the complete appraisal may be done once the information as sought in the similar cases of State of Rajasthan may be submitted by the State Govt. of Rajasthan/PP: -

Details of Scientific Replenishment Study report needs to be presented with other requisite information.

1) DMG, State Government to submit demarcated river stretch through latitudes and longitudes (out of the total lease) where river sand/bajri mining can be permitted based on available reserves and Original Ground Level (OGL) at each cross section in consultation with State Irrigation Department;

2) PP and Consultant to submit latitudes and longitudes of the identified cross section, duly authenticated by State Government, which shall be used for replenishment study in future for calculation of replenishment amount/ rate;

3) PP to give undertaking that only Scrapers shall be used for mining to ensure that the mining depth to be maintained as 1.0 meters (max.) from Original Ground Level and No other heavy machinery like bucket excavators, JCB machines etc. shall be used which may adversely impact the aquatic biota;

4) State Government of Rajasthan shall regulate the mining operations made by PP and submit report to MoEF&CC on quarterly basis. It shall also be ensured that leveled cross section is made before the onset of next rainfall season; and

5) State Department of Mines & Geology and PP are required to submit District Survey Report (DSR) in line with provisions made in Ministry's notification dated 15.01.2016.

6) The Committee deliberated the issues and is of the view that **Department of Mines and Geology, Government of Rajasthan shall first confirm whether the instant LOI/Lease is valid or not before consideration of the Proposal.**

7) The PP is required to submit the sections clearly marking the lateral and depth extents of present ground profile as well as proposed excavation profile at individual sections. The same needs to be verified/ approved by the State Mines and Geology Department, Govt. of Rajasthan.

8) The PP needs to submit a database in structured tabulated form clearly mentioning the nomenclature of the section line, latitude and longitude of both the extents of section line, chianages and respective levels (RL, AMSL) of all the points taken on that section line. That means with the help of this database profile of ground at that section line can be drawn with the help of suitable CAD software.

9) Thus with the help of existing ground profile and proposed extents of excavation considering the stipulations of lateral extents of sustainable sand mining guidelines, as mentioned above, The PP shall estimate the proposed quantum of excavation in tonnages with the help of Specific Gravity verified by the State DMG between every two consecutive sections. Such estimation shall be

furnished by the PP in tabular form which includes the nomenclature of section lines, area proposed for excavation, distance between two consecutive section lines, volume, specific gravity, tonnage of the mineral, maximum depth extent from existing ground profile. Respective plans shall also be submitted clearly marking the area to be excavated. The same needs to be verified by the State Mines and Geology Department, Govt. of Rajasthan. In addition to this a composite plan mentioning the above proposed excavation zones for the entire mine lease area also needs to be submitted. Thus PP needs to submit a plan clearly showing the area to be put in under excavation and no excavation zones. Respective KML files of such lateral extents of excavation and no excavation zone within ML shall also be submitted by the PP.

10) PP needs to submit a plan clearly mentioning the width of river, lease boundaries, area left under safety zones as prescribed as per Sustainable Sand Mining Management Guidelines, 2016, as per statutory requirements under Rajasthan Minor Mineral Concession Rules and other competent authority.

11) The plans and sections should be depicting the dates (period) of survey further in order to ensure the ground survey. PP should submit the dates (period) of survey, the model no & details of the instrument used for such survey, field recordings and observations along with name, signatures and contact details of the Surveyor explicitly be mentioned and recorded in the field book as well as in Plan & Sections.

12) In addition to this soft copy (Excel or CSV file, DWG file) of all such survey recordings should also be submitted in proper order & sequence in order to cross check & verification samples checks of sections.

13) The Committee deliberated the issues w.r.t. erection of pillars and accordingly suggested that the PP needs to erect the pillars with the following specifications and submit the details (in table form) of the same along with photographs. The specifications inter-alia are as (a) the distance between two adjacent pillars shall not be more than 100 meters; (b) the pillars shall be of square pyramid frustum shaped above the surface and cuboid shaped below the surface; (c) each pillar shall be of reinforced cement concrete; (d) the pillars shall have a base of 0.30m X 0.30m and height of 1.30m of which 0.70m shall be above ground level and 0.60m below the ground; (e) all the pillars shall be painted in yellow colour and the top ten cm in red colour by enamel paint and shall be grouted with cement concrete; (f) on all the pillars, distance and bearing to the forward and backward pillars and latitude and longitude shall be marked; (g) each pillar shall have serial number in a clockwise direction and the number shall be engraved on the pillars; (h) the number of pillar shall be the number of the individual pillar upon the total number of pillars in the lease; and (i) the tip of all pillars shall be a square of 15 cm on which a permanent circle of 10 cm diameter shall be drawn by paint or engraved and the actual boundary point shall be intersection of two diameters drawn at 90 degrees.

14) PP shall submit the compliances as per the Ministry's Office Memorandum No.3- 50/2017-IA.TII(Pt.), dated 30.05.2018 by an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble

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

15) The proposal of EC was appraised before the EAC in its meeting held during August 25- 27, 2015 wherein the Committee observed that the PP has continued the mining operation in monsoon season and accordingly PP needs to submit the clarification w.r.t. mining of Bajri in monsoon season.

16) PP shall submit the compliances as per the Ministry's Office Memorandum No.3- 50/2017-IA.III(Pt.), dated 30.05.2018 by an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. w.r.t. judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

The Committee made the detailed deliberations. The representatives of State Government of Rajasthan were also present during the meeting. Based on the detailed deliberations and discussions, the Committee **deferred** the proposal and **suggested that the proposal can only be considered after submission of above mentioned informations/clarifications from State Govt. of Rajasthan and Project Proponent.**

The Ministry on 13.06.2020 informed the PP that "The Committee deliberated the information submitted by PP and the Committee deferred the proposal and suggested that the proposal can only be considered after submission of requisite information which are detailed in the minutes of EAC held during May 30th -31st ,2018. The PP is requested to kindly see minutes of the Meeting for further necessary action."

In response to above deliberation and ADS raised, PP has now replied on 11.07.2020 stating that Replenishment study report prepared and verified by Irrigation as well as Department of Mines & Geology, Rajasthan Complying the points raised by EAC IN 32nd meeting held on May 30-31, 2018. The point wise compliance of 32nd EAC Meeting 2018 are as following:

S.NO.	INFORMATION /CLARIFICATION	COMPLIANCE
1.	Complete appraisal of the EIA/EMP report along with TOR compliance and other mitigation measures, if not done earlier	Complete Appraisal of EIA/ EMP Done on EAC Meeting held on 25 August 2015 and EAC Recommended the Proposal for EC..
2.	Details of Scientific Replenishment Study report needs to be presented with other requisite information.	Details of Scientific Replenishment Study report along with other requisite information in given as annexure- 1
3.	DMG, State Government to submit demarcated river stretch through latitudes and	DMG, State Govt. submitted demarcated river stretch through latitude and longitudes (out of total

	longitudes (out of the total lease) where river sand/bajri mining can be permitted based on available reserves and Original Ground Level (OGL) at each cross section in consultation with State Irrigation Department;	lease) where river sand / Bajri mining can be permitted based on available reserves and original ground level(OGL) at each cross-section in consultation with irrigation department. Enclosed As Annexure -2.
4.	PP and Consultant to submit latitudes and longitudes of the identified cross section, duly authenticated by State Government, which shall be used for replenishment study in future for calculation of replenishment amount/ rate;	Project proponent and consultant submitted the latitude and longitudes of the identified cross-section duly authenticated by state govt. which used for replenishment study and for calculation of replenishment amount/rate. Annexure No.-3
5.	PP to give undertaking that only Scrapers shall be used for mining to ensure that the mining depth be maintained as 1.0 meters (max.) from Original Ground Level and No other heavy machinery like bucket excavators, JCB machines etc. shall be used which may adversely impact the aquatic biota;	An undertaking is attached herewith regarding the use of scrapper for mining to ensure mining depth be maintained as 1.0 meter (max) and other heavy machinery like bucket excavators, JCB machines etc. will not be used. This may adversely impact the aquatic biota. Annexure - 4.
6.	State Government of Rajasthan shall regulate the mining operations made by PP and submit report to MoEF&CC on quarterly basis. It shall also be ensured that levelled cross section is made before the onset of next rainfall season; and	As the mining operations suspended by honorable supreme court thus leveled cross section not prepared and submitted before the onset of next rainfall season.
7.	State Department of Mines & Geology and PP are required to submit District Survey Report (DSR) in line with provisions made in Ministry's notification dated 15.01.2016	District Survey Report in Attached as Annexure no- 5
8.	The Committee deliberated the issues and is of the view that Department of Mines and Geology, Government of Rajasthan shall first confirm whether the instant LOI/Lease is valid or not	LOI issued by the state Govt. is valid vide letter no. P10 (9) Mine/Group-2/2013 dated 27.02.2013 issued by Department of Mines & Geology, Government of Rajasthan. Annexure No.-6

	before consideration of the Proposal.	
9.	The PP is required to submit the sections clearly marking the lateral and depth extents of present ground profile as well as proposed excavation profile at individual sections. The same needs to be verified/approved by the State Mines and Geology Department, Govt. of Rajasthan.	Plan & Sections clearly Showing the lateral and depth extents the Material will be excavated, present ground profile as well as proposed excavation profile at individual sections duly verified/Approved by State Mines & Geology Department, Govt. of Rajasthan attached as Annexure No.-7
10.	The PP needs to submit a database in structured tabulated form clearly mentioning the nomenclature of the section line, latitude and longitude of both the extents of section line, chainages and respective levels (RL, AMSL) of all the points taken on that section line. That means with the help of this database profile of ground at that section line can be drawn with the help of suitable CAD software.	A database is structured tabulated form clearly mentioning the nomenclature of the section line, latitude and longitude of both the extents of section line, Chainage and respective level RL of all the points taken on that section line with the help of this database profile of ground at that section line can be drawn with the help of CAD software attached herewith as Annexure-8 (Section wise CSV)
11.	Thus with the help of existing ground profile and proposed extents of excavation considering the stipulations of lateral extents of sustainable sand mining guidelines, as mentioned above, The PP shall estimate the proposed quantum of excavation in tonnages with the help of Specific Gravity verified by the State DMG between every two consecutive sections. Such estimation shall be furnished by the PP in tabular form which includes the nomenclature of section lines, area proposed for excavation, distance between two consecutive section lines,	Estimation of Proposed Quantum of excavation in Tonne with the help of specific gravity verified by State Department of Mines & Geology between every two consecutive sections done with the help of existing ground profile and proposed extents of excavation considering the stipulations of lateral extents & Sustainable Sand Mining Guidelines given at Estimation of quantity furnishable in tabular form and includes the nomenclature of section lines, Volume, Specific gravity, tonnage of the mineral, Maximum depth extent from existing ground profile, Plans showing the area to be excavated is given in Plate No-5 in Replenishment Report.

	<p>volume, specific gravity, tonnage of the mineral, maximum depth extent from existing ground profile. Respective plans shall also be submitted clearly marking the area to be excavated. The same needs to be verified by the State Mines and Geology Department, Govt. of Rajasthan. In addition to this a composite plan mentioning the above proposed excavation zones for the entire mine lease area also needs to be submitted. Thus PP needs to submit a plan clearly showing the area to be put in under excavation and no excavation zones. Respective KML files of such lateral extents of excavation and no excavation zone within ML shall also be submitted by the PP.</p>	
<p>12.</p>	<p>PP needs to submit a plan clearly mentioning the width of river, lease boundaries, area left under safety zones as prescribed as per Sustainable Sand Mining Management Guidelines, 2016, as per statutory requirements under Rajasthan Minor Mineral Concession Rules and other competent authority.</p>	<p>A plan clearly showing the width of river lease boundary area left under safety zone as prescribed as per Sustainable Sand Mining Management Guidelines 2016.</p>
<p>13.</p>	<p>It was found that the plans and sections were not depicting the dates (period) of survey further in order to ensure the ground survey PP should submit the dates (period) of survey, the model no & details of the instrument used for such survey, field recordings and observations along with name, signatures and contact</p>	<p>Plan & Sections the dates of Survey. A field Book showing the date (period) of Survey, The model Number & detail of the instruments used. Field recordings and observations along with name, Signature and contacts details of the Surveyor mentioned and recorded in the field book. Annexure-9</p>

	details of the Surveyor explicitly be mentioned and recorded in the field book as well as in Plan & Sections.	
14.	In addition to this soft copy (Excel or CSV file, DWG file) of all such survey recordings should also be submitted in proper order & sequence in order to cross check & verification samples checks of sections.	Soft Copy of excel or CSV file, DWG files of all Survey recordings area submitted in proper order & sequence in order to cross check & verification samples check of samples. Annexure No.-10 (CD)
15.	The Committee deliberated the issues w.r.t. erection of pillars and accordingly suggested that the PP needs to erect the pillars with the following specifications and submit the details (in table form) of the same along with photographs. The specifications inter-alia are as (a) the distance between two adjacent pillars shall not be more than 100 meters; (b) the pillars shall be of square pyramid frustum shaped above the surface and cuboid shaped below the surface; (c) each pillar shall be of reinforced cement concrete; (d) the pillars shall have a base of 0.30m X 0.30m and height of 1.30m of which 0.70m shall be above ground level and 0.60m below the ground; (e) all the pillars shall be painted in yellow colour and the top ten cm in red colour by enamel paint and shall be grouted with cement concrete; (f) on all the pillars, distance and bearing to the forward and backward pillars and latitude and longitude shall be marked; (g) each pillar shall have serial number in a clockwise direction and the number	Project Proponent erected the pillars with the following specifications: i. The distance between two adjoining pillars is not more than 100 meters. ii. The pillars are of square pyramid frustum shaped above the surface & cuboid shaped below the surface. iii. Each Pillar are of Reinforced cement concrete. iv. Each pillars having base of 0.3mtrs x0.3mtrs and height of 1.30mtrs of which 0.7mtrs are above ground & 0.6mtrs below ground. v. All Pillars are painted in yellow colour and top 10cm in red by enamel paint and grouted with cement concrete. vi. Distance backward & forward bearing with latitude & longitude marked on the pillar. vii. Each Pillar are numbered in clockwise (f) on all the pillars, distance and bearing to the forward and backward pillars and latitude and longitude shall be marked; (g) each pillar shall have serial number in a clockwise direction and the number shall be engraved on the pillars; (h) the number of pillar shall be the number of

	<p>shall be engraved on the pillars; (h) the number of pillar shall be the number of the individual pillar upon the total number of pillars in the lease; and (i) the tip of all pillars shall be a square of 15 cm on which a permanent circle of 10 cm diameter shall be drawn by paint or engraved and the actual boundary point shall be intersection of two diameters drawn at 90 degrees.</p>	<p>the individual pillar upon the total number of pillars in the lease; and (i) the tip of all pillars shall be a square of 15 cm on which a permanent circle of 10 cm diameter shall be drawn by paint or engraved and the actual boundary point shall be intersection of two diameters drawn at 90 degrees. direction and number engraved on the pillar. I. the Number of pillars is the number of individual pillars upon the total number of pillars in the lease. II. The tip of the pillar is square of 15 cm on which a permanent Circle of 10cm diameter drawn. Annexure No.-11 (Pillar Photographs)</p>
<p>16.</p>	<p>PP shall submit the compliances as per the Ministry's Office Memorandum No.3-50/2017-IA.III(Pt.), dated 30.05.2018 by an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2ndAugust 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. w.r.t. judgment of Hon'ble Supreme Court dated the 2ndAugust 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.</p>	<p>Annexure No.-12 (Affidavit)</p>

4. PP has submitted that the mine lease area is 995.0 ha which is Kothari & Khari River. Letter of Intent (LOI) for grant of mining lease for minor mineral Bajriover an area of 995.0 ha has been granted by the Director of Mines and Geology Department, Govt. of Rajasthan, vide letter no P.10(11) Khan/ Gr. – 2/

2013 dated 27.02.2013 for the period of 5 year. Department of Mines and Geology, State Government of Rajasthan vide letter dated 06.02.2015 has confirmed that mine site does not fall in the Aravall Hills.

5. PP has submitted that the Mining Plan is approved by SME, Bhilwara Circle, Bhilwara vide letter no. SME/ BHL-C12/ F/ Mining Plan/ Mining Scheme/ 3783 dated 27.08.2013.

Comment of PD: In response to EAC deliberation and ADS raised in the minutes of the EAC meeting held during 30th May, 2018 to 31st May, 2018, PP submitted the Replenishment Study Report.

6. The Proponent has submitted that Method of mining is semi - mechanized opencast method. Excavation will be carried out up to a maximum depth of 3.0 meters from surface of deposit and not less than one meter from the water level of the River Kothari & Khari whichever is reached earlier. Proponent informed that 199.92 ha area will be used for excavation; 24.3 ha for safety against bridges (12 nos.); 19.17 ha for safety zone against permanent roads (11 nos.) and 17.80 ha for wells (28 nos.).

Project Proponent reported that mining will be done leaving a safety distance from the banks i.e. 7.5m of the width of the River from both the banks. Mining will be done only during day time and completely stopped in monsoon season. No mining will be done in the zone of 45m on either side of the structure/ bridge. Project Proponent reported that there will be temporary rest shelters during operational phase.

Mineral will be transported through road. Project Proponent has made the traffic analysis survey and reported that no. of trucks will be deployed 300 per day (20 tonnes capacity each) which increase 250 PCUs per day and the level of service (LOS) remains as "A". Project Proponent reported that roads will be repaired regularly and maintained in good conditions. A supervisor will be appointed to regulate the traffic movement near site. Speed breakers and signage will be maintained at the sensitive places.

PP submitted that there will be no OB or waste generation as the sand is exposed in the river bed.

7. PP submitted that the site elevation is 562 – 422.041 MSL. The ground water depth is 8.0m bgl in pre-monsoon season and 5.0m bgl in post-monsoon season. The depth of extraction will be at 3.0 m from the surface level of river bed while the water level is 8.0 m below the surface of river bed. No ground water interception during the mining operations is envisaged. The total daily water demand will be 26.0 KLD, out of which 4.5 KLD will be used for domestic purpose and 21.5 KLD for dust suppression which will be met by tanker supply. To conserve water following measures will be adopted such as Mobile toilets with modular septic tank having efficient water utilization capacity (low facets water requirement for flushing) will be used, Atomized water sprinklers will be used to minimize the air borne dust emissions on haul roads, Rain water harvesting structure will be constructed to augment the water table (It is a dry

river bed mining project. Hence, no rain water harvesting structure is proposed within the lease area. As a part of CSR activity, rain water harvesting structures are proposed in the nearby villages.). The domestic waste water generated will be channelized to septic tank followed by soak pit.

8. PP has submitted that the project is linear dry bed mining confined to river bed only. Thus, there is no scope for plantation in the lease area. It is proposed to develop social forestry in the approach villages at public places like school, PHC's, Panchayat Bhawan with due permission from Panchayat and in consultation with Forest Department. Predominance will be given to school and PHC's. As the part of Social Forestry Programme, to increase the green cover of the study area, it is proposed to provide 3,200 saplings per year (In continuous three years) to the nearest schools, PHC's, temples, Charagah land etc. It will act as a barrier for air pollutants as well as noise. It will also help to enhance the aesthetic beauty of the area. Native plants like Neem, Pipal, Khejri, Mango and other local species will be planted. The management will give emphasis on plantation and will also motivate local persons for plantation during rainy season. PP has submitted a village wise 5 year action plan for Green belt Development for plantation of 5000 saplings each year.

9. PP submitted that there is no forest land involved in the lease area. Project Proponent reported that there is no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger / Elephant Reserves (existing as well as proposed) is situated within 10 Km of the mining lease area as per the primary survey and the available secondary data. A certificate has been obtained stating that the above mentioned, from the Office of Deputy Conservator of Forests, Bhilwara vide letter dated 11.02.2015. The area is not covered under Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.

Comment of PD: PP has not enclosed the annexures with the EIA Report and may be asked to submit the above stated documents as reported by PP.

10. PP submitted that The authenticated list of flora and fauna has been obtained from the Office of Deputy Conservator of Forest, Bhilwara vide letter no. F() Survey/Uwars/2059 dated 11.02.2015. Schedule – 1 fauna Peafowl has been reported in the buffer zone during the study period. The conservation plans for Peafowl has been prepared by in-house expert. An amount of Rs. 1.0 lacs have been earmarked for the conservation of schedule – 1 species.

Comment of PD: PP has not enclosed the annexures with the EIA Report and may be asked to submit the above stated documents as reported by PP.

11. In response to EAC deliberation and ADS raised in the minutes of the EAC meeting held during 30th May, 2018 to 31st May, 2018, PP has submitted the District Survey Report.

12. PP has submitted that Baseline data for ambient air quality (PM10, PM2.5, SO2 & NO2), water quality, noise level, soil and flora & fauna was generated for the period during October 2013 to December 2013. All the parameters for water and air quality were within permissible limits. The lease area does not fall in critically polluted areas under CEPI Guidelines. A certificate has been obtained by the Mining Engineer stating that the lease does not fall in "Aravali Range" vide letter no. Sa.Kha.A/Bheel/C.C.4/Kha.Pa 114/2012/93 dated 06.02.2015.

Comment of PD: PP has not enclosed the annexures with the EIA Report and may be asked to submit the above stated documents as reported by PP.

13. The Public Hearing for the proposed Project was conducted on 07.11.2014 at 11:00 AM at Tehsil Office, Tehsil – Mandal, District – Bhilwara, Rajasthan. The Public hearing was presided over by Shri Giriraj Verma, Additional District Magistrate, Bhilwara. The representative from the Rajasthan State Pollution Control Board was also present. The issues raised during the Public Hearing were also considered and discussed during the meeting, which inter-alia, included water supply, construction of rain water harvesting structure, provision of assistance to local schools, scholarships etc., effective implementation of measures will be adopted. Project Proponent has made the action plan with budgetary provisions.

The Committee deliberated and is of the view that PP needs to implement the action plan and the Implementation Report has to be submitting to the Regional Office of the MoEFCC every six month.

14. Proponent informed that Rs. 12.5 Lakhs per annum as capital cost and Rs. 1.25 Lakhs as recurring cost have been earmarked towards CSR activities for next five years of mining operation. This includes 1) Health Checkup at camps (Capital: Rs. 2.0 lakhs & Recurring/year: Rs. 0.20 Lakhs), 2) Surveillance Programme of the Workers - (Capital: Rs. 1.5 lakhs & Recurring/year: Rs. 0.15 Lakhs), 3) Assistance to Local Schools, Scholarships to Students (Capital: Rs. 2.0 lakhs & Recurring/year: Rs. 0.20 Lakhs), 4) Sanitation and Drinking Water Facilities (Capital: Rs. 2.0 lakhs & Recurring/year: Rs. 0.20 Lakhs), 5) Vocational Training to persons for income generation (Capital: Rs. 1.0 lakhs & Recurring/year: Rs. 0.10 Lakhs), 6) Assistance to Self Help Groups (Capital: Rs. 2.0 lakhs & Recurring/year: Rs. 0.20 Lakhs) and 7) Road Maintenance (Capital: Rs. 2.0 lakhs).

15. Project Proponent reported that the mining lease is river bed classified as GairMumkinNadi Nallah. Hence, no R& R issues are involved in the core zone. However, for transportation of loaded trucks to the nearest approach road, the vehicles will pass through the agriculture land, which comes under R & R issue. As a part of R & R plan, agreement has been made between the land owners and Project Proponent giving them appropriate compensation and maintenance. The lease has been allotted only for five years, so that after the completion of project, land will be handed over to the owners.

16. The Project Proponent has earmarked Rs. 18.0 lacs towards Environmental Protection Measures. This cost will be spending phase wise along with the growth of project. This will include 1) Pollution Monitoring – Air, Water, Noise - ₹ 2.0 Lakhs, 2) Dust Suppression (Water Sprinkling) - ₹ 2.0 Lakhs, 3) Wire Fencing at Plantation Sites - ₹ 1.0 Lakhs, 4) Plantation Including Maintenance - ₹ 1.5 Lakhs, 5) Rain Water Harvesting - ₹ 1.5 Lakhs and 6) Haul Road Other Roads Repair and Maintenance - ₹ 1.0 Lakhs. The protection measures will be dynamic and subject to periodic review so that measures remain effective and appropriate.

17. PP has submitted that Occupational health impacts of river bed sand mining is very remote. However, such evidences have not been proven so far, though the mining is undertaken for years. No records for any occupational health problems were reported during the primary survey. However, in case of health implications will be reported, mitigation measures will be adopted such as all employees will be trained, educated and encouraged to follow best and safe work practices in their working environment, Personnel Protective Equipment's like face mask, earmuffs, ear plugs, gloves, safety goggles and safety boots is being provided, All workers will be subjected to Initial Medical Examination as per Mines Rule 1955 both at times of appointment and Periodical Medical Examination at least once in five years, First aid trained personnel's, first aid stations fully equipped as per Mines Rules 1955 and first aid kits will be made available all the time, Awareness programme regarding the use, maintenance and up-keep of respirators will be conducted on regular basis so that employees are trained to handle the equipment properly.

18. No litigation is pending against the project / applicant in any court of law. However, there is a PIL in the High Court of Rajasthan filed by an NGO, Nature Club of Rajasthan. The order was passed on dated 16 April' 2013 by Hon'ble Court giving directions to State Govt. to finalize the allotment of mining leases of bajri (river bed sand) in the State within a period of six months as per new rules and adopt procedure for revenue collection under new rules only.

The Project Proponent has also made a submission that in accordance to Hon'ble Supreme Court of India's orders dated 25.11.2013, 24.02.2014 and 27.03.2014 (In Civil Appeal No. 9703-9706 of 2013) production of ~ 1,57,968 Tons of Bajri has been made during January 2014 to December 2014 and ~ 61,328 Tons of Bajri has been made during January 2015 to March 2015.

19. The Consultant in the EIA report has given a declaration that they confirm that they shall be fully accountable for any misleading information mentioned in the statement. Further, PP has given undertaking in EC Report that they hereby give undertaking that the data and information given in the application and enclosures are true to be best of their knowledge and belief and they are aware that if any part of the data and information found to be false or misleading at at any stage, the project will be rejected and clearance given, if any to the project will be revoked at their risk and cost.

Comment of PD: In response to the ADS wherein it was stated that, "PP shall submit the compliances as per the Ministry's Office Memorandum

No.350/2017-IA.III(Pt.), dated 30.05.2018 by an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.,”PP has accordingly submitted the affidavit vide Certificate No. AX 931525 dated 26.02.2020.”

20. The Proponent submitted that total project cost will be approx. Rs. 99.90 Lakhs. Total employment in the mining lease will be around 95 people. The local villagers will be preferred for employment.

21. The EAC deliberated on the submissions made by the project proponent and presentation made by the consultant and made following observation:

- i. The Committee deliberated on the replenishment study report submitted by PP. The amount proposed for production is 42 LTPA in the 559.92 Ha out of 1299 Ha lease area. The Committee observed that Replenishment Study Report submitted with EIA/EMP does not give any insight of safe extractable quantity as the blocked reserves in the safety zone is not provided in the report.
- ii. On comparing the results of replenishment study conducted by CMPDI in 2017 which is based on the Meyer-Peter's equation and by OMTA which is based on pre & post monsoon dated, the Committee found that there is a huge variation in the quantity of material deposited.
- iii. The Committee also observed that in the replenishment study report mineable mineral was calculated and impact on traffic density was covered. But it is not clear from the study report that area which comes under no mining zone (block area) and the reserves which is blocked in this area. Due to this it is difficult to ascertain that what would be safe extractable volume, depth and tonnage.
- iv. The Member Secretary informed the Committee that Ministry has received a representation on 4.05.2020 from Bajri Mining Lease Holders Association wherein it was requested for mechanized mining, mining in night hours and considering the proposal based on the recommendation already made by EAC. One of the PP also reiterated the same by addressing and informed the Committee there is sufficient material available for mining and requested for grant of EC.
- v. The Committee considered the request of the Member of the Association at the same time is also of the view that the Hon'ble Supreme Court in its order dated 2.08.2018 mentioned that “124. We are not in agreement with learned counsel for the mining lease holders. There is no doubt that the grant of an EC cannot be taken as a mechanical exercise. It can only be granted after due diligence and reasonable care since damage to the environment can have a long term impact.”. Further, EAC is of the view that “In another judgment in Secretary, Kerala State Coastal Management Authority v. DLF Universal Ltd., the Apex Court

discussed about the procedure of deemed environmental clearance and held that not to be followed in future, since obtaining of prior environmental clearance is mandatory, irrespective of wording in Para 8(2) of EIA 2006 Notification.” So, in the instant case the decision can be only be taken after examining the information & data submitted by the PP.

- vi. The Member Secretary also informed the Committee that Ministry also received a representation from Sr. Advocate of Hon’ble Supreme Court against the Sand Mining Proposals from the State of Rajasthan wherein inter-alia the issues raised is regarding illegal mining, violation of Common Cause Judgment dated 2.08.2017 and request for not considering these proposals. The Chairman is of the view that complaint may be forwarded to all the members so that issues mentioned therein may be addressed and at the same time asked the Member Secretary to sought desired information from PP/State Government for the same.
- vii. The Committee also felt that complete document is not available online and Ministry may ask PP to upload the same for further appraisal and public viewing. In case PP faces any issue regarding size restriction then same may be informed to Director NIC, MoEF&CC and Member Secretary, so as to ensure that all the information made online.

22. Based on the discussion held on 19,20 & 21 August, 2020 and document submitted, the Committee **deferred** the proposal for want of following information from the PP & State Government. The Committee is of the view that the *Hon’ble Supreme Court in its order dated 6.12.2019 asked for completing of the application and directed the Ministry to pass appropriate order*, therefore to expedite the process, a Special Meeting may be conducted for the Sand Mining proposal from the State of Rajasthan after receipt of information from PP.

- (i) *In the replenishment study report details such as area under 7.5 meters statutory barrier, area under ¼ width of the river, area under ¾ width of the river for both lease area and area demarcated by DMG needs to be mentioned. In addition to these details of the reserve available and block therein needs to be provided along with plan and section for area demarcated by DMG. In the study report the safe extractable volume and tonnage needs to be defined after the deducting the block reserves. The slice plan for the mining in the safe extractable zone needs to be provided in the report.*
- (ii) *The details of the area to be utilized & not to be utilized for mining, as approved mining plan at the end of 5 years needs to be provided. Whether area demarcated by DMG comes under the utilized zone or un-utilized zone. In addition to this, area required for mining in the next 5 years needs to be provided with proper justification. The details of any prohibited area within the LOI area or demarcated area needs to be provided.*

- (iii) Mining is proposed in the small area and still large area is left how PP will ensure to curb illegal mining in the demarcated area and rest of the area falling in the lease (provision of Enforcement and Monitoring Guidelines for Sand Mining ,2020 shall be referred for the same). In addition to this budget for installation surveillance equipment like CCTV, security guards weigh bridge etc., needs to be provided. The mining intensity of the original proposal considering larger area and the current proposal shall be compared and explained, as there is significant difference in mining intensity per Ha area.
- (iv) PP needs to submit the compliance of ToR points wherein certificate is required for involvement of no forest land, distance from the protected area, authenticated list of schedule-1 species, conservation plan for schedule-1 species and proof of its submission to Chief Wildlife Warden if not already submitted. PP shall ensure that all these documents along with Annexure to EIA Report and other documents submitted to the ministry should be uploaded online on PARIEVSH Portal for public viewing.
- (v) PP needs to submit a letter from the State Government that there is no violation of Common Cause Judgment dated 2.08.2017 in respect of this mining proposal and there is no production before the SC Order dated 25.11.2013 & after SC Order dated 16.11.2017. An undertaking in this may also be submitted.
- (vi) The PP needs to submit time-bound, activity-wise action plan for EMP, Occupational Health, Planation, and CER along with the budgetary provision. In addition to details of Environmental Management Cell to be established for implementation of EMP needs to be submitted along with details of manpower and cost.
- (vii) PP needs to ascertain the impact of transportation and details of transportation route viz. (length of the road, type of road, passing through the village or habitation) and mitigative measures to be taken for abatement of pollution due to transportation. The budget for the same needs to be provided.
- (viii) In case there any proposal for utilization of land outside the mining lease for transportation with a mutual agreement with villagers then details of the same needs to be provided along with proposed compensation details.
- (ix) PP needs to re-estimate the requirement of water for plantation, dust suppression and domestic use. The source of water needs to be mentioned. The cost of water tanker etc. needs to be mentioned in EMP.
- (x) PP needs to confirm that is there any other homogeneous mining lease within 500 meters of this lease and forming cluster. If, yes details of the same needs to be provided.

(xi) It has observed that PP has changed the consultant a letter in this regard needs to be submitted in pursuant to Ministry's O.M. No. J-11013/41/2006-IA. II(I) dated 17.03.2010.

(xii) PP has provided details of many court cases which are on various issues. Therefore, PP needs to provide status of the case wherein the case is pertaining to issue of grant of EC to present proposal, grant of LoI, illegal mining by PP etc. The Complete details and status of the same needs to be provided.

2.4 Devadri Iron Ore Mine of M/s KIOCL Limited for mining 2 MTPA Iron Ore (ROM) & 500 TPA Manganese & Wet Beneficiation Plant including Crushing, Screening, Conveying for a capacity of 2 MTPA in a total area of 482.367 ha (ML Area 470.40 ha and 11.967 ha outside ML for conveyor corridor/road) in Devadri Range, Sandur Taluk, Bellary District, Karnataka State. [File no. -11015/28/2018-IAII(M); Proposal No. IA/KA/MIN/72345/2018]- Re-consideration of EC.

The proposal of M/s KIOCL Limited is for mining of 2 MTPA iron ore (ROM), 500 TPA Manganese & Wet Beneficiation Plant including Crushing, Screening, in the mine lease area of 470.4 Ha. The mine lease area is located at Devadri Range, Sandur Taluk, Bellary District Karnataka. The latitude and longitude of the mine lease area lie between from 15.02016'91" To 15.06021'08" N and 76.57063'49" To 76.60035'41" E and the Survey of India Topo Sheet No. is 57A/12.

Observation of EAC: The Committee observed that latitude & longitude needs to be verified as per coordinate provided by the State Government.

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. PP in Form-1 also applied under category 2(b) Mineral Beneficiation.

3. PP submitted that the ToR proposal for mining of 2 MTPA iron ore (ROM), 500 TPA Manganese & Wet Beneficiation Plant including Crushing, Screening, in the mine lease area of 470.4 Ha was submitted to Ministry of Environment, Forests & Climate Change (MoEF & CC) vide Proposal number: IA/KA/MIN/72345/2018 on 22.03.2018 for determining the Terms of Reference and submitted Form-1 & PFR. The proposal was considered by Environmental Appraisal Committee (EAC) during its meeting held on 23rd - 24th April, 2018. Ministry granted TOR vide letter No. J-11015/28/2018-IA. II(M) dated 16.05.2018. The application for amendment in TOR was made vide Proposal No. IA/KA/MIN/72345/2018 on 27.11.2018 for change in total project area from 482.367 Ha to 485.7725 Ha. The proposal for amendment in ToR was considered by the EAC in its meeting held on 23/01/2019. Amendment in TOR was granted vide letter No. J11015/28/2018-IA. II (M) dated 22.02.2019. The project proponent has applied for Environmental Clearance vide proposal No. IA/KA/MIN/72345/2018 dated 28.11.2019 in Form-2 along-with EIA/EMP report to Ministry at PARIVESH Portal. The

proposal was placed in EAC meeting held during 19-20 December, 2019 wherein the Committee deferred the proposal for want of requisite information. The PP did not submit the information within stipulated time frame and the proposal was de-listed on 30.05.2020 and the proposal was re-listed on 6.07.2020. The PP uploaded the reply to ADS on 6.07.2020 and the proposal is now placed in EAC meeting held during 19-21 August, 2020.

4. The project proponent submitted that the Commerce and Industries Secretariat vide notification no. CI 294 MMM 2015, Bengaluru dated 23.01.2017 issued LoI in favor of the M/s K.I.O.C.L Limited in pursuance of the approval by Central Government under Section 17A (2) of the Mines and Minerals (Development and Regulation) Act, (MMDR), 1957 by reserving an area of 470.40ha (four hundred and seventy point forty ha only) in Devadari Range, Sandur Taluk, Bellary District, Karnataka. Further, the Department of Mines & Geology vide letter No. DMG/MLS/Res. KIOCL/2016-17/10301 dated 13.02.2017 asked the PP to submit the statutory approvals including Forest & Environment Clearance for execution of mining lease.

Observation of the EAC: *The validity is not mentioned in the LOI but in pursuant to MMDR Amendment Act 2015 the same may be considered for 50 years.*

5. The project proponent submitted that the Mining Plan including Progressive Mine Closure Plan over an area of 470.40 ha is approved by the Regional Controller of Mines, IBM, Bangalore vide letter no.279/1096/2018/BNG/505 dated 08.03.2018.

Observation of EAC: *The mining plan is approved for captive consumption of mineral only.*

6. PP submitted that as per the approved mine plan, the mining will be Opencast Mechanized with drilling and blasting. The excavation is by deploying shovel/excavator and transportation is through dumper. No secondary drilling & blasting will be done. Rock breaker will be used to avoid secondary blasting. The RoM will be transported to stock pile near the crusher. The manganese ore will be blasted and then transported to stock yard for further breaking and manual sorting. PP submitted that Ultimate depth of Mining will be 20-120 m below the ground surface level. It will not intersect the ground water level. PP submitted that at the conceptual stage the area under mining will be 285.23 Ha, waste dump site 91.49 Ha, tailing pond 33.63 ha, Mineral Separation Plant 11.58 Ha, green belt 37.42 Ha and safety zone 11.03 Ha.

PP also reported that they will establish 2 MTPA Beneficiation Plant including Crushing, Screening, Conveying at the mine site. The mined ore will be beneficiated to produce 1.2 MTPA of iron ore concentrate. The 0.4 MTPA Calibrated Lump Ore (CLO), 1.2 MTPA Filtered concentrate and 500 TPA Manganese ore shall be used for KIOCL's Pellet Plant/Blast Furnace at Mangaluru. ROM from the mine will be fed to crushing and screening plant through dumpers. The crushed and screened ore will be fed to the beneficiation plant through conveyors, from where it will be concentrated and filtered within the ML area itself. The filtered concentrate cake & CLO thus

produced along with Manganese ore will be transported to KIOCL's Pellet Plant/ Blast Furnace at Mangaluru through rail.

PP reported that the total mineable reserves have been estimated to be 7,281,234 tons at an average Fe% of 58.04. However, considering the present mineable reserve, the life of mine is calculated 7 years with mine capacity of 2 MT/yr ROM production. However, after the detailed exploration of entire mining lease area, the expected mineral reserve is likely to substantiate a mine life of minimum 20-30 years.

Observation of EAC: *The Committee previously asked that i) PP need to bring out the total excavation quantity for mineral wise, waste generation, Top soil generation, OB/IB/SB generation and its quantity of reserves mineral wise etc., ii) Estimated quantity of Manganese reserve and life in the mine lease area, iii) PP did not provide the details of the overburden, inter-burden, top soil generation etc. and iv) PP need to submit the plan of utilization of wastes overburden, inter-burden, filtered tailings and its dumping locations should bring out.*

PP in its reply submitted on 6.07.2020 submitted that total excavation will be as follows:

Description	Iron Ore	Manganese Ore
Probable Reserve	7.34 million tons	1400 tons
Total excavation (Waste + Ore)	7.87 Million Tons	0.0022 Million Tons
Waste generation (OB/SB/IB)	6.351664 M.cu.m	0.00085 M.cu.m
Topsoil generation	0.116102 M. cu.	Nil

In addition to above, PP submitted that the Probable Manganese ore Reserves are 1400 tons with an average grade of 34.96% Mn. Initial 4 years is envisaged for preparatory works like preparation of storage yard, removal of OB, road and production of Manganese ore at the rate of 500 tonnes/year starting from 5th year of mine plan onwards. The life of mine is considered as 7 years.

With respect to waste utilisation & handling PP submitted that some quantity of overburden waste is envisaged for laying of mine roads for optimum utilization. The overburden/ waste generated during the excavation of iron ore will be dumped at the western side of the lease area demarcated as Waste Dump-1 located at 1663470N - 1664800N; 6694905 - 670595E. Similarly, the waste generated by the Manganese pit will be dumped at Waste Dump-2 demarcated at the south western corner of the lease area located at 1661765N - 1661864N & 670554E - 670657E.

The proposed waste dumps i.e. Dump-1 for iron pit and Dump-2 for manganese pit shall be formed by retreating method of dumping in order to facilitate its early reclamation.

After the mine reaches the conceptual stage, backfilling is envisaged in a sequential manner such that the terrain attains its original profile. All overburden dumps and tailing stack yards are planned for afforestation with indigenous species.

Details of Tailing Pond and its management:

The low-grade iron ore will be processed for up-gradation of the Fe content. The tailings generated by iron ore beneficiation will be dewatered and the tailing cakes will be dumped at north-west corner of the lease located at 669531E- 669933E; 1664798N-1665234N near boundary pillar no. K-30.

The non-magnetic tailings from magnetic separation circuit are fed to tailing thickener. The tailings are thickened and the under flow is fed to Horizontal Belt vacuum Filter in filtration building and the tailings filter cake is disposed-off near tailing stockpile using belt conveyors (and required transfer houses) and tripper conveyor. The stocked tailings are further conveyed to tailings pond through trucks. The tailing cakes will be dumped at a specific location at North West corner of the lease.

The tailings are free of any hard chemicals and hence there is no danger of ground water contamination. Water sprinklers at regular intervals are proposed to arrest any dust generation. The ends of tailing yards where no further dumping take place will be covered with grass turf so that no dust will be generated. The capacity of tailing pond is 3 Mt. The filtered tailing cake will be disposed off in tailing pond @ 0.4 MT /year However; Company will explore the possibility of Secondary usages of tailings through R&D during mining operations. PP has also submitted the plan showing dumps and tailings pond etc.

The wastes generated in the form of overburden, inter-burden, filtered tailings will be disposed as external dumps at its planned location. The top soil generated during the mining operations (around 1.16 lac m³) will be used for avenue plantation as well as at the envisaged Mineral Processing Complex. Total Excavation will be 7.869216 Million TPA [Total ROM in the 5th year (2.04858 MTPA) + Total Development quantity (OB/SB/IB) in 5th Year (5.820636 million tons)] rounding to 7.87 Million TPA.

Comment of PD: The Committee observed that beneficiation activity is shown for the iron ore and around 0.4 MTPA of tailing will be generated. The Committee again confirmed the break-up of total excavation and PP reported that the total excavation will be 7.872 Million TPA which include 2.0 Million TPA of Iron Ore (ROM), 0.0005 MTPA of Manganese Ore (RoM) and remaining 5.87 Million Tons of waste including top soil.

7. PP reported that source of water for the project is Tungabhadra dam located 50 km (approx.) from the project site. An intake well, pump house and necessary pipeline will be laid for drawl of water. A reservoir of 50,000 m³ capacity will be earthen type with impervious lining will be constructed within the beneficiation plant area. The fresh water requirement will be

around 150 m³ /hr or 3.6 MLD. PP submitted that around 90 KL per day of water will be used for dust suppression of the haul roads, stock piles, plantation etc. However, as no township has been envisaged, the potable water requirement will be 25 KLD only. PP submitted that a letter vide no. 3361/CMD dated 12.10.2018 is submitted to Karnataka Water Resources Department for sanction of drawl of required quantity of water from Tungbhadra dam for the project. Further, PP has submitted that working will not intersect groundwater.

Observation of EAC: *The Committee previously asked the PP to submit i) the approval for the allocation of water from Tungabhadra Dam to use in Devadari Ore mine and ii) Undertaking for not utilization of ground water resources.*

PP in its reply dated 6.07.2020 submitted that the company has planned to source water from Tunga Bhadra dam or Narihalla reservoir for Devadari mining project. The requirement of water would be 2953.41 m³/hr. Recovery of water in the plant would be around 2809.73 m³/hr. Therefore, the makeup water requirement for the project is 143.48 m³/hr rounding to 150 m³/hr (3.6MLD). Accordingly, company has submitted application on 12.10.2018 to Principal Secretary, Water Resource Department, Govt. of Karnataka. As per the Govt. of Karnataka directions, Company has resubmitted application in prescribed format on 13.03.2020 for allocation of 4 MLD water from TB Dam or Narihalla reservoir for use at Devadari Iron Ore Mine. Water Resource department, Gok vide letter dated 22.05.2020 directed Managing Director, Karnataka Neeravari Nigam Limited (KNN) to verify the application and submit the detail report regarding the proposal. The application is under process with Water Resource Dept., GoK.

PP also submitted an undertaking dated 25.06.2020 wherein it has undertaken that Company will not utilise groundwater resource for Devadari Iron Ore Mining Project during the course of mining activities.

Observation of EAC: *Committee observed that PP has submitted the copy letter dated 13.03.2020 and 22.05.2020 and approval is yet to be obtained. The Committee asked the PP to submit the approval State Government for withdrawal of water from TB Dam or Narihalla reservoir.*

8. PP has submitted that Plantation shall be done in the undisturbed area and safety zone. It is envisaged that a total of 447.78 ha shall be covered under plantation at conceptual stage which includes 1) Mining Area (285.23148 ha), 2) Dump area (91.4911 ha), 3) Green belt & plantation (37.42295 ha) and 4) Tailing Pond (33.6341 ha). Company will undertake extensive sapling work in mines in abundant area, dumps, green belt, in and around plant premises, office premises etc. Plantation shall be undertaken @ 2500 Plants per ha. It is estimated that a total of 11,19,450 no. of saplings shall be planted in the ultimate stage. The survival rate will be 75 %. It is also envisaged that 27 ha of land shall be covered with plantation during first plan period of 5 years. Types of species to be planted will be Australian acacia, Banyan, Peepal, Teak etc. Company has earmarked Rs. 1.50 Cr. under CER budget within the 1st 5 years plan period from the commencement of mines.

Comment of PD: *The Committee is of the view that indigenous local species should be selected for the plantation in consultation with forest department.*

9. PP submitted that the proposed mining lease area 470.40 ha falls in Swamimalai Block, Kumaraswami Reserve Forest Range. The additional area of 15.3725 Ha (outside ML area) also falls under Swamimalai Block Kumaraswami Reserve Forest Range. Project Proponent has submitted application for Forest Clearance vide Proposal No. FP/KA/MIN/32568/2018 dated 16.03.2018 for diversion of 485.7725 hectares of forest land in Devadari Range, Swamimalai Forest Block, SandurTq, Ballari District, which includes 470.40 ha mining lease area and 15.3725 ha required for diversion for other components like Conveyor corridor, power transmission line, service road (West), and service road (East). Forest Diversion Proposal is under process in the office of DFO/DC Bellary. The mine lease is for captive purpose only. PP also reported that there are no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/ (existing as well as proposed), within 10 km of the notified mine lease area.

Observation of EAC: *The Committee previously asked the PP to submit the present status of the forest clearance for 470.40 ha mining lease area and outside the mine lease are of 15.3725 ha.*

PP in its reply dated 6.07.2020 submitted that company has submitted FC application in Form "A" on 16.03.2018 through online portal of MoEF&CC, Gol. On 23.08.2018, Nodal Officer, GoK accepted FC application. Company has submitted hard copy of FC application on 28.08.2018 to Deputy Conservator of Forest (DCF), Ballari, the work of Tree enumeration, DGPS survey, and identification of Compensatory afforestation land has been completed at site. Degraded forest land to an extent of 68.00 ha has been identified in Kudligi and Hadagali Range forest in lieu of providing alternate Compensatory Afforestation land to Forest Dept.

DCF, Ballari visited Devadari mine site on 25.09.2019 and submitted Part II report to CCF, Ballari Circle, Thereafter, CCF, Ballari Circle submitted Part III report to Nodal Officer, GoK. On 19.02.2020 PCCF, GoK forwarded FC proposal to Additional Chief Secretary (Forest), GoK along with Part IV report for submission to MoEF&CC, Gol for in-principle (Stage I) FC approval.

Currently, the Forest Clearance application is being processed in the office of Additional Chief Secretary (Forest), GoK for State Govt. recommendations for in-principle (Stage I) FC approval.

Observation of EAC: *The Committee observed that Stage-I FC is not yet obtained and without Stage-I FC the EC letter could not be issued by the Ministry. Therefore, PP may expedite the process for grant of FC. In addition to this PP shall also submit a certificate with regard to distance of mining lease from the protected area if any falling within the 10 KM of the project site.*

10. PP submitted that the survey has not indicated the presence of any rare, endangered or endemic species within the lease area. The fauna reported in this area are not of any rare species and are all common migratory type.

Observation of EAC: *The Committee previously asked the PP to submit the List of Flora & Fauna details duly authenticated by the Department of Forest/Wild life division of the state Government.*

PP in its reply dated 6.07.2020 submitted that List of Flora and Fauna is authenticated by DCF, Forest Department, Ballari vide letter No. M1/MNG/B/FF/2006-07/339 dated 22.06.2020. PP during the presentation submitted that the Schedule – I Fauna present in the study area are Black buck, Panther, Sloth Bear Common peafowl, Monitor lizard , Python & Indian Wolf

Observation of EAC: *Committee observed that in the letter dated 22.06.2020 the list of species as per working plan for Ballari Forest Division for 2013-14 to 2022-23 is provided. But details regarding Schedule-1 species is not uploaded online, however during the presentation PP mentioned that 7 Schedule-1 species viz. Black buck, Panther, Sloth Bear Common peafowl, Monitor lizard, Python & Indian Wolf are present in the study area. The Committee is of the view that PP should verify the list, mention the schedule against each species. PP should also prepare the conservation plan for all the schedule-1 species and submit the same for the approval of the Chief Wildlife Warden. PP shall upload the copy of conservation plan and its proof of submission on the PARIVESH Portal.*

11. PP submitted that the baseline data was collected during summer season (March to May, 2018). 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 26.11 to 54.63µg/m³ and 51.28 to 86.63µg/m³ respectively. The concentrations of NO₂ and SO₂ were found to be in range of 25.87 to 12.10µg/cu.m and 15.36 to 7.00 µg/m³, respectively. AAQ parameters in the study area have been found well within prescribed norms. Ambient noise levels were measured at 8 locations in and around the mine site. Noise levels varied from 54.8 & 55.6Leq dB(A) during day time and from 55 and 50Leq dB(A) during night time. PP further submitted that ground water samples were collected from 9 locations within study area. PP submitted that the total hardness varies between 252.00 to 224.00 mg/l. PP submitted that only one surface water sample were collected from Narihala Dam reservoir and submitted all the parameters area well within the prescribed limit of IS: 2296. PP also reported that No species classified as Rare, Endangered or threatened were observed during the study in the lease area. Specific corridors for movements or breeding grounds have not been reported. PP submitted that post project concentration of various pollutants is well within the prescribed standards.

Comment of PD: *The Committee is of the view that isopleths were not incorporated in the EIA/EMP Report nor in the annexure rather it is uploaded separately. Further, there is no indexing in the isopleth. The Committee is of the*

view that air quality modeling should be done for all the activities viz. drilling, blasting, loading, unloading, transportation, crushing, conveying, beneficiation activities considering the total excavation and material re-handling. The control case and worst case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants needs to be mentioned clearly. In addition to this the Original analysis report of sample collected needs to be submitted along with the accreditation certificate of the laboratory. The input parameters used for the modeling needs to be submitted to the Ministry.

12. PP submitted that the Karnataka State Pollution Control Board conducted Public Hearing for the proposed project of Devadari Iron Ore Mine of M/s KIOCL Limited (A Govt. of India Enterprise) for mining of 2 MTPA Iron ore (ROM) & 500 TPA of Manganese ore & setting up of 2 MTPA Beneficiation plant including crushing, screening, conveying in total area of 485.7725 ha (ML area 470.40 ha and 15.3725 ha outside ML for conveyor corridor/power transmission line/approach road) at project site, Devadari range, Sandur taluk, Ballari district, Karnataka state on 25-06-2019 .The advertisement for public hearing was published in “Indian Express” & “Vijay Karnataka” on 24.05.2019 [P.]. The Public hearing was conducted under the chairmanship of Shri M. Satish Kumar, KAS, Additional Deputy Commissioner and Additional District Magistrate, Ballari District and Shri Venkatesh Shekar, Senior Environmental Officer, Karnataka State Pollution Control Board, Ballari was also presented. The issues raised during public hearing were also deliberated during the meeting which includes, employment, ground water depletion, construction of check-dams, grazing area for animals, impact of crops, CSR activities, drinking water facility, medical facility, skill development, infrastructure facility in school & village, implementation of pollution control measures, additional compensation, educational facilities, road maintenance, plantation, employment to local people, etc. The PP inter-alia committed during public hearing that the project will employ around 500 persons and likely to increase the employment by another 700 persons in phased manner (skilled/semiskilled/un-skilled level) on commencement of this mine & setting up of beneficiation plant, through handling of material, transport, ancillary units, spares & consumables, supplies etc. PP has proposed a budget of Rs 50 Crore for drawing water from Tunga Bhadra dam or Narihalla reservoir. PP has earmarked Rs 75 lakhs under CER for rejuvenate lakes/ponds in and around project area. It will be implemented in 1st five-year plan period. Company has earmarked Rs. 5 Crs under Environment Management plan. Out of 5 Crs about Rs 1.3 Crs utilized for Installations of static water sprinkling system, Dry fog system, Water tankers within 6 months from commissioning of mining activities. Company has earmarked Rs. 5 Crs under Environment Management plan and Rs 7.87 Crs for various activities under Corporate Environment Responsibility and shall be taken up in every year on execution of the mining lease deed. Under CER Budget for Sustainable Livelihood, Company has earmarked Rs.50.00 lakhs for activities like a) Agriculture related training to improve yield, market & Demand. b) Rain Water Harvesting, c) training in dairy Farming and Honeybee keeping. The Company has also earmarked capital Budget of Rs.5 Cr for establishing infrastructure environmental parameters. This will be completed during 02

years on commencement of Devadari mine. To reduce the road transportation Company has proposed Capex for Infrastructure, railway siding, power, Conveyor Corridor & Establishment etc is Rs.380 Crs scheduled date is 31.03.2023. There will only 4-5 truck of Manganese Ore in a month.

Observation of EAC: *The Committee noted that during the PH one of the issue raised is regarding grazing of the animals and asked the PP about the same. The PP informed that they will buy the additional land for the grazing of animals. The Committee therefore of the view that PP should provide the complete details (area, location, tentative budget, timeline) for the grazing land.*

13. PP mentioned that Rs 7.87 Crores for various activities under Corporate Environment Responsibility like 1) Creation of Health infrastructure & assistance (Rs. 100 Lakhs), 2) creation of Education facility (Rs. 100 Lakhs), 3) Infrastructures Development (Rs. 200 Lakhs), 4) Environment Sustainability (Rs. 150 Lakhs), 5) Hygiene & health (Rs. 100 Lakhs), 6) Sustainable lively hood (Rs. 50 Lakhs), 7) Development of Sports facility & cultural activity (Rs. 50 Lakhs) and 8) Skill Development (Rs. 37 Lakhs) have been earmarked and shall be taken up every year on execution of the mining lease deed. Scheduled date is within 1st five-year plan period on commissioning of Devadari mine.

Observation of EAC: *The Committee previously asked that PP need to submit the Revised CER for the total cost of the project including cost of land.*

PP in its reply dated 6.07.2020 submitted that the total project cost is Rs. 787.50 Crores and budget earmarked for Corporate Environmental Responsibility (CER) is Rs. 1087 lakhs as per Ministry's O.M. No. 22-65/2017-IA.II (M) dated 01.05.2018 for Green Field Project (calculated as per slab system based on capital cost of project).

Observation of EAC: *During the meeting the Committee advised the PP on the activities proposed under CER. The Committee asked the PP to submit the revised CER Plan.*

14. PP reported that there is no habitation within the notified Mining Lease area. Rehabilitation work is not applicable for the mining project. However, application is submitted to Deputy Commissioner, Bellary on 28/08/2018 for grant of No Objection Certificate for the project under Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. The application is under process.

Observation of EAC: *The Committee previously asked that i) PP need to bring the Revised R&R plan and the HR policy for the engagement of 500 employees and ii) Permission for shifting of School and its alternative location.*

PP in its reply dated 6.07.2020 submitted that this project is Green Field Project and no habitants with in lease area. Rehabilitation and Resettlement is not envisaged. For engagement of 500 employees for this project, KIOCL being CPSU has well defined HR policy for recruitment of workers and officer

category. PP also submitted that No school is existing within the core zone hence shifting of school to alternate location is not envisaged.

15. **Observation of EAC:** *The Committee previously asked that PP need to submit the EMP cost.*

PP in its reply dated 6.07.2020 submitted that Environmental Management Plan (EMP): PP submitted that Company has earmarked Rs. 5 Crores (Capital cost) and 1 Crores (Recurring/year) under Environment Management plan. This will be completed during 02 years on commencement of Devadari mine. PP has submitted the detailed plan with activities, budget and timelines which includes 1) Preparation cost EIA/EMP (Capital: 20 Lakhs), 2) Plantation/ Green belt development (Capital: 100 Lakhs & Recurring/year: 10 Lakhs), 3) Water tanker (Capital: 60 Lakhs & Recurring/year: 40 Lakhs), 4) Construction of RWH structure (Capital: 50 Lakhs), 5) Garland drains, gully plugs and retaining walls (Capital: 40 Lakhs & Recurring/year: 1 Lakhs), 6) Check bunds, culverts (Capital: 60 Lakhs), 7) Pollution Control monitoring equipments (Capital: 100 Lakhs & Recurring/year: 10 Lakhs), 8) Installation cost of Static water Sprinkling System (Capital: 50 Lakhs & Recurring/year: 20 Lakhs), 9) Dry Fog system at Crushing & Screening units (Capital: 20 Lakhs), 10) Occupational Health (Recurring/year: 1 Lakhs), 11) Environmental Awareness (Recurring/year: 1 Lakhs), 12) Personal protective equipments (Recurring/year: 3.5 Lakhs), 13) Housekeeping (Recurring/year: 0.5 Lakhs) and 14) Dump terracing (Recurring/year: 13 Lakhs).

16. To avoid any adverse effects on the health of workers due to various pollutants, sufficient measures will be practiced as given below: Provision of rest shelters for mine workers with amenities like drinking water etc. All safety measures like use of safety appliances, safety signboards, posters, slogans related to safety etc. Training of employees on use of safety appliances and first aid. Regular maintenance and testing of all equipments as per manufacturers' guidelines. Periodic Medical Examination (PME) of all workers by a medical specialist to be conducted regularly, to assess the health status of the employees and then suitable corrective actions taken. The frequency of PME is once in three years for the employees above 45 years and once in five years for the employees less than 45 years. First Aid in mines includes training and re-training of the staff of First Aid activity group along with necessary facilities. Close surveillance of work environment and practices, which may affect environment and worker's health and safety. Working of mine as per approved Mining Plan and Environmental Management Plans. Company shall make arrangements with hospitals, specialist doctors to meet the demand of urgency of both its employees and community around. For community medical check-up, the Company will organize camps at different locations throughout the year in nearby areas besides, more medical treatment facilities at the door step of the villagers through mobile vans and doctors.

17. PP reported that there is No litigation pending against the project.

18. PP has given an undertaking vide Letter No. KIOCL/ Mining/ DIOM/1863 dated 10.09.2019 certifying that the contents (information & Data) given in the EIA/EMP Report are correct. The prescribed TORs have been complied in the EIA Report. The Consultant in the EIA report has given a declaration stating that EIA Coordinator (EC) has gone through the report, and the consultant organization shall be fully accountable for any misleading information.

Observation of EAC: *The Committee previously asked the PP to submit the Undertaking by way of Affidavit in compliance of the Ministry O.M. 30.05.2018*

The PP in its reply dated 6.07.2020 submitted an Affidavit in an India non judicial e-stamp Certificate No. IN-KA58021379618279S dated 12.06.2020 registered on 19.06.2020 for compliance of the Ministry's OM no. 3-50/2017-IAIII (Pt.), dated 30th May 2018 that this judgment is not applicable to said project.

Observation of EAC: *The Committee is of the view that affidavit submitted by the PP is not as per O.M. dated 30.05.2018 and PP is required to submit the revised affidavit.*

19. The PP further submitted that the total cost of the project is 787.50 Crore and total direct employment will be given to around 500 persons and Indirect employment will be about 700.

20. Based on the discussion held and document submitted the Committee **deferred** the proposal for want of following information:

- 1) The Committee observed that latitude & longitude needs to be verified as per coordinate provided by the State Government.
- 2) The Committee asked the PP to submit the approval of State Government for withdrawal of water from TB Dam or Narihalla reservoir.
- 3) PP should submit the species to be planted and select indigenous local species.
- 4) PP may expedite the process for grant of FC and submit the Stage-I of FC for consideration of the proposal for grant of EC. In addition to this PP shall also submit a distance of mining lease from the protected area if any falling within the 10 KM of the project site.
- 5) PP should verify the list provided by State Government and mention the schedule against each species. PP should also prepare the conservation plan for all the schedule-1 species and submit the same for the approval of the Chief Wildlife Warden. PP shall upload the list of schedule-1 species, copy of conservation plan and its proof of submission to CWWL on the PARIVESH Portal.

- 6) The Committee is of the view that isopleth is not incorporated in the EIA/EMP Report nor in the annexure rather it is uploaded separately. Further, there is no indexing in the isopleth. The Committee is of the view that air quality modeling should be done for all the activities viz. drilling, blasting, loading, unloading, transportation, crushing, conveying, beneficiation activities considering the total excavation and material re-handling. The control case and worst case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants needs to be mentioned clearly. In addition to this the Original analysis report of sample collected needs to be submitted along with the accreditation certificate of the laboratory. The input parameters used for the modeling needs to be submitted to the Ministry.
- 7) PP should provide the complete details (area, location, tentative budget, timeline) for the grazing land.
- 8) Activities proposed under CER needs to be revised as suggested by EAC during the meeting.

2.5 Production of 5.50 MTPA of Limestone total excavation from the mines will be 6.54 MTPA (Limestone: 5.5 MTPA, Soil: 0.56 MTPA and Waste: 0.48 MTPA) from Sonadih Limestone Mine (ML-1; Area : 294.160 Ha) located near Villages - Sonadih, Dhabadih, Raseda, Keshdabri, Baloda Bazar Tehsil & Balodabazar - Bhatapara District, Chhattisgarh by M/s Nuvoco Vistas Corporation Limited [File No.: J-11015/184/2016-IA.II(M); Proposal No IA/CG/MIN/72229/2016; Consultant: B.S. Envi -Tech Pvt. Ltd] -Re-Consideration of EC - Regarding.

The proposal of M/s. Nuvoco Vistas Corporation Limited is for total excavation from the mines will be 6.54 MTPA (Limestone: 5.5 MTPA, Soil: 0.56 MTPA and Waste: 0.48 MTPA) for production of 5.50 MTPA of Limestone from Sonadih Limestone Mine (ML-1; Area 294.160 Ha) located near Villages - Sonadih, Dhabadih, Raseda, Keshdabri, Baloda Bazar Tehsil & Balodabazar - Bhatapara District, Chhattisgarh. The mine lease area lies between the 21°43'10.0"- 21°45'0.0" North latitude and 82°10'50.0"-82°12'20.0" East Longitude with an average altitude of 243-259m above MSL on the Survey of India Topo-sheet No. 64/K/2.

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 Project Proponent [**then M/s. Lafarge India Pvt. Limited**] applied vide proposal no IA/CG/MIN/58559/2016 for prescribing Term of Reference (ToR) and submitted Form-1 and Pre-feasibility report. The proposal was considered in EAC meeting held on September 19-20, 2016, and EAC in its meeting held on November 23-25, 2016 recommended the proposal for prescribing Term of Reference (ToR). The ToR letter was issued on 16.12.2016 in the name of **M/s. Lafarge India Pvt. Limited.**

The Project Proponent then applied for transfer of Terms of Reference (TOR) from M/s. Lafarge India Pvt. Limited to M/s. Nuvoco Vistas Corporation Limited and submitted the requisite information and documents. The Ministry accorded transfer of TOR to M/s. Nuvoco Vistas Corporation Limited on 06.03.2018.

PP vide **proposal no. IA/CG/MIN/72229/2016** applied for grant of EC online and submitted the Form 2 and EIA Report after conducting the Public Hearing. As the complete details was not provided an EDS was raised on 11.09.2018 for submission of requisite information. As the PP did not submit the requisite information within the stipulated time frame the proposal was deleted from the PARIVESH portal on 02.03.2019 stating the reason that *“The EDS which were sought from PP and noted that PP has not submitted the information and requisite documents yet. It seems that PP is not interested to submit the information accordingly the proposal was delisted from the list”*. PP resubmitted the application vide proposal no. IA/CG/MIN/72229/2016 on 18.11.2019, thereafter, the Ministry raised EDS on 10.12.2019 for submission of requisite information PP uploaded the information w.r.t. EDS on 19.12.2019 and the Ministry revalidated the proposal and raised EDS on 14.02.2020. PP submitted the reply to EDS dated 17.02.2020 on 20.02.2020. Meanwhile, it is also noted by Ministry that the said proposal of PP for grant of EC has been running in duplication with the same proposal number on PARIVESH portal and thereby creating ambiguity w.r.t. EDS raised and reply submitted by PP from time to time. In view of the same, PP was asked to withdraw one of the proposals. One of such proposals has been withdrawn on 24.03.2020 which has been accepted by the Ministry. PP vide its letter Ref: NUVOCO-SCP/ML1-MoEFCC/2019-20 dated 18.12.2019 submitted the reply w.r.t. EDS raised on 10.12.2019 and thereafter on 14.02.2020 and uploaded the same on 20.02.2020. The proposal was then placed in EAC meeting held during 20-21 April, 2020 wherein the Committee deferred the proposal for want of requisite information. The PP submitted the information 22.05.2020 and the proposal was placed in EAC meeting held during 22-24 June wherein the Committee deferred the proposal for want of requisite information. PP submitted the requisite information 12.07.2020 and the proposal is placed in EAC meeting held during 19-21 August, 2020.

4. PP reported that the Government of Chhattisgarh vide letter dated 15.06.2016 issued LOI/lease in favour of M/s Lafarge India Private Limited. Total mine lease area is 294.160ha, out of which is 277.025 ha is patta land and 17.135 ha is Govt. Land. Further PP, submitted that Department of Mines and Geology, Government of Chhattisgarh has approved transfer of LOI (Letter of Intent) from M/s. Lafarge India Pvt. Limited to Nuvoco Vistas Corporation Limited vide letter no 3- 86/2007/12(2) dated 03.11.2017 for Sonadih Limestone Mine (ML-1) mining project with production capacity of 5.50MTPA. The mine is located in Villages- Sonadih, Dhabadih, Raseda, Keshdabri, Baloda Bazar, Tehsil- & Balodabazar-Bhatapara District, Chhattisgarh in 294.160 ha.

5. PP submitted that Mining Plan along with Progressive Mine Closure Plan of above area was approved by Indian Bureau of Mines (IBM) vide letter No. Balodaba/Chup/khayo-51/2016-Raipur dated 3rd October 2016. Thereafter IBM approved the name change for approved mining in the name NUVOCO vide letter No. RPR-1309/02/2017-MINING PLAN-Vol-II/192 dated 09.05.2018. The total mineral resources of the mine are estimated to be about 156796437 tonnes (156.80 million tonnes) out of which the probable reserves are estimated as 97264403 tonnes (97.264 million tonnes) of limestone, which will last for 18 years with the average rate of production of 5.5 million tonnes per annum. At the end of the mine about 176.98 ha up to a maximum depth of 30 m (upto a level of 205 mRL) from surface level in the form of five benches will be mined. After the exhaustion of entire mineable limestone, Block 2 will be backfilled by generated OB/waste and remaining mined out pit will be converted in to water tank for utilization in irrigation purpose. The water reservoir will be properly fenced by barbed wire or a bund will be constructed outside the water reservoir during the closure of the mine Part of the Mined-out area will be converted into a water reservoir for storing storm/rain water which would help to recharge the ground water table in the area and balance area will be backfilled as mentioned above. Any side/ inter burden / sub-grade mineral generated will be utilized in blending with high grade material Hence there will be no left over OB or reject dump at conceptual stage. Prior to the final closure of mine, mined out area will be protected by fencing and green belt will be developed all around it by planting suitable species of trees.

6. The PP submitted that the mine is proposed to operate by the conventional open cast method of mining, which includes drilling, blasting, loading and transportation by deploying heavy earth moving machineries. The machinery and other infrastructure planned ML-1 (294.16 ha) is inclusive of the equipment available at the present mine. The excavated limestone will be transported by dumpers to crusher located in the cement plant which is adjacent to the ML area. Loading will be carried out by hydraulic excavators of 5.1 cu. m bucket capacity. The limestone will be loaded into 35 tonner dumpers for loading and transportation of limestone. The crushed the material will be directly transported to cement plant after crushing and screening through belt conveyor.

Observation of EAC: *The Committee previously asked the PP i) to explore the possibility of sequential operation and concurrent backfilling in the void already created in the existing mines based on excavation plan of both the mines and ensure that earliest backfilling can be done, no fresh land for dumping of waste and to avoid dumping close to the habitation and ii) Area to be kept as a safety zone near the habitation/ no mining zone, effective area under mining, location of dumps if any and plantation on the same needs to be submitted.*

For point no i) PP in its reply dated 12.07.2020 submitted the following:

(a) The existing Sonadih Limestone Mine has been active for more than 35 years & have been working in four benches within a single pit; the left out reserve 6 available in the complete periphery of the mines and thus working is done in all directions of the pit. The cement grade limestone is supplied to

the plant by blending of limestone from all benches. The excavation from the bottom bench is done mainly in dry seasons; as it works as sump to accumulate the rain water at the catchment area which helps us to mine smoothly in the remaining three benches and supply the required qualitative limestone to the plant during monsoon seasons. The accumulated rain water in the bottom bench acts a 9 4 water reservoir and it is also used for supplying water to Sonadih village, mines and plant use.

While considering the Sonadih Limestone Mines for backfilling below aspects are going against the specific way of mining

1. Presently, existing mines are being operated in all the benches in all the sides.
2. Bottom bench acts as a sump for the rain water accumulation from the catchment area.
3. The accumulated water is used for supplying water to Sonadih village and plant
4. If back filling is done in the existing mines by using OB of ML-1 (294.160 Ha), it would not be sufficient to achieve the original ground RL.

While backfilling in ML-1 (294.160 Ha) is being done by sequential mining then,

1. One of the blocks / pits of ML-1, the height of dump will attain the original ground RL.
2. Upon backfilling land will be used for multipurpose like agriculture, plantation, infrastructure development etc.

Therefore, it is proposed to do sequential operation & backfilling in ML-1 so as to avoid using fresh land for permanent dumping & also to avoid dumping near habitation.

- (b) In the Modified Mining Plan (attached), it has been taken care and no dumping of overburden and waste is planned close to habitation.

For point no ii) PP in its reply dated 12.07.2020 submitted the following:

- a. In Modified Mining Plan, no mining including dumping is proposed within 300 meter of the habitation. It is mentioned in the point no. 7.1 A (I) (a) of Modified Mining Plan.
- b. The revised location of dumps and afforestation are depicted in the conceptual plan (Plate no. VIII) of the Modified Mining Plan.
- c. Plantation in safety zone is proposed in 2nd year an 3rd year.

Observation of EAC: *The Committee observed that PP has revised the mining plan and now there is no dumping and mining is proposed within 300 meters of the habitation. The Committee is of the view that PP shall carry out plantation within 300 meter of the no mining zone.*

7. PP submitted that the maximum depth of working will be 28 m from surface level which is above the water table. The depth of ground water level near mining lease area in pre & post monsoon are found to be 35 to 45 mbgl & 30 to 35 mbgl respectively. PP submitted that the source of water required will be through intake well for which they have got agreement with Water Resource Department dated 22.10.2010. Mining activity **will not intersect ground water table** hence permission under Ministry's O.M No. 21-103/2015-IA-III is not required. PP submitted that Shivnath River flows at 0.9 km North from this lease boundary. Garland drains with sedimentation pits all along the mine pit will be constructed to arrest the carryover of silt from the mine area. Check dam will be constructed at the discharge end of garland drains. Whatever water gets collected in the mine pit either as direct rainfall falling in the pit will be collected in the sumps and pumped back for road spraying, green belt. Balance water, free from suspended particles, will be released for supplying to nearby villages or released in the nearby stream outside the lease area. The mine workings will be above the water table throughout the life of the mine. Ground water will not be intersected. NUVOCO will use about 100 m³/day of water for dust suppression, greenbelt development and Domestic Purpose. The wastewater generated from the domestic front is mainly from toilets and canteen. Domestic wastewater - 8 m³/day. This water is treated in Septic tank followed by Soak pit. In addition to this PP also provided the copy of agreement dated 22.10.2010 made with Water Resource Department.

8. PP submitted that total 10000 saplings covering 5 Ha area (@2,000 saplings per hectares) in the next 5 years. PP submitted that species such as *Karanj, Khamar, Akesia, Gulmohar, Sal, Mango, Jamun, Amrud, etc, are the common species which are planted and this will be continued in future.* PP reported that after this plan period, about 25 Ha additional area will be covered by plantation in every five years. (1st Five Year Plan – 10000 saplings in 5 ha, 2nd Five Year Plan – 50000 saplings in 25 ha, 3rd Five Year Plan – 50000 saplings in 25 ha and Last 3-year Plan - 50000 saplings in 25 ha). **Thus, the total area no. of saplings planted will be 160000 in an area of 80 Ha.** PP submitted that the budget earmarked for the plantation shall be Rs 10 lakhs.

Observation of EAC: *The Committee previously Revised plantation plan needs to be submitted wherein the plantation around the lease boundary to be completed within 2 years and rest of the plantation in the 5 years. In addition to progressive plantation for gap filling, backfilling sites and dump site needs to be provided. The sapling to be planted shall be at least of 2-meter height and budget for the plantation shall be calculated accordingly.*

PP in its reply dated 12.07.2020 submitted that the revised plantation programme is mentioned in the conceptual plan of Modified Mining Plan [Plate No-VII]. Budget for five-year plantation is mentioned in following table:

Year	Area for Afforestation (Ha)	Nos. of saplings (Nos.) for plantation		Total saplings	Capital Cost of Plantation @Rs. 200/- per sapling of 6 feet height (In Rs.)	Recurring cost of Plantation @Rs. 25/- per sapling	Remark
		100%	10% (10% extra every year for gap filling considering 90% survival rate)				
I Year	18.60	46,500	-	46500	93,00,000	-	Plantation around lease boundary
II Year	18.60	46,500	4650 (Ist Year area)	51150	10230000	1162500	Plantation around lease boundary and some in safety zone/ buffer zone
III Year	18.60	46,500	4650 (IInd area)	51150	10230000	1162500	Plantation remaining in safety zone/ buffer zone and other location
IV Year	18.60	46,500	4650 (IIIrd area)	51150	10230000	1162500	
V Year	18.60	46,500	4650 (IVth area)	51150	10230000	1162500	
			4650 (Vth area)	4650	9300000	116250	
Total	93.00	232500	23250	255750	51150000	4766250	

Note- After 5 years, total grown trees will be 2,32,500 nos

9. PP submitted that total mine lease area is 294.160ha, out of which is 277.025 ha is patta land and 17.135 ha is Govt. Land. There is no forest land within the ML area. PP has submitted a letter issued by DFO, Balodabazar vide letter No. 607 dated 08.02.2019 certifying that the said mine lease area does not involve the forest land. Further, PP informed that there are no eco sensitive areas like National Parks, Wildlife Sanctuaries, Biosphere Reserves, Elephant Corridor, Mangroves, Archaeological/ Historical Monuments, Heritage sites, etc. exist within 10 km radius area from the ML boundary. Nearest Reserved Forests from the Mine site are Mohtara RF 0.6 km – South, Latwa RF - 3.8 km in South West and Sonbarsa RF 1.7 km- WSW.

10. PP has reported that there is a presence of Schedule-I species (Peacock and Monitor Lizard). PP has submitted wildlife conservation plan with a budget of Rs 180 Lakh for 5 years. The same has been approved by Principal Chief Conservator of Forest (Wildlife) vide its letter No Va.Pra./Prabandh-449/2019/3623 dated 26.06.2019.

Observation of EAC: The Committee previously asked that a Letter from Chief Wildlife Warden regarding distance of mining lease from the protected area, national park etc. needs to be submitted.

PP in its reply dated 12.07.2020 submitted that they have made an application to PCCF (Wildlife), Raipur on 2.7.20 (enclosed) regarding distance of mining lease from the Protected area, National Park etc. and the same has been forwarded to CCF (Wild Life) Udanti-Sitanadi Tiger Reserve on 9.7.20 for his comments from PCCFs Office. The application is under consideration.

As per the detailed biological study report and Wild Life Conservation Plan approved by PCCF (Wildlife), Chhattisgarh on 26.06.2019, no Eco-Sensitive Zones (ESZ), national Parks, Wildlife Sanctuaries, Biosphere Reserves, Elephant Corridor, Tiger Reserves, Community reserves, Wildlife Corridor, Mangroves, Archaeological/Historical Monuments, Wetlands, Heritage sites, etc. exist within the 10 km radius area of the proposed site.

Meanwhile, PP has explored the locations of protected/forest areas of Chhattisgarh at ENVIS Centre on Wildlife & Protected Areas from Wild Life Institute of India, Dehradun (Sponsored by MoEF&CC) and attached is the list & map which shows the locations of those areas. It reveals that the "Barnawapara Wild Life Reserve" is the nearest to PP's ML 1 and crow-fly distance is more than 40 kms (map attached). Further, it is evident that the nearest protected area of Barnawapara WLS is outside 10 km study area of the proposed mining lease.

12. Primary baseline data for specific micro-meteorology data, ambient air quality, waste quality, noise level, soil and flora & fauna has been collected for winter season, 2016-17 covering the months of December 2016 to February 2017 on hourly basis. The monitoring results of ambient air, surface water, soil, ambient noise and ground water for the month of December 2016 to February 2017 have been reported well within the prescribed NAAQS limits.

13. The Project Proponent reported that Public Hearing for the project was conducted on 04.05.2018 by Chhattisgarh Environment Conservation Board. The advertisement for public hearing was published in "Hindustan Times" on 01.04.2018 and Dainik Bhaskar on 31.03.2018. The Public hearing was conducted under the chairmanship of District Magistrate, Balodabazar, Chhattisgarh. The issues raised during public hearing were also deliberated during the meeting are mainly on employment and providing the medical facilities, educational facilities, bus facility, laying of Roads etc. PP has also made budgetary provisions in the form of CER, EMP and CSR to address the issues raised during Public consultation.

14. PP submitted that Corporate Environment Responsibility (CER) Budget towards capital expenditure in accordance to the MoEF&CC's office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018 for Social Welfare Measures has been worked out for new mine capital cost of Rs 150 crores under Greenfield project. Based on the same, a budget of Rs. 2.75 Crores has been allotted towards capital expenditure for Corporate Environment

Responsibility (CER) which includes Rs. 60 lakhs towards Construction and repair of Road of Raseda - 600 mts, Dhabdih - 550 mts, Rasedi 430 mts, Sonadih 1000 mts, (4500/- per cubic meter), Rs. 35 lakhs towards Pond De-siltation - Raseda and Dhabadih villages, Rs. 20 lakhs towards Providing equipments and other infrastructure support to start 5 Nos of smart classes in affected village school. @ Approxi4-5 Lakh/School, Rs. 65 lakhs towards providing medical facility in the affected villages with provision of medicines and check-up, Rs. 60 lakhs towards Water Facility- Laying of water pipe line from Mines pit to Sonadih village dam, digging /repairing of Bore well and Rs. 35 lakhs towards Plantation under 'Harihar Chhattisgarh' on the land allotted by Distt. Administration (Local species Neem, cassasimea, Jamun, Awala, etc.).

15. PP has submitted that 04 nos. of villages fall under R&R wherein no. of Project Affected Families (PAFs) are 100. The Funds Allocated for R&R is Rs. 100 Lakhs. PP has stated that in Form 2 that R&R is in progress. Out of total private land 277.025 Ha. Company has purchased approximate 55 % Non ST land & 1 % ST land of land in ha. From the private Land Owners and the process of land purchasing would continue in phases as per requirements of the mining operations throughout the life of mine. There are about 1531 Project Affected persons in the total 277.025 Ha of private land with Sonadi-327, Raseda-475, Dhadabih-288 and Kesbadri-441. Compensation is being included transaction cost, one-time compensation for non-employment by NVCL either directly or indirectly to the land loser or any of the dependents of the land loser, one-time compensation towards subsistence livelihood per family for 12 months, expenses for incurring stamp duty & registration fee for purchasing alternate equivalent land etc.

- All compensation was/ will be paid at the time of Sale Deed Registration by Bank Drafts / Pay Orders only;
- A Grievance Redress Mechanism is in place at the unit level;

Based on detail socio economic survey, land and other assets and vulnerability component NVCL has worked out resettlement budget. In order to identify the value of the proposed lands to be acquired, NVCL conducted a market survey. On the basis of prevailing market price, the rates for the lands already purchased from SC/ST APs vary between Rs. 15 to 20 Lakhs per acre, excluding registration and stamp duty, against this rate payable. DLC Government Circle Rate declared every financial year) rate is vary between Rs. 2 to 3 lakh /acre. Therefore, a price of Rs. 20 lakh per acre has been taken into consideration for budget estimates for the future land purchase for the project. Rs 2947 compensation already paid to land losers & Monitory assistance to vulnerable APs, for crop, trees & structures and Registration, document preparation and consultation for transfer of ownership. PP has further submitted a Rehabilitation and Resettlement Plan.

16. The Project Proponent submitted that the budget earmarked for Environmental Management Plan (EMP) shall be ₹ 51.0 Lakh (Capital) & ₹ 48.0 Lakh (recurring/annum) which includes i) Rs 35.0 Lakh (Capital) & Rs

15.0 Lakh (recurring) for Dust Suppression Measures, ii) Rs 6.0 Lakh (Capital) & Rs 23.0 Lakh (recurring) for Environmental Monitoring, iii) Rs 10.0 Lakh (Capital) & Rs 10.0 Lakh (recurring) for Greenbelt Development. NUVOCO has further budgeted an amount of Rs. 51 Lakhs (**Revised to Rs 550 Lakhs**) for implementation of Environmental Management Plan. This includes i) Rs 35.0 Lakh (Capital) & Rs 15.0 Lakh (recurring) for Air Pollution Control Measures, ii) Rs 6.0 Lakh (Capital) & Rs 1.2 Lakh (recurring) for Occupational Health Measures, iii) Rs 8.3 Lakh (Capital) for Dump Management (Retaining Wall), iv) Rs 100.0 Lakh (Capital) & Rs 28 Lakh (recurring) for Environmental Monitoring, v) Rs 220.6 Lakh (Capital) & Rs 0.5-5.175 Lakh (recurring) for Greenbelt and vi) Rs 180.0 Lakh (Capital) for Wildlife conservation.

17. PP submitted that the problem of occupational health, in the operation and maintenance phase is primarily due to dust and noise which could affect the workers from respiratory and hearing problems. The necessary personal protective equipments will be given to all the workers. Full-fledged hospital facilities will be available round the clock for attending emergency arising out of accidents, if any. All working personnel will be medically examined at least once in every year and at the end of his term of employment. This is in addition to the pre-employment medical examination.

Safety of both men and materials during construction and operation phases is of concern. Safety plan will be prepared and implemented in the proposed expansion. The preparedness of an industry for the occurrence of possible disasters is known as emergency plan. The disaster is possible due to collapse of rock structures and fire/explosion etc. Keeping in view the safety requirement during construction, operation and maintenance phases a safety policy will be formulated. Posting of safety officers has been in accordance with the requirement of Factories Act/DGMS and their duties and responsibilities has been defined thereof. In order to fully develop the capabilities of the employees in identification of hazardous processes and improving safety and health, safety circles has been constituted in each area of work. The circle consists of 2-3 employees from that area. The circle normally meets for about an hour every week. A full-fledged training center has been set up at the plant. Safety training has been provided by the Safety Officers with the assistance of faculty members called from Professional Safety Institutions and Universities and is repeated from time to time. In addition to regular employees, limited contractor labors have also been provided safety training. To create safety awareness safety films are being shown to workers and leaflets are being distributed. The health of all employees will be monitored once in a year for early detection of any ailment due to exposure of dust, heat and noise.

18. PP submitted an undertaking by the way of an affidavit bearing certificate No M 228161 dated 11.12.2019 to comply with all the statutory requirement and common cause judgment dated 02.08.2017. PP also submitted an undertaking that data and information given in the application, enclosure and other documents are true to best of his knowledge and belief and PP is aware that if any part of data or information submitted is found to

be false or misleading at any stage the project will be rejected and clearance given if any will be revoked at his risk and cost. Consultant also submitted an undertaking that “M/s B.S. Envi-Tech Pvt. Ltd has complied with all the prescribed Terms of Reference (TOR) issued by Ministry of Environment, Forests & Climate Change (MoEF&CC) in preparation of Final ELA. Report for M/s. Nuvoco Vistas Corporation Limited which proposes Limestone production of 5.5 MTPA from Sonadih Limestone Mine (ML-1) (ML area: 294.160 Ha.) located at Villages - Sonadih, Dhabadih, Raseda & Keshdabri, Baloda Bazar Tehsil, Balodabazar-Bhatapara District, Chhattisgarh.” Also, Managing Director, M/s B.S. Envi-Tech Pvt. Ltd confirms that the mentioned experts in EIA report prepared the Final EIA of M/s. Nuvoco Vistas Corporation Limited and that the consultant organization shall be fully accountable for any misleading information mentioned in this statement.

19. Project Proponent submitted that the Project cost is estimated to be about Rs. 150 crores and shall give direct employment to 113 persons.

The proposal was placed in the 15th EAC meeting held during 20-21 April, 2020. Based on the discussion held and document submitted the Committee **deferred** the proposal as some of the ToR points are not addressed properly, public hearing issues are not addressed properly and for want of following requisite information.

i. All ToR points shall be addressed properly and relevant information needs to be provided against each ToR Point.

ii. Mining Plan and EIA Report needs to be crossed examined for land use and waste dumping as i) in the mining plan land use for remaining 21.75 Ha is not provided, in EIA/EMP Report it has mentioned that there will be no left over OB or reject dump at conceptual stage but in the land use plan 13.03 Ha is shown under OB/Waste dump.

iii. Agreement made with Water Resources Department needs to be submitted. In addition to PP needs to submit a plan with timeline so that mine will become self-sufficient for its water requirement and water from external source will be not required.

iv. Plantation schedule needs to be revised so that maximum plantation can be completed within a period of 5 years and for the remaining period only progressive plantation and gap filling needs to be done to maintain a density of plantation of at least 2500 saplings/ha.

v. PP shall submit the letter from Chief Wildlife Warden certifying the distance of mining lease from the protected area falling in 10 KM radius

vi. Impact of mining activity on the reserve forest which is located at a distance of 0.6 KM.

vii. List of Schedule-1 Species duly authenticated by PPCF (Wildlife) and based on the same conservation plan needs to be prepared. Proof of submission

of conservation plan needs to be submitted. In case there is no change in list of schedule-1 species for which conservation plan has already been approved then a letter from PCCF (wildlife) may be submitted to the effect that there are no schedule-1 species in the core and buffer zone of the mining lease, other than what mentioned in approved conservation plan.

viii. Cumulative impact needs to be calculated considering the existing mines, existing cement plant and proposed mines. Lead distance mentioned in the EIA/EMP report needs to be examined and modeling should be done based on the actual distances.

ix. Public Hearing Points needs to be addressed properly, and compliance of commitment previously made during PH of the existing mines and cement plant needs to be submitted.

x. There is habitation in the mining lease area, therefore R&R Plan needs to be submitted. There is some issue in the PH regarding purchase of land. Therefore, complete details of compensation paid to project affected families and persons needs to be submitted.

xi. PP needs to submit in a tabular format, the year wise total excavation, waste generation, top soil generation and utilization, back filling plan, area of dump yard, quantity of waste etc. along with conceptual plan prepared for every five years over the life of mine to ascertain the progress of mines over the years.

xii. As the mine is not contiguous location of weighbridges and transportation route needs to be submitted for each mining block. Feasibility of conveyor transportation needs to be submitted.

xiii. What is the source of water for the cement plant and existing mining lease? Source of data for ground water level calculation needs to be submitted.

xiv. Public health implications, safety issues etc. needs to be addressed properly.

xv. It is not clear whether the canal is made up of concrete or not. There is a sudden dead end of canal and no reason was provided for the same. Therefore, a Study needs to be submitted which clearly bring out the complete details about the canal and safety measure to be taken for mining near canal, inter-alia, including the safe distance of mining; method of mining / blasting proposed; measures against the blast induced vibrations; and NOC from the concerned authority for mining near canal.

xvi. PP needs to bring out the details of the area to be put up under mining and left under safety zone (viz. around canal, electric line, railway line, public roads, statutory barrier etc.). The amount of mineral available after the same and blocked in safety zone.

The same was informed by **Ministry vide letter dated 29.04.2020** for submission of requisite information. **PP vide its letter dated 21.05.2020** submitted the following information/clarification:

1. PP has submitted the revised EIA/EMP report.
2. Pointwise compliance to MoEFCC ADS points raised vide letter dated 29th April, 2020.

S. No.	Point	Compliance Status and Reference in Revised EIA Report
i.	All ToR points shall be addressed properly and relevant information needs to be provided against each ToR Point.	All points are addressed with relevant information. Compliance of TOR points and its reference in the revised EIA Report are enclosed as Annexure - 1 F.
ii.	Mining Plan and EIA Report needs to be crossed examined for land use and waste dumping as i) in the mining plan land use for remaining 21.75 Ha is not provided, in EIA/EMP Report it has mentioned that there will be no left over OB or reject dump at conceptual stage but in the land use plan 13.03 Ha is shown under OB/Waste dump.	As mentioned in the Land-use para of the Approved mining plan (para 7.20) and Revised FEIA report (Chapter-2, Para 2.8.6, Table 2.11, Page - 32), total 272.411 ha of the mining lease the area will be utilized for excavation, road, infrastructure, OB dump and Plantation up to the conceptual stage. Hence, the remaining 21.75 ha of the non-mineralized area will stay undisturbed and not be utilized for any of the purposes during the course of mining operation up to the conceptual stage.
iii.	Agreement made with Water Resources Department needs to be submitted. In addition to PP needs to submit a plan with timeline so that mine will become self-sufficient for its water requirement and water from external source will be not required.	NUVOCO has Agreement with Executive Engineer, Water Resources Department, Raipur for water drawl from River Seonath - 2.0 cusec/month i.e., 4896 m ³ /day (copy enclosed as Annexure - 4 D to the letter by PP). Mine will become self-sufficient for its water requirement by the end of 3rd year. Details are provided in Chapter - 4, Table - 4.10 Page no 130.
iv.	Plantation schedule needs to be revised so that maximum plantation can be completed within a period of 5 years and for the remaining period only progressive plantation	Greenbelt developed is planned in the below areas: a. 80 Ha - Non Mining area Including 7.5 m barrier b. 16.83 Ha - Backfilling area c. 13.03 Ha - Dump area

	and gap filling needs to be done to maintain a density of plantation of at least 2500 saplings/ha.	<p>The plantation program is planned to cover maximum area in the first five years i.e 80 Ha. Balance area of 13.03 Ha of Dump and 16.83 Ha of Backfilling are based on the planned mining operations.</p> <p>Dumping will be completed at the end of 8th year and plantation commences from 9th year onwards. Similarly, Backfilling commences in 9th year and will continue upto 16th year. Plantation on backfilling area commences in 16th year.</p> <p>Details of plantation along with budget are provided in Chapter – 4, Para 4.5.7, Table – 4.20 Page no.149</p>
v.	PP shall submit the letter from Chief Wildlife Warden certifying the distance of mining lease from the protected area falling in 10 KM radius	<p>Mohtara Reserved Forest is located at a distance of 0.6 km from the Southern boundary of Mining lease. The distance of the Mohtara Reserved Forest is mentioned in the PCCF Approved Conservation Plan in Page no 29 (Approved conservation plan is enclosed as Annexure – 4 F to the letter by PP)</p>
vi.	Impact of mining activity on the reserve forest which is located at a distance of 0.6 KM.	<p>Impact of mining operations on Mohtara Reserve Forest located at a distance of 0.6 KM will be marginal.</p> <p>Details of the Impact and measures proposed are given in Chapter -4, Para 4.5.8, Page No 148</p>
vii.	List of Schedule-1 Species duly authenticated by PPCF (Wildlife) and based on the same conservation plan needs to be prepared. Proof of submission of conservation plan needs to be submitted. In case there is no change in list of schedule-1 species for which conservation plan has already been approved then a letter from PPCF (wildlife) may be submitted to the effect that there are no	<p>We have submitted the letter dated 04.04.2019 to Principal Chief Conservator of Forest and Chief Wild Life Warden (Copy enclosed as Exhibit - 1 to this ADS compliance) enclosing the detailed biological study of the core and buffer zone of the study area and the revised conservation plan.</p> <p>Principal Chief Conservator of Forest and Chief Wild Life Warden vide letter no. 449/2019/3623 dated 26.06.2019 has accorded approval of the detailed biological study, status</p>

	<p>schedule-1 species in the core and buffer zone of the mining lease, other than what mentioned in approved conservation plan.</p>	<p>of faunal diversity and Schedule-I species recorded in the study area and Wild Life Conservation Plan with the total Budget Provision of Rs 180 Lakh.</p> <p>There are two Schedule-I species in the study area i.e. Peacock and Monitor Lizard. List of Species are mentioned in the PCCF approved conservation plan in Page no 38. Approval letter along with Approved Conservation plan is enclosed as Annexure – 4 F to the letter by PP.</p> <p>Principal Chief Conservator of Forest and Chief Wild Life Warden office vide letter no. 1879 dated 19.05.2020 (Copy enclosed as Exhibit - 2 to this ADS compliance) has reaffirmed the two Schedule-I species in the study area i.e Peacock and Monitor Lizard and no forest land in proposed Mining Lease area.</p>
viii.	<p>Cumulative impact needs to be calculated considering the existing mines, existing cement plant and proposed mines. Lead distance mentioned in the EIA/EMP report needs to be examined and modeling should be done based on the actual distances.</p>	<p>Cumulative impact has been assessed considering the proposed emissions of Subject mine with total excavation and proposed expansion of the cement plant which includes new line of 1.6 MTPA clinker, 2.0 MTPA Cement and 75 MW coal based Power Plant.</p> <p>The lead distance has been revised to 4.4 km (two way) for limestone transport and 4.6 km (two way) for Top soil/OB waste transport.</p> <p>Details of cumulative impact are presented in Chapter -4, Para 4.1.6, Page 113</p>
ix.	<p>Public Hearing Points needs to be addressed properly, and compliance of commitment previously made during PH of the existing mines and cement plant needs to be submitted.</p>	<p>The response to Public Hearing Points are revised and is enclosed as Annexure – 7 B</p> <p>Compliance of commitment made during previous Public Hearing of the existing mine and cement plant are</p>

		enclosed with this ADS compliance as Exhibit-3 and Exhibit-4
x.	There is habitation in the mining lease area, therefore R&R Plan needs to be submitted. There is some issue in the PH regarding purchase of land. Therefore, complete details of compensation paid to project affected families and persons needs to be submitted.	<p>There are a total of 10 houses (6-8 families) located at the corner of Block- 5. It is proposed to do mining at this block at in the 9th Year. These houses will be rehabilitated in 9th year. Nuvoco will not do mining in this block until it is rehabilitated. A detailed action plan on rehabilitation of these houses will be submitted to MOEFCC before commencing Mining operation in Block – 5.</p> <p>The issue in the PH regarding purchase of land is “During Tata’ s time land purchased without signature and promised that employment will given to children but not get till date, whenever we go for discussion they banished from out side, Case is going on, they extend the case date.</p> <p>Till date for acquiring 160 Ha of land, NUVOCO has paid Rs 2947 Lakhs compensation. The R & R adopted for acquiring the land is detailed in Chapter -4 Para 4.6.1, Page 156-161 A detailed R&R Plan including the Income Restoration, Grievance cell and Monitoring mechanism is attached as Annexure- 4 G to the letter by PP.</p>
xi.	PP needs to submit in a tabular format, the year wise total excavation, waste generation, top soil generation and utilization, back filling plan, area of dump yard, quantity of waste etc. along with conceptual plan prepared for every five years over the life of mine to ascertain the progress of mines over the years.	Tabular Format giving details of year wise total excavation, waste generation, top soil generation and utilization for back filling and dump yard along with quantity of waste is given Table – 4.19 of Chapter - 4 in Page No.147 Fig – 4.8 shows the conceptual plan with year wise backfilling and plantation programme in Chapter -4, Page No. 133
xii.	As the mine is not contiguous location of	Initially two weigh bridges will be installed in ML-1. Weighbridge No 1

	<p>weighbridges and transportation route needs to be submitted for each mining block. Feasibility of conveyor transportation needs to be submitted.</p>	<p>will be installed in block no 2 and Weigh bridge No 2 will be installed in block no 3 as shown in above. The location of weigh bridges will be changed as per requirement. Location of Weigh Bridges and Mineral Transportation Route Is shown in Fig – 7.1 in Chapter - 7</p> <p>Feasibility of limestone by Haul Road versus Overland Land Belt Conveyor (OLBC) has been explored.</p> <p>There is existing haul road for limestone transportation in existing mining lease. The limestone from block 2 and 3 can be transported through this route having a short haul distance of 3 to 5 km from mine site to crusher for material transportation. No public road or village area / infrastructure will be encountered en-route and land is in control of Nuvoco.</p> <p>For Overland Land Belt Conveyor, minimum 25 meter of route gallery has to made from ML-1 to plant stacking site. The route will cross the existing mining lease. The mineral of 100meter width (50 meter each side) and approx. 2km will be blocked due OLBC.</p> <p>Further details of feasibility for limestone transport are provided under Chapter – 7, Para 7.3, Page - 189</p>
<p>xiii.</p>	<p>What is the source of water for the cement plant and existing mining lease? Source of data for ground water level calculation needs to be submitted.</p>	<p>Source of water for cement plant is River Sonadih. NUVOCO has Agreement with Executive Engineer, Water Resources Department, Raipur for water drawl from River Seonath - 2.0 cusec/ month i.e., 4896 m³/day.</p> <p>Source of water for existing mining lease is mine pit.</p>

		<p>Source of data for ground water level are:</p> <ul style="list-style-type: none"> ❖ Exploration carried out by NUVOCO as part of limestone reserves estimation through core drilling in the subject mine. ❖ Operating adjacent mine which has reached ultimate depth and no ground water seepage till date.
xiv.	Public health implications, safety issues etc. needs to be addressed properly.	<p>Impact of mining on various Environmental components leading to Impact on Public health are detailed in Chapter – 4, Para 4.8, Page – 166, Table – 4.28.</p> <p>The data was also collected from the Rural Health Organiser, Sub Health Center, Raseda. The letter of the same is placed for information. (Enclosed Annexure – 4H to the letter by PP) As per the data available the general disorders like Malaria, Typhoid, Viral Fever, jaundice and Diarrhoea are the most contracted by the persons locally. This indicates that out of these disorders, there is no impact on public health due to the existing mining operations which is adjacent to subject mine.</p>
xv.	It is not clear whether the canal is made up of concrete or not. There is a sudden dead end of canal and no reason was provided for the same. Therefore, a Study needs to be submitted which clearly bring out the complete details about the canal and safety measure to be taken for mining near canal, inter alia, including the safe distance of mining; method of mining / blasting proposed; measures against the blast induced vibrations; and NOC from the	<p>Canals are located outside the mining lease area. All canals in proximity are unlined kachha canals. Canal network and photographs of the canal are shown in Fig – 4.9 and Fig – 4.10</p> <p>There is no command area in the downstream of the canal, hence there is a dead end.</p> <p>Blasting Study was conducted by M/s Central Institute Of Mining & Fuel Research (Council Of Scientific & Industrial Research) CIMFR. based on the characteristic of blast wave propagation under similar strata condition of existing</p>

	<p>concerned authority for mining near canal.</p>	<p>Sonadih Limestone Mine located adjacent to the proposed mining lease area. The nature and variation of strata is taken similar. The detailed Blasting Report is enclosed as Annexure - 2 A.</p> <p>The following blasting zones have been classified and Blast design Parameters are recommended for controlled blasting in the nearby of different surface features.</p> <ul style="list-style-type: none"> ❖ 50 - 100 m Zone from canal and other important surface features ❖ 100 - 300 m Zone from canal and other important surface features ❖ Beyond 300 m from canal and other important surface features <p>The blasting parameters for the above zones along with safety measures proposed for protection of canals are detailed in Chapter – 4, Para 4.5.4, Page 139 -143.</p> <p>Executive Engineer Water Management Division - 2, Balodabazar Dist. Balodabazar - Bhatapara (CG) vide letter no 1118/Karya/2020 -21 dated 12/05/2020 informed that at present, no right has been granted by Government of Chhattisgarh to carry out any mining operations over the proposed area.</p> <p>NOC will be issued to start the mining operation and other activities after mining lease deed execution with Govt. of Chhattisgarh over the said area,</p> <p>Letter from Office of Executive Engineer Water Management Division -2 , Balodabazar dist Balodabazar-Bhatapara (CG) along with English Translation is enclosed</p>
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		as Annexure – 4 E to the letter by PP.
xvi.	PP needs to bring out the details of the area to be put up under mining and left under safety zone (viz. around canal, electric line, railway line, public roads, statutory barrier etc.). The amount of mineral available after the same and blocked in safety zone.	The total Limestone reserves are 156.79. Mineable reserves are 97.26 million tonnes and blocked reserves are 46.94 million tonnes. Details are furnished in Chapter -2, Para 2.8.5, Table -2.10, Page 31.

22. **The proposal was again placed in the 18th EAC (Non-coal Mining) held during 22-24 June, 2020.** The committee after detailed deliberations on the reply to ADS points submitted by the PP, was of the view that the boundary of the block-1 and Block 2 on the Northern side is just adjacent to the Sonadih village. The eastern boundary of the Block-3 also intersecting the boundary of village Raseda and some of the Habitations are falling within the Mine Boundary. The PP informed that the waste generated from the proposed mine will be dumped in the Block-I area and northern side of the Block-2. Further, some are will be left as non-mining area in the Block-3 towards Raseda village. The committee is of the view that project proponent did not considered the environmental implication associated with the mining operations on the surrounding villages of Sonadih and Raseda. The committee suggested to explore the possibility of the dumping the waste in the voids available or may be available in future in the existing mines adjacent to the proposed block-2 instead of dumping on the northern side of the Block-1 and Block-2 which is adjacent to the Sonadih village and will have the impact of windborne dust from the dumps. Further, the committee also suggested to explore the possibility of the sequential mining so that the void created in one block can be utilized for dumping of waste generated from the mining of the subsequent block(s). Therefore, **the proposal was deferred** for submission of the revised mining plan by leaving atleast 300 m as non-mining area and proposed with green barrier against the Sonadih village in the northern part of the Block-1 and Block-2 and against the Raseda village on eastern part of the Block-3. The committee desired to submit the following details/ documents for further consideration of the proposal:

- 1) *PP may explore the possibility of sequential operation and concurrent backfilling in the void already created in the existing mines based on excavation plan of both the mines and ensure that earliest backfilling can be done, no fresh land for dumping of waste and to avoid dumping close to the habitation.*
- 2) *Area to be kept as a safety zone near the habitation/no mining zone, effective area under mining, location of dumps if any and plantation on the same needs to be submitted.*

- 3) *Revised plantation plan needs to be submitted wherein the plantation around the lease boundary to be completed within 2 years and rest of the plantation in the 5 years. In addition to progressive plantation for gap filling, backfilling sites and dump site needs to be provided. The sapling to be planted shall be at least of 2meter height and budget for the plantation shall be calculated accordingly.*
- 4) *Letter from Chief Wildlife Warden regarding distance of mining lease from the protected area, national park etc. needs to be submitted.*

The same was intimated to PP on 01.07.2020. PP vide its letter dated 10.07.2020 has submitted the following information online on PARIVESH on 12.07.2020:

i.Point No. 1: PP may explore the possibility of sequential operation and concurrent backfilling in the void already created in the existing mines based on excavation plan of both the mines and ensure that earliest backfilling can be done, no fresh land for dumping of waste and to avoid dumping close to the habitation.

Submission of PP:

(c) The existing Sonadih Limestone Mine has been active for more than 35 years & have been working in four benches within a single pit; the left out reserve 6 available in the complete periphery of the mines and thus working is done in all directions of the pit The cement grade limestone is supplied to the plant by blending of limestone from all benches. The excavation from the bottom bench is done mainly in dry seasons; as it works as sump to accumulate the rain water at the catchment area which helps us to mine smoothly in the remaining three benches and supply the required qualitative limestone to the plant during monsoon seasons. The accumulated rain water in the bottom bench acts a 9 4 water reservoir and it is also used for supplying water to Sonadih village, mines and plant use.

While considering the Sonadih Limestone Mines for backfilling below aspects are going against the specific way of mining

5. Presently, existing mines are being operated in all the benches in all the sides.
6. Bottom bench acts as a sump for the rain water accumulation from the catchment area.
7. The accumulated water is used for supplying water to Sonadih village and plant
8. If back filling is done in the existing mines by using OB of ML-1 (294.160 Ha), it would not be sufficient to achieve the original ground RL.

While backfilling in ML-1 (294.160 Ha) is being done by sequential mining then,

3. One of the blocks / pits of ML-1, the height of dump will attain the original ground RL.

4. Upon backfilling land will be used for multipurpose like agriculture, plantation, infrastructure development etc.

Therefore, it is proposed to do sequential operation & backfilling in ML-1 so as to avoid using fresh land for permanent dumping & also to avoid dumping near habitation.

(d) In the Modified Mining Plan (attached), it has been taken care and no dumping of overburden and waste is planned close to habitation.

ii. Point No. 2: Area to be kept as a safety zone near the habitation/no mining zone, effective area under mining, location of dumps if any and plantation on the same needs to be submitted.

Submission of PP:

d. In Modified Mining Plan, no mining including dumping is proposed within 300 meter of the habitation. It is mentioned in the point no. 7.1 A (I) (a) of Modified Mining Plan.

e. The revised location of dumps and afforestation are depicted in the conceptual plan (Plate no. VIII) of the Modified Mining Plan.

f. Plantation in safety zone is proposed in 2nd year and 3rd year.

iii. Point No. 3: Revised plantation plan needs to be submitted wherein the plantation around the lease boundary to be completed within 2 years and rest of the plantation in the 5 years. In addition to progressive plantation for gap filling, backfilling sites and dump site needs to be provided. The sapling to be planted shall be at least of 2 meter height and budget for the plantation shall be calculated accordingly.

Submission of PP: Revised plantation programme is mentioned in the conceptual plan of Modified Mining Plan [Plate No-VII]. Budget for five-year plantation is mentioned in following table:

Year	Area for Afforestation (Ha)	Nos. of saplings (Nos.) for plantation		Total saplings	Capital Cost of Plantation @Rs. 200/- per sapling of 6 feet height (In Rs.)	Recurring cost of Plantation @Rs. 25/- per sapling	Remark
		100%	10% (10% extra every year for gap filling considering 90% survival rate)				
I Year	18.60	46,500	-	46500	93,00,000	-	Plantation around lease boundary
II Year	18.60	46,500	4650	51150	10230000	1162500	Plantation around lease

			(Ist Year area)				boundary and some in safety zone/ buffer zone	
III Year	18.60	46,500	4650 (IInd area)	Year	51150	10230000	1162500	Plantation remaining in safety zone/ buffer zone and other location
IV Year	18.60	46,500	4650 (IIIrd area)	Year	51150	10230000	1162500	
V Year	18.60	46,500	4650 (IVth area)	Year	51150	10230000	1162500	
			4650 (Vth area)	Year	4650	9300000	116250	
Tot al	93.00	232500	23250		255750	51150000	4766250	

Note- After 5 year, total grown trees will be 2,32,500 nos

iv. Point No. 4: Letter from Chief Wildlife Warden regarding distance of mining lease from the protected area, national park etc. needs to be submitted.

Submission of PP: PP submitted that they have made an application to PCCF (Wildlife), Raipur on 2.7.20 (enclosed) regarding distance of mining lease from the Protected area, National Park etc. and the same has been forwarded to CCF (Wild Life) Udanti-Sitanadi Tiger Reserve on 9.7.20 for his comments from PCCFs Office. The application is under consideration.

As per the detailed biological study report and Wild life Conservation Plan approved by PCCF (Wildlife), Chhattisgarh on 26.06.2019, no Eco-Sensitive Zones (ESZ), national Parks, Wildlife Sanctuaries, Biosphere Reserves, Elephant Corridor, Tiger Reserves, Community reserves, Wildlife Corridor, Mangroves, Archaeological/Historical Monuments, Wetlands, Heritage sites, etc. exist within the 10 km radius area of the proposed site.

Meanwhile, PP has explored the locations of protected/forest areas of Chhattisgarh at ENVIS Centre on Wildlife & Protected Areas from Wild Life Institute of India, Dehradun (Sponsored by MoEF&CC) and attached is the list & map which shows the locations of those areas. It reveals that the "Barnawapara Wild Life Reserve" is the nearest to PP's ML 1 and crow-fly distance is more than 40 kms (map attached). Further, it is evident that the nearest protected area of Barnawapara WLS is outside 10 km study area of the proposed mining lease.

23. The proposal is again placed in the 20th EAC (Non-coal Mining) held during 19th - 21st August, 2020 wherein the Committee **recommended** the proposal of M/s Nuvoco Vistas Corporation Limited for grant of Environmental Clearance for production of 5.50 MTPA of Limestone total excavation from the mines will be 6.54 MTPA (Limestone: 5.5 MTPA, Soil: 0.56 MTPA and Waste: 0.48 MTPA) from Sonadih Limestone Mine (ML-1; Area : 294.160 Ha) located near Villages - Sonadih, Dhabadih, Raseda, Keshdabri,

Baloda Bazar Tehsil & Balodabazar - Bhatapara District, Chhattisgarh subject to Standard EC Condition as per (Annexure III). In addition to this the Committee also prescribed following specific conditions for this project:

1) PP shall ensure that there should be no mining & waste dumping within 300 meters of the habitation (both on the north side of the mining lease i.e Sonadih Village and south east side of the mining lease ie. Raseda Village) and dense plantation @ 2500 saplings/Ha shall be carried out in the area under this 300-meter safety zone within 2 years of commencement of mining operations. The budget earmarked for the plantation shall be kept in separate bank account and audited annually. PP shall submit the detail such as photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation and outcome of the pilot study etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

2) PP shall also implement the plantation plan submitted to the Ministry wherein it has proposed to plant 232500 saplings over an area of 93.0 Ha [1st Year: total 46,500 saplings, Area 18.60 Ha; 2nd Year: total 46,500 saplings, Area 18.60 Ha; 3rd Year: total 46,500 saplings, Area 18.60 Ha; 4th Year: total 46,500 saplings, Area 18.60 Ha; 5th Year: total 46,500 saplings, Area 18.60 Ha]. The PP should annually submit the audited statement and detailed environment monitoring report along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, sampling reports, photographs & Geo-location of the infrastructures/facilities developed, details of persons engaged in Environment Management Cell etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

3) The Wildlife Conservation Plan for Schedule-1 Species namely, Peacock and Monitor Lizard shall be implemented in consultation with state Forest Department including recommendation of the Chief Wildlife warden.

4) The activities proposed under Corporate Environment Responsibility (CER) in accordance to the MoEF&CC's office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018 shall be implemented which inter alia, include, Construction and repair of Road of Raseda - 600 mts, Dhabdih - 550 mts, Rasedi 430 mts, Sonadih 1000 mts; De-siltation of ponds of Raseda and Dhabdih villages; providing equipments and other infrastructure support to start 5 Nos of smart classes in affected village school; providing medical facility in the affected villages with provision of medicines and check-up; Water Facility- Laying of water pipe line from Mines pit to Sonadih village dam; digging /repairing of Bore well; and Plantation under 'Harihar Chhattisgarh' on the land allotted by Distt. Administration (Local species Neem, cassasimea, Jamun, Awala, etc.). The activities should be audited annually. The PP should annually submit the audited statement and details of implementation of CER activities along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, photographs & Geo-location of the infrastructures/facilities

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

5) The activities proposed under Environmental Management Plan (EMP) which inter alia, include Air Pollution Control Measures; Occupational Health Measures; Dump Management (Retaining Wall); Environmental Monitoring; Greenbelt and Wildlife conservation shall be taken up. PP shall implement the all the measures submitted in the EIA/EMP and subsequent submissions to the Ministry.

6) Total excavation from the mines shall not exceed to 6.54 MTPA, inter alia, including Limestone: 5.5 MTPA, Soil: 0.56 MTPA and Waste: 0.48 MTPA.

7) The PP shall adopt control blasting with necessary permission from the Director General of Mines Safety near the village / habitation boundary / near canal or non-conventional mining with ripper dozer or other mechanical means by avoiding the blasting near the village / Habitation boundary.

8) The ground induced blasting vibrations shall be monitored regularly for every blast performed and the values of "Peak Particle Velocity" and "Air Over Pressure" shall be maintained below the permissible values prescribed by the DGMS, from time to time.

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

10) The top soil shall be scraped and preserved before the mining including proposed dumping in the mineralized area and utilized for reclamation over the backfilled area. The topsoil and waste dump shall be kept separately.

11) The safety distance of 50 m shall be provided from the banks of the canal on either side and thick green belt shall be developed.

2.6 Sukinda Mines (Chromite) by M/s Indian Metals & Ferro Alloys Ltd with expansion of production from 3.51 LTPA to 6 LTPA, change in mining technology from opencast to opencast & underground and establishment of chrome ore beneficiation plant (COBP) of 40 TPH over a lease area of 116.76 ha located at Village- Kaliapani, Tehsil- Sukinda, District- Jajpur, State- Odisha (File No: J-11015/204/2015-IA. II(M); Proposal No: IA/OR/MIN/114264/2007; Consultant: Perfect Enviro Solutions Pvt. Ltd)- Re-Consideration of EC.

The proposal of M/s Indian Metals & Ferro Alloys is for enhancement in production of chromite from 3.51 Lakh TPA to 6.0 Lakh TPA with change in technology from opencast to combination of opencast and underground

mining and establishment of chrome ore beneficiation plant of 40 TPH feed capacity in the mining lease area of 116.76 ha. The mining lease area of 116.76 ha is situated at Khasra No. 488 (p), 502, 627 (p), 628 (p), 629, 630 (p), 641 (p), 691 (p), 888 (p), 889 (p), 892 (p), 894 (p), 895 (p), 627/1010(p), 627/1011 (p), 883 (p) of Village Kaliapani, Tehsil Sukinda, District Jajpur, Orissa. The mine lease area falls in the Survey of India Topo sheet 73-G/16 (OSM Sheet no. F45N16) with latitude 21°01'45.51"N to 21°2'33.81" N & longitude is 85°45'35.91" E to 85°46'42.03" 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 and 2(b) Beneficiation.

3. PP submitted that earlier environmental clearance for a capacity of 2.55 LTPA chromite production was granted by the Ministry vide letter No. J11015/28/2001-IA.II (M) dated 24.12.2004 for the period of 5 years and amendment in EC was issued on 10.02.2005. Subsequently, the Ministry had granted the extension of mining operation up to 31.03.2009 or till a decision on the expansion proposal for which ToR were prescribed vide this Ministry's letter no. J-11015/346/2007-IA.II (M) dated 31.07.2007 is taken, whichever is earlier. Furthermore, the EC for enhancement in production of chromite from 2.55 LTPA to 3.51 LTPA was granted by the Ministry vide letter no J-11015/346/2007-IA.II (M) dated 18.06.2008 with the validity up to March 2012. Subsequently, the Ministry had extended the validity of EC up to 31.03.2014 vide letter of even no dated 22.05.2012. Further the validity was extended vide letter dated 11.08.2014 for continuation of production of 3.51 LTPA of Chrome Ore by Opencast Method for Captive use valid up to 03.09.2029.

PP submitted that the ToR proposal for expansion in production of chromite from 3.51 Lakh TPA to 6.0 Lakh TPA with change in technology from opencast to combination of opencast and underground mining and establishment of chrome ore beneficiation plant of 40 TPH feed capacity was submitted to Ministry of Environment, Forests & Climate Change (MoEF& CC) on **15.06.2015 vide Proposal number: IA / OR / MIN / 28526 / 2015 for determining the Terms of Reference.** The proposal was considered by Environmental Appraisal Committee (EAC) during its 36th meeting held during July 29– 30, 2015. **ToR has been granted by the Ministry vide letter No J11015/204/2015-IA-II (M) dated 24th August 2015** for undertaking EIA study in accordance with the provisions of Environmental Impact Assessment Notification dated 14-11-2006.

PP submitted that the public hearing was completed on 23.06.2017 and submitted EIA report to Ministry for appraisal vide proposal number IA/OR/MIN/28526/2015 dated 7.07.2018. The proposal was placed in the EAC meeting held during August 23-24, 2018. However, PP vide email dated 20.08.2018 mentioned that the consultant has been changed and the new consultant may take some time to validate the data and accordingly requested to defer the proposal. Therefore, the Committee deferred the proposal and delisted. Subsequently, PP applied online on 30.08.2018 for extension of

validity of ToR for 1 year from 24.08.2018 to 23.08.2019. The proposal was considered in the EAC meeting held during October 23-24, 2018 and the extension in validity of ToR (i.e. 24.08.2018 to 23.08.2019) was granted by Ministry vide letter no. J-11015/204/2015-IA-II (M) dated 29th July 2019. PP then applied for EC vide Proposal No. IA/OR/MIN/114264/2007 dated 13.08.2019 and submitted EIA/EMP report. As complete information was not uploaded an EDS was raised and PP again submitted the proposal on 12.09.2019 and the proposal was placed in EAC meeting held during October 21-22, 2019 wherein the Committee deferred the proposal for want of requisite information. PP submitted the information on 31.01.2020 and proposal could not be placed in EAC meeting due to technical issue in the Parivesh Portal & COVID-19 pandemic. The proposal was then placed in EAC meeting held during 22-24 June, 2020 wherein the Committee deferred the proposal for want of requisite information. PP submitted the information on 16.07.2020 and the proposal is placed in EAC meeting held during 19-21 August, 2020.

4. PP submitted that total mine lease area is 116.76 ha, out of which 115.05 ha is Mahagiri protected forest land and 1.71 ha is a government land. PP submitted that mining lease was granted by Govt. of Orissa for 30 years which was executed on 04.09.1999 and the lease is valid up to 03.09.2029. Mining operations commenced from 15.09.1999. PP further submitted that they have applied for extension of mining lease till 2049 as per MMDR, 2015.

Observation of EAC: In the EAC Meeting held during 22.06.2020 Committed observed that *“Status of extension of mining lease copy of letter if any issued in this regard needs to be submitted.”*

PP in its reply submitted on 15.07.2020 mentioned that *“Mining lease has been granted by Govt. of Orissa for 30 years which was executed on 04.09.1999. As per MMDR Act 2015, the validity of the mining lease is extended upto 03.09.2049. However, formal application for extension of mining lease has already been submitted to the State Government. PP has submitted Copy of lease deed enclosed as **Enclosure I to the letter.**”*

5. PP submitted that Mining plan for period 1999-2000 to 2003-2004 was approved by Indian Bureau of Mines vide IBM Lr. No:314(3)/99-MCCM(C)/MP-4, dt 18.11.1999. 1st Modification of the approved mining plan for period 2002-03 to 2003-04 was approved by IBM vide letter no 314 (3)/2002-MCCM (C)/MP-10 dated 18.10.2002. Subsequently, 1st and 2nd Scheme of Mining was approved by IBM for years 2004-05 to 2008-09 and 2009-10 to 2013-14 respectively. The 3rd Scheme of Mining & Progressive Mine Closure Plan for the period from 2014-15 to 2018-19 was approved by IBM vide lr no 314 (3)/2012- MCCM(CZ)/MS-56/255 dated 31.07.2013. Modified Mining Scheme was approved vide no: MSM/FM/06-ORI/BHU/2016-17/1697 dt: 23.09.2016. Modification in review of mining plan has been approved by IBM for period 2017-18 to 2018-19 vide letter no. MPM/FM/25-ORI/BHU/2017-18/2815 dated 14.02.2018. Review of Mining Plan for the period 2019-20 to 2023-24 has been prepared and approved by IBM vide letter no. MS/FM/27-ORI/BHU/2018-19 dated 31.10.2018.

Observation of EAC: *The Committee previously observed that PH was conducted on 23.06.2017 and the modified mining plan that was placed in PH was approved on 23.09.2016. Thereafter, two review of mining plan was approved and PP needs to submit whether there are any changes made in the recently approved mining plan or not. The copy of recent mining needs to be uploaded on PARIVESH and changes if any made with justification needs to be submitted. The land use mentioned at conceptual stage needs to be submitted.”*

PP in its reply dated 15.07.2020 submitted that “There are no changes in the area of the Mining Lease (116.76 ha.), production capacity (3.51 LTPA to 6 LTPA), mining technology involving Opencast-cum- Underground Mine and Chrome Ore Beneficiation Plant (40 TPH) in the IBM approved Review of Mining Plan dated 31.10.2018, modification of review of mining plan dated 14.02.2018 and IBM approved mining plan dated 23.09.2016 on the basis of which Public Hearing was held on 23.06.2017. PP also submitted an undertaking vide an affidavit bearing No. 51AA 101371 dated 4.01.2020 in this regard”

6. PP submitted that the present mining operation is fully mechanized with drilling and blasting and proposed mining operation is both open cast and underground mining with drilling and blasting. The ultimate maximum bench height will be up to 8m with minimum working width of 8- 12m. The ultimate pit limit will be (-)2 mRL in Band I which may increase further up to (-) 62 mRL upon successful implementation of mining by grab method while proposed ultimate pit limit in Band II is 46mRL. PP further submitted that proposed chrome ore beneficiation plant of 40 TPH feed capacity will be installed from the year 2020-21, to produce usable grade of chrome concentrate. The process in the chrome ore beneficiation plant is a wet gravity separation method and does not involve any use of chemicals. It is proposed to beneficiate the stock of 6.12 Lakh tonnes of subgrade ore having (+) 10 to (-) 30% Cr₂O₃. The ore is transported to company's ferro chrome plant in Choudwar (in Cuttack district) via Tomka or Mangalpur by road. In addition, the ore is transported to company's ferro chrome plant in Therubali (in Rayagada district), initially, the ore transported upto Tomka railway siding by road and from Tomka railway siding to Therubali by rail.

PP submitted that the total OB/waste from opencast mining in Band I and Band II will be 10665440 cum which will be dumped in existing dump yard and will be backfilled in the mined-out areas of Band I and will also be utilized for back filling of stopes. There will be generation of marginal quantity of top soil during mining of Band II which will be stored properly and will be utilized for plantation purpose. From underground mining 384840 cum of waste will be generated till lease period which will dumped in the existing dump yard and in the mined out areas of Band I and Band II. The common dumping along boundary line has been proposed between M/s IMFA and M/s BAL and the necessary permission from Directorate General of Mines Safety has been obtained vide letter No BBR-JA/CH-2 & 12/P111 (3)/2017/235-136, dated 15/02/2017. PP vide its letter dated 29.01.2020 submitted total excavation is 28.0 LTPA including mineral (6.0 LTPA), and overburden (OB) (22.0 LTPA).

Observation of EAC: The Committed observed that “PP in the mining plan is mentioned that mined out area of band-1 will be backfilled, but it is not clear from the same whether the IBM has allowed dumping over the mineralized area. Further in EIA Report the impact due to additional material handling for backfilling is not mentioned. It is not clear whether the dump will be re-handled or waste material from opencast and underground will be directly backfilled in the band-1. Therefore, a letter in this regard that IBM has approved the proposal of backfilling considering the fact that the band-1 is having mineral at the time of backfilling. In addition to this cumulative impact due to all the activities needs to be submitted.”

PP in its reply dated 15.07.2020 submitted that “Mining in Band I is proposed to continue till the ultimate pit limit (-2) mRL. After completion of open-cast mining, the mined out area of Band will be backfilled upto 114 mRL by the overburden to be generated during opencast mining of Band II and waste to be generated from underground developments of band. Since the mine plan has been duly approved by IBM wherein overburden dumping has been mentioned and incorporated in the plans & sections, hence the arrangement of dumping the overburden on the exposed mineral at the bottom of the mined out area as per conceptual plan has the consent of IBM. Underground workings are proposed after leaving a safe parting of 248 m below the ultimate opencast pit limit of Band i.e. (-2) mRL based on scientific study carried out by NIRM, Karnataka and duly approved by IBM. After completion of opencast mining of Band II, the mined out area shall be backfilled/reclaimed upto 78mRL. For 6 lakh tones of Chrome ore production, 30,000 CuM of waste will have to be handled per annum from underground workings of Band-I in line with the experience at our another adjacent underground mine. So, about 510000 Cum waste will be generated from underground developments of Band during conceptual period. After completion of opencast mining of Band II, the mined out area shall be back-filled/reclaimed upto 78mRL to fill up the void area by about 510000 Cum waste. As this is the underground material, so plantation cannot be made over it. For which one layer of OB material is to be spread over it for plantation. So, about 15,000 to 20,000 Cum of leftover OB material from dump yard is to be rehandled for rehabilitation purpose by planting local species.

Relevant pages of Approved Review of Mining Plan by IBM mentioning that backfilling is proposed in Band I & Band II are attached as Enclosure VII to the letter. Cumulative impact due to all the activities has been evaluated at the maximum generation of overburden of 11 Lakh Cum per annum whereas OB generation from underground operation and OB re-handling quantity from the dump for backfilling of Band II mined out area is much less till the conceptual period. Hence there will be no additional impact due to re-handling of OB. PP has also submitted the Report showing cumulative impact.”

7. PP submitted that the total water requirement is 3500 KLD which will be sourced from existing bore wells and mine water after treatment in ETP. PP further submitted that 240 KLD water will be used for drinking and domestic purpose, 10 KLD for mines drilling purpose, 20 KLD for wheel washing, 710 KLD for sprinkling, 100 KLD for plantation purpose and

160KLD (water will be circulated within the COB plant) for COB plant makeup water and 2260 KLD will be discharged to Damsal Nala after treatment in ETP.

As per CGWB (2011) report the water level of the project area is 5-10 m bgl (Pre-monsoon) and 2-5 m bgl (Post monsoon). The CGWA approval was obtained vide letter no. CGWA/NOC/MIN/ORIG/2016/2166 dated 06.05.2016 for abstraction of 240 cu.m/day of ground water through proposed one (1) bore well and 3,260 cu.m/day through dewatering mine seepage from mine pit on account of mining intersecting the water table. The total withdrawal should not exceed 3500 cu.m/day (not exceeding 12,77,500 cu.m/year). This NOC is valid up to 06/04/2018. The CGWA approval was renewed vide letter no. CGWA/NOC/MIN/REN/1/2018/5556 dated 14.12.2018 for abstraction of 240 cu.m/day of ground water (and 87,600 cu.m/year) through two (2) existing bore wells and 3,260 cu.m/day (not exceeding 11,89,900 cu.m/year) through dewatering mine seepage from mine pit on account of mining intersecting the water table. The total withdrawal should not exceed 3500 cu.m/day (not exceeding 12,77,500 cu.m/year). This NOC is valid from 07/04/2018 to 06/04/2021.

PP has submitted that Generation of mine water from the opencast pit is being pumped to common effluent treatment plant and treated. The treated water is being used for mines allied activities and for dust suppression. No effluent water will be discharged out of the mining lease area. In future, mine underground water also shall be pumped and will be channelized to the ETP through garland drains / pipeline from where treated water will be used in mine for sprinkling, plantation purpose and also in the beneficiation plant. Excess water will be discharge to the land after confirming the prescribed CPCB/SPCB norms. However, surface runoff during rainy season is coursed through garland drain into a sump and pumped to ETP for treatment. Most of the water used for the beneficiation of ore will be recycled. Only dried solid will be dumped on the dump yard designated for the purpose. The generated sewage from mine office and canteen etc. will be discharged to septic tank followed by soak pit. PP vide his letter dated 29.01.2020 inter-alia submitted the i) Details of ETP and sludge management enclosed as Annexure-7 to the letter, ii) Management of surface run-off along with mitigative measures, iii) PP has submitted that total water requirement for the project after recalculation is 1240 Cu.m / Day (During peak summer season), in which 240 Cu.m / day for domestic uses and 1000 Cu.m for industrial uses. The freshwater requirement is only 240 Cu.m/day which is only for domestic uses and water requirement for industrial uses i.e. 1000 Cu.m will be met from mine seepage water after treatment. Once underground operation starts, the water requirement will be reduced by 50 percent for industrial uses. Further after full-fledged underground operation there will be very less water requirement for sprinkling (dust suppression) to the OB dump, mine haulage roads and mine benches, iv) Compliance status of installation of piezometers is provided as Annexure 12b to the letter by PP. PP has also enclosed Action Taken report submitted to CGWA vide letter dated 05.03.2019 in compliance to the conditions stipulated in the NOC approved vide letter dated 14.12.2018.

8. PP has submitted that a total of 73421 saplings have been planted over an area of 23.290 ha during the period from 1999-2000 to 2018- 19 (as on 30.06.2018) in the dump slopes, safety zone and other areas. Dead end slope of the OB dump for an area on 13.684 ha. has been reclaimed & plantation done with 49332 nos of saplings over it till 31.03.2018. Further, it is proposed to do plantation in the dead ends of the dump yard during this plan period. During Conceptual stage mined out area of Band I and Band II will be reclaimed by backfilling and plantation and dump slopes will also be planted. A total of 11750 saplings covering an area of 4.7 ha will be planted during 2019-2020 to 2023-24. The species proposed for plantation include *Acacia auriculiformis*, *Acacia mangium*, *Alstoniascholaris*, *Albizialebeck*, *Azadirachtaindica*, *Dalbergiasissoo*, *Delonixregia*, *GmelinaArborea*, *Millettiapinnata*, *Peltophorumpterocarpum*, *Phyllanthusemblica*, *Pterocarpus marsupium*, *Putranjivaroxburghii*, *Senna tora*, *Tectonagrandis*, *Terminalia bellirica*. PP vide his letter dated 29.01.2020 has submitted Details of plantation carried out in safety zone, overburden dump, other areas in the ML area for the period from 1999-2000 to 2019-20, photos of plantation and compliance of existing EC condition.

9. PP further submitted that forest clearance for 115.05 ha has been granted by MoEF&CC vide letter no. F.No. 8-16/2016-FC dated 22nd June 2018. PP has also submitted the Land Schedule certified by Revenue Inspector, Kaliadapani and Tahasildar Sukinda. PP submitted that There are no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elephant Reserves existing within the study area. PP further submitted that the total 10 forest such as Mahagiri PF (project area), Daitari PF (2.42 Km, NE), Dhalparha RF (6.57 Km, S), Birasal RF (6.25 Km, SW), Ranjagarh RF (3.78 Km, NWW), Tipilei RF (10.92 Km, SW), Barabati PF (10.93 Km, SE), Bhuban RF (11.5 Km, S) and Pubal PF(12.7 Km, SE) are within the 10 km radius of buffer zone and total 13 water bodies such as DamsalNala (0.74 Km NW), KarchamulaNala (2.93 Km W), NadibaranaNala (3.88 Km W), Right Bank Canal (4.11Km W), Damsal Canal (4.13 km SW), Ragada Dam (4.15 km NW), PuagaghuaNala (4.16 km, W), SasubhuashuriNala (4.5 km, NW), PandaraNala (4.54 km S), PoruajoraNadi (8.91 km SW), PetapetiNala (9.2 km, W), PatharkanchiaNala (9.5 km, SE) and Near Manatirarivill. Canal (10.6 km SE) 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 vide his letter dated 29.01.2020 submitted copy of letter w.r.t. NPV payment submitted to DFO vide letter dated 22.05.2015 and enclosed as Annexure 16 to the letter by PP.

Observation of EAC: *The Committee previously asked that in the EC granted on 24.12.2002 it has mentioned that no forest land is involved but now PP has submitted that there is forest land for which Forest Clearance was obtained on 22.06.2018. The reason for change in land classification needs to be submitted.*

PP in its reply dated 15.07.2020 submitted that the entire ML area was Non-Forest as per HAL records. Further in accordance to the MoEF&CC Circular No. F.No.8-78/1996-FC dated 10.03.2015, as per the Sabik records (as on 25.10.1980) the land schedule of the ML area consisted 115.05 ha. Of Forest land & 1.71 ha. Of Non-Forest Land. Hence the forest clearance was obtained for diversion of 115.05 ha. of Sabik Kisam forest land as on 25.10.1980 vide MoEF&CC letter no. F.No. 8-16/2016-FC dated 22.06.2018. PP also submitted the Land Schedule.

10. PP submitted that no threatened, rare, endangered or endemic species were observed during the survey in core zone. However, there are 9 schedule I Species found in buffer zone and Seven schedule II species were reported in the buffer zone. These include Four horned antelope, Indian elephant, Mouse deer, Sloth bear, Pea fowl, Spotted owlet, python, yellow monitor lizard, Great Indian hornbill, Bengal monitor, Ratel or Honey Badger. Further, PP submitted the approved site-specific wildlife conservation plan with financial forecast of Rs. 320.77 lakh from the Office of the PCCF & Chief Wildlife Warden, Odisha vide letter no 10061/1WLSSP-181/2015 dated 18.11.2015. PP vide his letter dated 29.01.2020 also submitted the compliance status given by DFO Cuttack on Approved site-specific conservation plan vide letter No. 751/55F (Misc)/2017 dated 29.01.2020.

11. PP submitted that the baseline data of one Season (Pre-monsoon) was collected from October 2015 to December 2015 and has been revalidated in October 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. Air, Noise, Water, Land, Ecology and Socioeconomic. The general pattern of wind in study area was observed and the prevailing wind direction shown from SW to NE. Second predominant wind pattern was observed from NE to SW. A weather station was installed near the site for hourly monitoring of temperature, humidity, rainfall, if any and wind speed/direction data for the month of October 2018. Wind speed of the area varied from 0.2 m/s to 2.1 m/s. Mean wind speed of the area is 0.6 m/s. The ambient air quality of the sampling location was found to be well within the limits. PP has reported that it is also observed that air quality in the area has improved since 2015 to 2018 due to measures taken by PP such as sprinkling systems (fixed), water canon for fogging (portable). Along with these measures, the PP has undertaken massive plantation around the core zone for abatement of pollution from their project. The ambient noise level during day time at the proposed mine site varies from 63.6 dB (A) to 64.5 dB (A) which are within the standard limit of Industrial area ~75 dB (A). During night the noise level at the project site ranges from 58.1 dB (A) to 59.3 dB (A) which are also within the night-time noise standard limit of 70 dB (A). The Ground water quality at the core and buffer zones shows that parameters are within the range of drinking water standard (IS:10500). All other parameters are also within the range. Thus, water can be used for drinking purposes and other household activities purposes. The surface water quality indicates that water can be used as drinking water source without conventional treatment but after disinfection and falling in Class "A" as per CPCB Surface water quality

criteria. The Surface water quality of the Damsalnala upstream and downstream, shows that all the parameters below than EPA Discharge standards. Generally, three types of soils, viz. Alfisols, Udisols and Vertisols occur in the area. After analyzing the samples collected from site shows that the soil texture in core zone is Sandy Clay which can hold water and nutrients and makes soil fertile. PP vide its letter dated 29.01.2020 submitted that One-month data for the period November 2019 has been collected and analyzed by NABL accredited laboratory. PP also provided the Comparative data and trend analysis considering the values obtained during earlier EC appraisal, baseline data collected during Oct-Dec 2015 period & fresh 1-month baseline data for all relevant parameters.

12. PP submitted that public hearing was conducted on 23.06.2017 at Mahagiri Enclave under khata no. 53/15, Plot no.664 of Village Kaliapani of Jaipur District under the Chairmanship of Mr. Abdul Alim Khan, OAS, Additional District Magistrate, Kalinga Nagar, and District-Jajpur. The advertisement for public hearing was published in English daily newspaper “The Times of India” and Oriya daily newspaper “Samaja” on 16.05.2017 and 18.05.2017. The major issues raised were local employment opportunity, health care facility, drinking water supply, road maintenance. PP has prepared an action plan to address the issues raised during the public hearing. The Committee also deliberated on the issues raised during public hearing.

13. PP has reported that the activities and budget earmarked for Corporate Environmental responsibility as per Ministry’s OM No. 2-65/2-17-IA. II(M) dated 01.05.2018 and the action plan on the activities proposed under CER has been prepared by PP. PP has submitted that as per MoEF&CC guidelines the CER of 0.75% of project cost i.e. Rs 394.45 crores, amounting Rs 2.95 crores shall be spent under CER. This include 1) Drinking water & Sanitation facility – Rs. 44 Lakhs, 2) Skill Development – 75 Lakhs, 3) Provision of Solar Energy harvesting structures – Rs. 25.5 Lakhs, 4) Construction and repair maintenance of roads – Rs. 29 Lakhs, 5) Plantation – Rs. 25 Lakhs, 6) Storm water management – Rs. 100 Lakhs. The fund will be spent over a period of 5 years. PP vide its letter dated 29.01.2020 submitted the revised CER budget as per OM No. 2-65/2-17-IA. II(M) dated 01.05.2018. PP has stated that the project is for expansion hence as per the MoEF&CC OM No. F.No.22-65/2017-IA-III dated 01.05.2018, 0.75% of the project cost i.e. Rs 394.45 Crores which amounts to Rs 2.95 Crores has to be spent under CER. However, Rs 3 Crores has been allocated towards CER. This will include 1) Drinking water supply – Rs. 80 Lakhs, 2) Sanitation facility – 31 Lakhs, 3) Infrastructure development – Rs. 52 Lakhs, 4) Health support – Rs. 39 Lakhs, and 5) Education support – Rs. 98 Lakhs. The fund will be spent over a period of 5 years.

14. PP reported that this is an existing mine. During proposed expansion no additional land will be needed hence there is no settlement or rehabilitation envisaged.

15. PP submitted that budget earmarked for Environment Management Plan Rs 2.0 (capital) and Rs 1.43 Cr (recurring). This will include 1) Pollution Control (Capital – Rs. 88 Lakhs & Recurring/annum – Rs.65 Lakhs, 2) Pollution monitoring (Capital – Rs. 45 Lakhs & Recurring/annum – Rs. 14 Lakhs), 3) Occupational health and safety (Capital – Rs. 11 Lakhs & Recurring/annum – Rs. 9 Lakhs), 4) Green Belt (Capital – Rs. 12 Lakhs & Recurring/annum – Rs. 8 Lakhs), 5) Reclamation / Rehabilitation of Mined out area (Capital – Rs. 5 Lakhs & Recurring/annum – Rs. 9 Lakhs), 6) Compensatory Afforestation (Capital – Rs. 3.5 Lakhs & Recurring/annum – Rs. 9.5 Lakhs), 7) Wire fencing around plants and maintenance (Capital – Rs. 5 Lakhs & Recurring/annum – Rs. 10.5 Lakhs), 8) Maintenance of retaining wall (Capital – Rs. 6 Lakhs & Recurring/annum – Rs. 10Lakhs) and 9) Others (Settling pond) – (Capital – Rs. 25 Lakhs & Recurring/annum – Rs. 8 Lakhs).

16. PP has submitted that the proposed mining will be operated by open cast mechanized with drilling and blasting. Hence, it is envisaged to take up the precautionary measures which will include and Accident Prevention, Sanitary facilities shall be well equipped with suppliers and employees shall be encouraged to wash frequently, particularly those exposed to dust, In the event of temporary closer, approaches will be fenced off and cautionary notice displayed in English and regional language, Rotation of workers exposed to dusty and noisy areas, First aid facilities in the mining areas, Provision of personal protection devices to the workers, Periodic medical examinations, Medical camp will be organized for the worker every year, At the end of mining operation, test will be conducted to assess health of workers, Workers will be informed and trained about occupational health hazards, if identified, The personnel working in dust prone areas will be examined every year as per the DGMS circular No.01 of 21.01.2010, Quick-Fix designed by OSHA's ergonomics standards will be followed to reduce work-related musculoskeletal disorders (MSDs), Lyophilized Polyvalent Anti snake venom serum will be available at the mine site for snake bites and other mitigation measures for safety at work as envisaged in HIRA. PP has earmarked a separate Budget for Occupational Health for workers for an amount of Rs. 8 Lakhs. The nearby habitant might get affected due to the working of mine hence a sum of Rs 5.0 Lakhs has been dedicated towards the betterment of local people. In addition to this PP vide its letter dated 29.01.2020 submitted the i) Details of underground mining including precautionary steps planned and other safety procedures as per the government guidelines and ii) Reasons for common dumping and permission letters from DGMS.

17. PP submitted the certified compliance report for existing EC from RO, MoEF&CC, Bhubaneswar vide letter no.101-409/EPE/83 dated 20.02.2017. Further, PP vide its letter dated 29.01.2020 submitted the updated certified compliance report obtained vide letter no 101-409/08/EPE dated 06.12.2019 along with the letter of observation of RO, MoEF&CC on the compliance report. PP has also submitted copy of Action Taken Report submitted to RO, MoEF&CC on Certified Compliance vide letter dated 16.12.2019.

18. PP has obtained NOC and Consent to Operate from State Pollution Control Board, Odisha. PP has submitted copies of CTP from 2003 onwards. The latest CTO has been obtained till 31.03.2021 for 0.351 MTPA production rate vide letter no.2483/IND-I-CON-2274 dated 06.02.2016. PP has stated that the CTO for proposed expansion in production will be obtained after grant of EC from MoEF&CC.

19. PP reported that in compliance to the order of Hon'ble Supreme Court order dated 02.08.2017, the Dy. Director of Mines, Department of Mines & Geology, Govt. of Odisha vide letter No. 570/ Mines dated 11.04.2018 has demanded a sum of Rs 94,73,53,671/- towards excess production during 2000-01 to 2007-08. Since as per the project proponent the demand made by Government authorities is not admissible demand as per actual figures hence project proponent has filed a revision application vide No.22/46/2018/RC1 challenging the demand notice issued by the State Government. After hearing of Revision Application on 10.05.2018, the Revisionary Authority has stayed the same with a notice to State Govt. to furnish reply within 3 months and thereafter project proponent has to file rejoinder within one month. The copy of the stay order is submitted by PP.

20. PP has given an undertaking that the data and information given in the application and enclosures are true to the best of their knowledge and belief and they are aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at their risk and cost. The Consultant in the EIA report has given a declaration stating and certifying that they were a part of the EIA team under the capacity of EIA coordinator from August 2018 to May 2019 that prepared the said EIA report. PP vide its letter dated 29.01.2020 has submitted an affidavit in a non-judicial stamp paper vide Certificate No. 51AA 101371 dated 18.12.2019 stating *"That there is no change in the area of the Mining Lease (116.76 Ha), production capacity (3.51 LTPA to 6 LTPA), mining technology involving Opencast-cum-Underground Mine, and Mineral Processing Plant (40 TPH) in the IBM approved Review Mine Plan dated 31.10.2018 as submitted to MoEF& CC along with EIA/EMP Report for appraisal and IBM approved Mining Plan dated 23.09.2016 submitted earlier for Public Hearing held on 23.06.2017"*. PP submitted undertaking by the way of affidavit bearing No. 40AA 98821 dated 8.04.2019 to comply with all the statutory requirement & Common Cause Judgment dated 2.08.2017.

21. PP submitted that cost of the project is Rs 394.45 Crores (including 354.45 Crores for underground mining operations and Rs 40 crores for Chrome Ore Beneficiation project). PP submitted that number of working day is 250; two shifts working are being practiced having 8 hours in each shift. After expansion the number of working day will be 300 with three shifts each of 8 hours. Total number of direct employment potential is about 921 including existing 712 employees.

22. **The proposal was placed in the 10th EAC Meeting held during October 21-22, 2019.** Based on the presentation made by PP and the

discussion held, the Committee **deferred** the proposal and asked the PP to submit requisite information for further consideration.

- i. PP collected baseline data during October 2015 - December 2015 which is 3 years old. The Committee asked the PP to collect fresh 1-month baseline data and analysis the data. In addition, the PP needs to submit comparative data and trend analysis considering the values obtained during earlier EC appraisal, baseline data collected during Oct – Dec 2015 period, regular monitoring and fresh 1-month baseline data for all relevant parameters.
- ii. PP submitted certified compliance report from RO, MoEF&CC, Bhubaneswar vide letter no.101-409/EPE dated 20.02.2017 which is about 2 year old and reveals that some of the conditions are in process of complying. The Committee is of the view that EC obtained on 2002 and still in the process of complying the conditions, so PP needs to submit updated compliance report for existing EC conditions.
- iii. PP proposed for chrome ore beneficiation plant (40 TPH), so, PP should perform the cumulative effect of mining and beneficiation plant in the EIA studies and submit the report separately. The report should also highlight the techno-economic benefit of beneficiation plant.
- iv. Free Silica needs to be analyzed and documented by carrying fresh study from an accredited laboratory.
- v. PP submitted that as part of the existing EC condition, PP made plantation, however, the PP was unable to show/explain the same in KML. PP needs to submit the revised KML file with plantation area and their corresponding coordinates. PP also requires to submit the details of plantation carried out in safety zone and along the lease boundary. PP needs to submit the photographic images of the same. In addition, PP requires to show the compliance status of the existing EC condition (xvi).
- vi. PP needs to submit details of total excavation (in same unit) including mineral, overburden (OB), interburden (IB), side burden (SB) and waste/topsoil production and etc.
- vii. The site-specific wildlife conservation plan is approved on 18.11.2015, PP needs to submit compliance status of the same from the Competent Authority and also submit the revised approved site specific conservation plan as the proposal for expansion in production.
- viii. PP needs to evaluate the performance of ETP and submit the details of corresponding analytical data along with details of sludge management plan for ETP sludge.
- ix. PP needs to submit details of steps taken for management of surface run off specifically mitigative measures.
- x. PP submitted that water requirement is 3500 KLD, the Committee is of the view that the water requirement is very high. So, the Committee asked the PP to

submit water budget for the same and also futuristic approach on decreasing the water requirement as well as rainwater harvesting.

- xi. PP submitted compliance to the ToR conditions which are generic and not adequate. PP needs to submit the revised compliance status of the ToR conditions.
- xii. PP needs to revise the CER budget as per the provisions of OM No. F. No. 22-65/2017-IA-III dated 01 May 2018.
- xiii. PP needs to submit copy of CGWA approval and compliance status of conditions especially on installation of peizometers at suitable location for monitoring.
- xiv. PP needs to submit details of environment management cell, performance including monitoring and their educational backgrounds.
- xv. PP needs to submit details of underground mining including precautionary steps planned and other safety procedures as per the government guidelines.
- xvi. PP requires to submit reasons for proposing common dumping along the lease boundary with M/s. BAL. PP needs to show the current dumping yard with coordinates and details of handling of dump, if any. In addition, PP needs to submit the copy of permission obtained from Directorate General of Mines Safety vide letter No. BBR-JA/CH-2 & 12/P-111 (3)/2017/235-136, dated 15/02/2017.
- xvii. PP requires to submit the copy of document for NPV payment

PP submitted that change in technology from opencast to combination of opencast and underground mining; however, there is no change in the mining plan. Therefore, the Committee asked the PP to submit a letter in the form of affidavit that there is no change in the mining plan.

23. Based on the ADS raised above and subsequently informed by Ministry vide letter dated 13.12.2019, PP vide its letter No. IMFA/MPC/20/09 dated 29.01.2020 has submitted the following information/clarification:

Sl. No.	ADS dated 13.12.2019	Reply
i.	PP collected baseline data during October 2015 - December 2015 which is 3 years old. The Committee asked the PP to collect fresh 1-month baseline data and analysis the data. In addition, the PP needs to submit comparative data and tend analysis	One-month data for the period November 2019 has been collected and analyzed by NABL accredited laboratory. Test reports are attached as Annexure lato the letter by PP . Comparative data and trend analysis considering the values obtained during earlier EC appraisal, baseline data collected during Oct-Dec 2015 period, regular monitoring and fresh 1-month baseline data for all relevant

	considering the values obtained during earlier EC appraisal, baseline data collected during Oct – Dec 2015 period, regular monitoring and fresh 1-month baseline data for all relevant parameters	parameters has been carried out which is attached as Annexure 1b to the letter by PP.
ii.	PP submitted certified compliance report from RO, MoEF&CC, Bhubaneswar vide letter no.101-409/EPE dated 20.02.2017 which is about 2 year old and reveals that some of the conditions are in process of complying. The Committee is of the view that EC obtained on 2002 and still in the process of complying the conditions, so PP needs to submit updated compliance report for existing EC conditions.	Updated Certified compliance report has been obtained vide letter no 101-409/08/EPE dated 06.12.2019 and is attached as Annexure 2a to the letter by PP. RO has observations on two points regarding plantation and settling pond vide letter no 101-409/08/EPE Dated 10.12.2019 which has been duly complied with and replied vide letter no IMFA/MPC/SMC/2019/92 Dated 16.12.2019. The letters are attached as 2b and 2c respectively to the letter by PP.
iii.	PP proposed for chrome ore beneficiation plant (40 TPH), so, PP should perform the cumulative effect of mining and beneficiation plant in the EIA studies and submit the report separately. The report should also highlight the techno-economic benefit of beneficiation plant.	Cumulative effect of mining and beneficiation plant and Techno-economic benefit of the Chrome Ore Beneficiation Plant have been prepared and is attached as Annexure 3 to the letter by PP. As per the report the beneficiation plant is viable considering the fact that subgrade chrome ore mining will not incur any cost as it has already been mined out and stacked within the lease area. The sale price of the beneficiated product will outweigh the cost of beneficiation plant. Since beneficiation will be done through wet process hence there will be minimal impact on the environment due to this plant as given in Annexure 3 to the letter by PP.
iv.	Free Silica needs to be analyzed and documented by carrying fresh study from an	Free Silica has been analyzed by NABL accredited lab and attached as Annexure 4to the letter by PP.

	accredited laboratory	
v.	PP submitted that as part of the existing EC condition, PP made plantation, however, the PP was unable to show/explain the same in KML. PP needs to submit the revised KML file with plantation area and their corresponding coordinates. PP also requires to submit the details of plantation carried out in safety zone and along the lease boundary. PP needs to submit the photographic images of the same. In addition, PP requires to show the compliance status of the existing EC condition (xvi).	Details of plantation carried out in safety zone, overburden dump, other areas in the ML area, photos of plantation and compliance of existing EC condition is attached as Annexure 5 to the letter by PP . KML file showing the plantations in different areas as mentioned above attached.
vi.	PP needs to submit details of total excavation (in same unit) including mineral, overburden (OB), interburden (IB), side burden (SB) and waste/topsoil production and etc.	Total excavation is 28.0 LTPA including mineral (6.0 LTPA), and overburden (OB) (22.0 LTPA).
vii.	The site specific wildlife conservation plan is approved on 18.11.2015, PP needs to submit compliance status of the same from the Competent Authority and also submit the revised approved site specific conservation plan as the proposal for expansion in production.	Compliance status given by DFO Cutback on Approved site-specific conservation plan is attached as Annexure 6 to the letter by PP .
viii.	PP needs to evaluate the performance of ETP and submit the details of corresponding analytical data along with details of sludge management plan	Details of ETP and sludge management is attached as Annexure 7 to the letter by PP .

	for ETP sludge.	
ix.	PP needs to submit details of steps taken for management of surface run off specifically mitigative measures.	Management of surface runoff along with mitigative measure is attached as Annexure 8 to the letter by PP.
x.	PP submitted that water requirement is 3500 KLD, the Committee is of the view that the water requirement is very high. So, the Committee asked the PP to submit water budget for the same and also futuristic approach on decreasing the water requirement as well as rainwater harvesting.	Total water requirement for the project after recalculation is 1240 Cu.m / Day (During peak summer season), in which 240 Cu.m / day for domestic uses and 1000 Cu.m for industrial uses. The freshwater requirement is only 240 Cu.m/day which is only for domestic uses and water requirement for industrial uses i.e. 1000 Cu.m will be met from mine seepage water after treatment. Once underground operation starts, the water requirement will be reduced by 50 percent for industrial uses. Further after full fledged underground operation there will be very less water requirement for sprinkling (dust suppression) to the OB dump, mine haulage roads and mine benches. Details are given at Annexure 9 to the letter by PP.
xi.	PP submitted compliance to the ToR conditions which are generic and not adequate. PP needs to submit the revised compliance status of the ToR conditions.	Revised compliance status with adequate details has been prepared and is attached as Annexure 10 to the letter by PP.
xii.	PP needs to revise the CER budget as per the provisions of OM No. F. No. 22- 65/2017-IA-III dated 01 May 2018.	Revised CER budget as per the provisions of OM No. F. No.22-65/2017-IA-III dated 01.05.2018 attached as Annexure 11 to the letter by PP.
xiii.	PP needs to submit copy of CGWA approval and compliance status of conditions especially on installation of peizometers at suitable location for monitoring.	CGWA approval is attached as Annexure 12 a to the letter by PP. Compliance status of installation of piezometers is attached as Annexure 12 b to the letter by PP.
xiv.	PP needs to submit details of environment	Details of Environment Management Cell, performance including monitoring

	management cell, performance including monitoring and their educational backgrounds.	& educational backgrounds is attached as Annexure 13 to the letter by PP.
xv.	PP needs to submit details of underground mining including precautionary steps planned and other safety procedures as per the government guidelines.	Details of underground mining including precautionary steps planned and other safety procedures as per the government guidelines is given at Annexure 14 to the letter by PP.
xvi.	PP requires to submit reasons for proposing common dumping along the lease boundary with M/s. BAL. PP needs to show the current dumping yard with coordinates and details of handling of dump, if any. In addition, PP needs to submit the copy of permission obtained from Directorate General of Mines Safety vide letter No. BBR-JA/CH-2 & 12/P-111 (3)/2017/235-136, dated 15/02/2017.	Reasons for common dumping and permission letters from DGMS is attached as Annexure 15 to the letter by PP. KML file showing the common dumping attached.
xvii.	PP requires to submit the copy of document for NPV payment.	Copy of document for NPV payment is attached as Annexure 16 to the letter by PP .
xviii.	PP submitted that change in technology from opencast to combination of opencast and underground mining, however, there is no change in the mining plan. Therefore, the Committee asked the PP to submit a letter in the form of affidavit that there is no change in the mining plan.	Affidavit dated 18.12.2019 is attached as Annexure 17 to the letter by PP.

24. **The proposal was placed in 18th EAC meeting held during 22-24 June, 2020** wherein the Committee deliberated on the information submitted

by PP. In addition to above, the Committee also deliberated on the other issues such method of mining, backfilling plan, water consumption, compliance of standard ToR for beneficiation, change in the mining plan if any, cumulative impact due to mining and backfilling activities etc. PP also submitted certain information in this regard through email but it has observed the reply submitted in not satisfactory as all the issues are not addressed properly and the same needs to be upload online on PARIVESH Portal for public viewing. The Committee was therefore deferred the proposal for want of following information:

- a) Compliance of Standard term of reference as published by Ministry for beneficiation activity.
- b) Status of extension of mining lease copy of letter if any issued in this regard needs to be submitted.
- c) The Committee is of the view that PH was conducted on 23.06.2017 and the modified mining plan that was placed in PH was approved on 23.09.2016. Thereafter, two review of mining plan was approved and PP needs to submit whether there are any changes made in the recently approved mining plan or not. The copy of recent mining needs to be uploaded on PARIVESH and changes if any made with justification needs to be submitted. The land use mentioned at conceptual stage needs to be submitted.
- d) PP in the mining plan is mentioned that mined out area of band-1 will be backfilled, but it is not clear from the same whether the IBM has allowed dumping over the mineralised area. Further in EIA Report the impact due to additional material handling for backfilling is not mentioned. It is not clear whether the dump will be re-handled or waste material from opencast and underground will be directly backfilled in the band-1. Therefore, a letter in this regard that IBM has approved the proposal of backfilling considering the fact that the band-1 is having mineral at the time of backfilling. In addition to this cumulative impact due to all the activities needs to be submitted.
- e) In the EC granted on 24.12.2002 it has mentioned that no forest land is involved but now PP has submitted that there is forest land for which Forest Clearance was obtained on 22.06.2018. The reason for change in land classification needs to be submitted.
- f) PP shall ensure that the document uploaded on the Parivesh Portal is illegible, it has found that some of the documents including past production details authenticated by DMG is not illegible.

Based on the ADS raised above and subsequently informed by Ministry online on 01.07.2020, PP vide its letter No. IMFA/MPC/20/41 dated 15.07.2020 has submitted the following information/clarification online on PARIVESH on 16.07.2020:

Sl. No.	ADS Queries	Reply

1.	Compliance of Standard term of reference as published by Ministry for beneficiation activity.	PP has submitted TOR compliance of Beneficiation Plant is enclosed as Enclosure I to the letter.
2.	Status of extension of mining lease copy of letter if any issued in this regard needs to be submitted.	Mining lease has been granted by Govt. of Orissa for 30 years which was executed on 04.09.1999. As per MMDR Act 2015, the validity of the mining lease is extended upto 03.09.2049. However, formal application for extension of mining lease has already been submitted to the State Government. PP has submitted Copy of lease deed enclosed as Enclosure II to the letter.
3.	The Committee is of the view that PH was conducted on 23.06.2017 and the modified mining plan that was placed in PH was approved on 23.09.2016. Thereafter, two review of mining plan was approved and PP needs to submit whether there are any changes made in the recently approved mining plan or not. The copy of recent mining needs to be uploaded on PARIVESH and changes if any made with justification needs to be submitted. The land use mentioned at conceptual stage needs to be submitted.	There are no changes in the area of the Mining Lease (116.76 ha.), production capacity (3.51 LTPA to 6 LTPA), mining technology involving Opencast-cum-Underground Mine and Chrome Ore Beneficiation Plant (40 TPH) in the IBM approved Review of Mining Plan dated 31.10.2018, modification of review of mining plan dated 14.02.2018 and IBM approved mining plan dated 23.09.2016 on the basis of which Public Hearing was held on 23.06.2017. PP has enclosed herewith: 1) Table showing comparison of the production capacity of all three approved mining plans enclosed as Enclosure III to the letter, 2) Affidavit mentioning that there is no change in all the three mining plan as Enclosure IV to the letter, 3) Copy of recent mining plan dated 31.10.2018 as Enclosure V to the letter 4) Land use at Conceptual Stage as Enclosure VI to the letter.
4.	PP in the mining plan is mentioned that mined out area of band-1 will be backfilled, but it is not clear from the same whether the IBM has allowed dumping over the mineralized area. Further in EIA Report the impact due to	Mining in Band I is proposed to continue till the ultimate pit limit (-2) mRL. After completion of open-cast mining, the mined out area of Band will be backfilled upto 114 mRL by the overburden to be generated during opencast mining of Band II and waste to be generated from underground

<p>additional material handling for backfilling is not mentioned. It is not clear whether the dump will be re-handled or waste material from opencast and underground will be directly backfilled in the band-1. Therefore, a letter in this regard that IBM has approved the proposal of backfilling considering the fact that the band-1 is having mineral at the time of backfilling. In addition to this cumulative impact due to all the activities needs to be submitted.</p>	<p>developments of band. Since the mine plan has been duly approved by IBM wherein overburden dumping has been mentioned and incorporated in the plans & sections, hence the arrangement of dumping the overburden on the exposed mineral at the bottom of the mined out area as per conceptual plan has the consent of IBM. Underground workings are proposed after leaving a safe parting of 248 m below the ultimate opencast pit limit of Band i.e. (-2) mRL based on scientific study carried out by NIRM, Karnataka and duly approved by IBM. After completion of opencast mining of Band II, the mined out area shall be backfilled/reclaimed upto 78mRL. For 6 lakh tones of Chrome ore production, 30,000 CuM of waste will have to be handled per annum from underground workings of Band-1 in line with the experience at our another adjacent underground mine. So, about 510000 Cum waste will be generated from underground developments of Band during conceptual period. After completion of opencast mining of Band II, the mined out area shall be back-filled/reclaimed upto 78mRL to fillup the void area by about 510000 Cum waste. As this is the underground material, so plantation cannot be made over it. For which one layer of OB material is to be spread over it for plantation. So, about 15,000 to 20,000 Cum of leftover OB material from dump yard is to be re-handled for rehabilitation purpose by planting local species. Relevant pages of Approved Review of Mining Plan by IBM mentioning that backfilling is proposed in Band I & Band II are attached as Enclosure VII to the letter. Cumulative impact due to all the activities has been evaluated at the maximum generation of overburden of</p>
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		11 Lakh Cum per annum whereas OB generation from underground operation and OB re-handling quantity from the dump for backfilling of Band II mined out area is much less till the conceptual period. Hence there will be no additional impact due to re-handling of OB. Report showing cumulative impact is enclosed as Enclosure VIII to the letter.
5.	In the EC granted on 24.12.2002 it has mentioned that no forest land is involved but now PP has submitted that there is forest land for which Forest Clearance was obtained on 22.06.2018. The reason for change in land classification needs to be submitted.	The entire ML area was Non- Forest as per HAL records. Further in accordance to the MoEF&CC Circular No. F.No.8-78/1996-FC dated 10.03.2015, as per the Sabik records (as on 25.10.1980) the land schedule of the ML area consisted 115.05 ha. Of Forest land & 1.71 ha. Of Non-Forest Land. Hence the forest clearance was obtained for diversion of 115.05 ha. of Sabik Kisam forest land as on 25.10.1980 vide MoEF&CC letter mo. F.No. 8-16/2016-FC dated 22.06.2018. Land Schedule is Enclosed as Enclosure IX to the letter.
6.	PP shall ensure that the document uploaded on the Parivesh Portal is illegible, it has found that some of the documents including past production details authenticated by DMG is not illegible.	Noted.

25. The proposal is again placed in the 20th EAC (Non-coal Mining) held during 19th-21st August, 2020 wherein the Committee **recommended** the proposal of M/s Indian Metals & Ferro Alloys Ltd for expansion of production from Sukinda Mines (Chromite) from 3.51 LTPA to 6 LTPA, with total excavation of 28.0 LTPA including [Chromite Ore 6.0 LTPA (ROM) & and 22.02 LTPA of overburden, with change in mining technology from opencast to opencast & underground and establishment of chrome ore beneficiation plant (COBP) of 40 TPH over a lease area of 116.76 ha located at Village- Kaliapani, Tehsil- Sukinda, District- Jajpur, State- Odisha, subject to Standard EC Condition as per (Annexure III). In addition to this the Committee also prescribed following specific conditions for this project:

- 1) Waste should be dumped on the earmarked sites within the mining lease area and no waste should be dumped outside the lease area. Regarding dumping of waste on the mineralized zone for backfilling purpose the PP shall first obtain the permission from IBM.
- 2) PP shall construct garland drains to arrest the surface runoff during rainy season and same should be diverted to ETP for treatment.
- 3) The amount proposed under Conservation Plan for schedule-1 species shall be deposited in government account.
- 4) PP shall plant at least 2750 saplings during 2020-21 in 1.1 Ha, 2250 saplings during 2021-22 in 0.9 Ha, 2000 saplings during 2022-23 in 0.8 Ha, 2750 saplings during 2023-24 in 1.3 Ha. Thereafter, PP shall carry out gap plantation. The PP shall submit the plantation plan beyond 2023-24 within 6 month of grant of EC. The species proposed for plantation include *Acacia auriculiformis*, *Acacia mangium*, *Alstoniascholaris*, *Albizialebeck*, *Azadirachtaindica*, *Dalbergiasissoo*, *Delonixregia*, *Gmelina Arborea*, *Millettiapinnata*, *Peltophorum pterocarpum*, *Phyllanthusemblica*, *Pterocarpus marsupium*, *Putranjivaroxburghii*, *Senna tora*, *Tectonagrandis*, *Terminalia bellirica* and the same may be finalized in consultation with local forest department or any other expert agency engaged for the same. The PP shall keep the record of saplings planted, survival rate, area covered under plantation, location etc. In addition to this gap filling needs to be done to as and when require for maintaining the density of plantation. The budget earmarked for the plantation shall be kept in separate bank account and audited annually. PP shall submit the detail such as photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation and outcome of the pilot study etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 5) Approval/permission of CGWA/SGWA shall be obtained before drawing ground water for the project activities. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
- 6) The activities proposed under Corporate Environment Responsibility (CER) in accordance to the MoEF&CC's office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, which inter alia, include Drinking water supply; Sanitation facility; Infrastructure development; Health support; Education support; etc. The activities shall be taken up within 5 years. The PP should annually submit the audited statement and details of implementation of CER activities along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, photographs & Geo-location of the infrastructures/facilities developed, etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

- 7) The activities proposed under Environment Management Plan which inter alia, including Pollution Control; Pollution monitoring; Occupational health and safety; Green Belt; Reclamation / Rehabilitation of Mined out area; Compensatory Afforestation; Wire fencing around plants and maintenance; Maintenance of retaining wall; and Others (Settling pond). The PP should annually submit the audited statement and detailed environment monitoring report along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, sampling reports, photographs & Geo-location of the infrastructures/facilities developed, details of persons engaged in Environment Management Cell etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- 8) The PP shall implement the short term and long term measures to get rid from the adversity of Cr (VI) contamination and status report of the same along with benefit occurred needs to be submitted to Regional Office of MoEF&CC annually. In addition to this PP shall implement the EMP, Occupational Plan, commitment made during public hearing as submitted to the Ministry and status report of the same needs to be submitted to Regional Office of MoEF&CC annually.
- 9) Total excavation shall not be more than 28.0 LTPA including mineral (6.0 LTPA), and overburden (OB) (22.0 LTPA).
- 10) The PP shall take up the compensatory plantation in outside the ML area in lieu of the boundary plantation towards the common boundary of ML with adjacent lease.

2.7 Expansion of Zawar Group of Underground Lead- Zinc Mines of M/s Hindustan Zinc Limited proposed expansion from 4.0 Million TPA to 4.8 Million TPA Zinc Ore and expansion in Beneficiation plant from 4.0 Million TPA to 4.8 Million TPA, from the mine lease area of 3620ha, located at ML No.03/89 near village Zawar, Tehsil Girwa and Sarada, District Udaipur, Rajasthan under para 7(ii) (a) of EIA Notification, 2006 [Proposal No: F. No. J-11015/259/2012-IA.II (M); Proposal No. IA/RJ/MIN/165786/2020] - Consideration of EC under clause 7(ii).

The proposal of M/s Hindustan Zinc Limited is for expansion from 4.0 Million TPA to 4.8 Million TPA Zinc Ore and expansion in Beneficiation plant from 4.0 Million TPA to 4.8 Million TPA, from the mine lease area of 3620 ha, located at ML No.03/89 near village Zawar, Tehsil Girwa and Sarada, District Udaipur, Rajasthan under para 7(ii) (a) of EIA Notification, 2006. The proposed project site falls in zone-III as per IS 1893 (Part-I): 2002. Hence, seismically it is a moderate zone.

2. PP has submitted that the said proposal is covered under the ambit of EIA Notification, 2006 & its subsequent amendments and is categorized under category 'A' project activity 1(a) {Mining of Minerals} and 2(b) {Mineral

beneficiation}, respectively, as per the Schedule of the EIA Notification 2006 & its subsequent amendments.

3. PP submitted that earlier environmental clearance was granted vide letter no. No. J-11015/259/2012-IA.II (M) dated 05.01.2017.

PP has applied vide Proposal No. IA/RJ/MIN/165786/2020 dated 31.07.2020 for expansion from 4.0 Million TPA to 4.8 Million TPA Zinc Ore and expansion in Beneficiation plant from 4.0 Million TPA to 4.8 Million TPA, from the mine lease area of 3620 ha, located at ML No.03/89 near village Zawar, Tehsil Girwa and Sarada, District Udaipur, Rajasthan. PP has submitted that as per the O.M. issued by MoEF&CC, New Delhi {Guidelines for granting Environment Clearance for expansion of Coal Mining Projects involving one-time Production Capacity Expansion in the existing operation - dated 19.12.2012, 07.1.2014, 30.05.2014 and 28.07.2014}, the proposal for Environmental Clearance for 20% increase in ore mining and beneficiation capacity of Zawar group of mines is being submitted for approval under Clause 7 (ii) (a) of EIA Notification, 2006 and subsequent amendments.

4. PP submitted that total mine lease area is 3620 ha. The lease was granted from 1st April 1950 for a period of 20 years for 5178 ha. PP has reported that 1st renewal was made vide letter No. P.12(26)/Udaipur/Gp-2/90 on 13.03.1973 for the period from 01 Apr 1970 to 29 Mar 1990 for an area of 5178 ha. 2nd renewal was granted on 20.10.1992 for the period from 30th March 1990 to 29th March, 2010 for 5178 ha. Amendment was made vide order dated 03.08.1999 for reduction of lease area from 5178 ha to 3620 ha and validity of renewal from 30.03.2000 to 29.03.2010. The 3rd renewal has been granted vide letter No. ME/Udai/cc-3/P/Sarada/323/08/3856 dated 23.01.2015 for the period from 30th March 2010 to 31st March 2030 for an area of 3620 ha.

5. PP has submitted that Approval of Review of Mining Plan long-with Progressive Mine Closure Plan has been approved by IBM **vide letter no. 584(4)(3)(1809)/2019-RCM-Ajm dated 17.12.2019.**

6. PP submitted that the project itself being an underground mine, all mine development & production activity will happen underground. The underground mine voids shall be backfilled with ore beneficiation tailings, as per the mine plan. Tailing dam will be rehabilitated by vegetative cover after utilization to its optimum capacity. At the end of mine life, major infrastructure in the mine and beneficiation plant shall be dismantled and reclaimed after decontamination of any contaminated sites, as envisaged in the Mining plan.

The waste rock generation shall increase proportionate to increase in production capacity. The waste rock shall be utilized for tailing pond embankment height increase, surface leveling works and also backfilling into mine voids. There shall be no increase in external dumps for waste rock. The capacity of the existing tailing dam will be increased to dispose the tailings by increasing the height of the embankment. Waste oil, used oil and other hazardous wastes will be safely stored in drums/tanks/covered shed and sold

to authorized recyclers. Waste water will be recycled and reused in the beneficiation plant. Zero effluent discharge shall be maintained.

7. PP submitted that Range of Water Table is from 10 m bgl to 7 mbgl (Pre-Monsoon Season) and 3 m bgl to 5 mbgl (Post-Monsoon Season). Present water requirement is 14000 KLD for existing operations. No additional requirement will be there for propose 20 % expansion. Water requirement for industry shall be met from the existing source i.e. captive Tidi dam. PP submitted that they obtained NOC from CGWA vide letter No. 21-4(267)/CGWA/WR/2008-2185; 21-4(266)/CGWA/WR/2008 dated 11.12.2013 for a period of 3 years. PP submitted the application for renewal of NOC vide its letter No. HZL/ZM/ENV/CGWA/2016-17/557 dated 09.12.2016.

8. PP has submitted that 373625 saplings have been planted in area of 170.85 ha. Further, it is proposed to plant 55000 saplings. The total area under greenbelt will be 251.43 ha.

9. PP submitted that the mine lease area of 3620 Ha includes a forest area of 1537.91 Ha. The entire forest area was granted Forest Clearance by MoEF&CC vide letter No. 8- 1/1997-FC dated 15/16.06.1998 with a validity coterminus with mining lease including 114.94 Ha area for surface use and 1422.97 Ha for underground mining. Renewal of Forest diversion was granted by MoEF vide letter No. 8-1/1997-FC dated 23.02.2015. PP reported that no protected area under international conventions or local legislation for its ecological, landscape, cultural or other related values exists within 15 km radius.

10. PP submitted that there is Presence of Schedule-I Species which includes Osprey, Indian Peafowl, White-rumped Vulture, Indian Leopard, Indian Pangolin, Crimson rose, Bengal Monitor Lizard. PP has submitted that the present Wildlife Conservation Plan is prepared for 2 projects, namely 'expansion of Lead and Zinc ore production and beneficiation capacities from 1.5 Million Tonnes Per Annum (MTPA) to 4.0 MTPA' and 'expansion of the capacity 4.0 MTPA to 4.8 MTPA of Lead and Zinc ore production and beneficiation capacities from its existing underground mines'. According to the SOP for the Wildlife Conservation Plan, the cost allotted for the wildlife conservation is Rs. 1845 Lakhs. The implementation of wildlife conservation plan is planned till the mine life i.e. for the duration of next 10 years (till March 2030) in 3 phases of 4 years, 3 years and 3 years. Accordingly, costing is allotted for the 3 phases, along with presentation of total cost required for the implementations for next 10 years. PP has reported that Conservation Plan for Schedule-I Species has not been approved by competent authority.

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

12. PP submitted that there will be an increase in traffic for Ore transport of 0.8 MTPA from mines to the centralized beneficiation plant within ML Area & ore concentrate from beneficiation plant to HZL smelters outside ML Area. No adverse impact to surface water bodies is anticipated. No additional water other the existing water demand will be sourced from the captive Tidi Dam. Mining

works are underground. No changes in water bodies are envisaged. No disturbance is envisaged for water courses.

13. PP submitted that public hearing is not applicable in this case.

14. PP submitted that the funds allocated towards CER (Corporate Environment Responsibility) is Rs. 3.25 crores.

15. PP reported that rehabilitation and resettlement (R&R) is not applicable for his project.

16. PP submitted that the funds allocated for Environment Management is Rs. 64 crores (Capital) and 2.9 crores (Recurring per Annum).

17. PP submitted the EC compliance report has been certified from RO, MoEF&CC, Lucknow vide letter no.IV/ENV/R/Mine-484/794/2008/814 dated 07.10.2019.

18. PP has submitted that CTO has been granted vide letter No. F(Mines)/Udaipur(Sarada)/53(1)/2016-2017/8193-8197 and Order No. 2017-2018/Mines/9658 dated 28.12.2017 for the period from 01.01.2018 to 31.12.2022.

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

20. PP has given an undertaking that the data and information given in the application and enclosures are true to the best of their knowledge and belief and they are aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at their risk and cost. In addition to this, they hereby give undertaking that no activity/ construction/ expansion has since been taken up.

21. PP submitted that Cost of the project is Rs. 1630 Crores (Existing: 1200 crore + Proposed: 430 crore). PP submitted that due to establishment of the project, large direct and indirect employment opportunities will be created. Entrepreneurship development through ancillary or supporting industries/ businesses in the surrounding area will further increase the income levels of people.

22. The Committee during EAC meeting held on 19,20 & 21 August, 2020 observed that Last public hearing was conducted on 29.09.2016 for expansion from 1.5 million TPA to 4.0 Million TPA of ore production and beneficiation capacity. The Committee noted that the production capacity increased 20 %, therefore, may be considered as per para 7(ii)(a) of the EIA, Notification, 2006. The committee, also observed that 55000 saplings to be planted by project proponent in the total area under greenbelt of 251.43 ha, inter alai, including Lease boundary plantation of forests in the next 4-5 years. It was also advised to communicate to the Ministry regarding the surrender of land.

23. The Committee during EAC meeting held on 19,20 & 21 August, 2020 **recommended** the proposal of M/s Hindustan Zinc Limited for expansion of Zawar Group of Underground Lead- Zinc Mines for proposed expansion from 4.0 Million TPA to 4.8 Million TPA Zinc Ore and expansion in Beneficiation plant from 4.0 Million TPA to 4.8 Million TPA, from the mine lease area of 3620ha, located at ML No.03/89 near village Zawar, Tehsil Girwa and Sarada, District Udaipur, Rajasthan under para 7(ii) (a) of EIA Notification, 2006 with following specific conditions in addition to the conditions prescribed in the earlier EC dated 5th January, 2017.

- (i) Gap Plantation shall be carried in consultation with State Forest Department in the total mining lease area where the surface rights were not acquired. These plantations shall be maintained and monitoring to be done to achieve the survival rate of 90%.
- (ii) The conservation plan for Schedule- I species reported in the study area namely, 1 reptilian (Bengal Monitor Lizard), 3 avifaunal (Osprey, Indian Peafowl and White-rumped Vulture), 2 mammalians (Indian Pangolin and Indian Leopard) and 1 butterfly (Crimson Rose) shall be implemented in consultation with State Forest Department including the recommendations of the chief wildlife warden.
- (iii) As proposed, no additional water shall be used for the proposed expansion. The requirement shall be met from the existing daily water demand of 14,000 KLD, out of which 2,400 KLD water is used for Mining purpose, 8,600 KLD for beneficiation plant and 3,000 KLD for domestic use which is drawn from Tidi Dam through pipeline.
- (iv) The PP shall obtain the NoC from the CGWA regarding the intersection of workings with the groundwater table.
- (v) Mist spraying arrangements shall be provided to suppress the dust emission at the loading, crushing and transfer points. The effective water spraying arrangements shall be made at the tailing dam to control the air borne dust.
- (vi) The PP shall implement all the additional measures that are proposed in the present application.

2.8 Pachhtardi Limestone Mine of M/s. Shree Digvijay Cement Co. Ltd with Production Capacity 0.35 million TPA (ROM) in the mine lease area of 18.0388 ha Near Village: Pachhtardi, Taluka: Bhanvad, District: Devbhumi Dwarka (Erstwhile Jamnagar), Gujarat- [File No: J-11015/240/2016-IA-II(M), Proposal No: IA/GJ/MIN/65781/2017; Consultant: J. M. EnviroNet. Pvt. Ltd] - Reconsideration EC.

The proposal of M/s. Shree Digvijay Cement Company Ltd. (SDCCL) is for Pachhtardi Limestone Mine with limestone Production Capacity of 0.35 Million TPA in the mine lease area of 18.0388 ha (As per the lease area provided by Gujarat State and Mines Department: 18 Ha; 03 Are; and 88 Sq.m). The mine

lease area is located at survey No 78/p near Village: Pachhtardi, Taluka: Bhanvad, District: DevbhumiDwarka (Erstwhile Jamnagar), Gujarat. The mine lease area falls between the Latitude 21° 51' 16.39"N to 21° 51' 38.11"N and Longitude 69° 40' 58.74"E to 69° 41' 33.83"E.

2. PP submitted that as per EIA Notification dated 14th September 2006 and amended time to time, the project falls under Category "A", Project or Activity '1(a) -5 as general condition is applicable due to proximity of Barda Wildlife Sanctuary from the mine site. As per the certificate of Forest Department vide Lr No. A/JMN/TE-7/282/2017-18 dated 7.10.2017, the mining lease is located at a distance of 1.5 KM from Barda Wildlife Sanctuary and 1.18 Km from notified Eco Sensitive Zone. Therefore, as the ML area out side the ESZ, no NBWL clearance is required.

3. PP submitted that the revised ToR proposal was submitted and the same was considered by the EAC in its meeting held during January 30-31, 2017 wherein Committee observed that the project is at a distance of about 1 km from the Barda Wildlife Sanctuary. The Committee was of the opinion that the proposal cannot be considered under the existing rules and rejected the case. PP further submitted that final Notification on Eco -Sensitive Zone around Barda Wildlife Sanctuary was published by MOEFCC and PP submitted request for consideration of proposal. Subsequently, the EDS were raised and the ToR proposal was considered by EAC in its meeting held 21-22 December 2017 wherein the Committee recommended the proposal. The Ministry granted the ToR vide letter No: J-11015/240/2016-IA-II(M) dated 09.01.2018 for the preparation of Environmental Impact Assessment (EIA) Report and Environmental Management Plan (EMP). Subsequently, PP submitted proposal for amendment in ToR letter dated 09.01.2018. The amendment in ToR was considered by the EAC in it meeting held during February 20-21, 2019 wherein committee recommended the amendment in the TOR subject to confirmation from the State Mines and Geology w.r.t. mine lease area and the amendment in ToR not yet granted.

PP applied for EC vide **Proposal no. IA/GJ/MIN/65781/2017 dated 25.10.2020** and submitted the EIA/EMP report to Ministry at PARIVESH Portal. Accordingly, the proposal was placed in the 11th EAC Meeting held during November 27-28, 2019. Based on the presentation made by PP and the discussion held, the Committee observed the following and deferred the proposal for want of requisite information for further consideration.

The Committee observed that the amendment in ToR is not yet granted. The Committee mentioned that the Ministry will investigate the same and issue the amendment in ToR, if all necessary documents are submitted as sought in February 2019 EAC meeting. However, the Public Hearing carried out for the proposal shall be valid for consideration of appraisal as the same has been carried out as per the provision of EIA-2006, provided there is no significant change in basic proposal in the amended ToR.

i. The Committee observed that the amendment in ToR is not yet granted. The Committee mentioned that the Ministry will investigate the same and issue the

amendment in ToR, if all necessary documents are submitted as sought in February 2019 EAC meeting. However, the Public Hearing carried out for the proposal shall be valid for consideration of appraisal as the same has been carried out as per the provision of EIA-2006, provided there is no significant change in basic proposal in the amended ToR.

- ii. PP shall submit revised action plan to address the concerns raised in public hearing with budgetary provision and timeline.*
- iii. PP needs to revise the CER budget as per the provisions of OM No. F. No. 22-65/2017-IA-III dated 01 May 2018.*
- iv. PP requires to properly address the details of issues arises from shifting of school from MLA and find appropriate alternative land for shifting of school and their EMP along with budgetary provisions and timeline.*
- v. PP needs to submit details of measures required for protection of agriculture land in the adjoining lands and probable impact zone area along with budgetary provisions.*
- vi. PP needs to carry out the impact analysis on transportation of truck over 90 km road and also submit health impact considering the baseline health data of the people in the regions.*
- vii. PP requires to submit details and status of plantation in buffer zone and plans for protecting the same.*
- viii. PP needs to submit the details of precautionary measures considered for protection of village (Pachhtar- adjacent to MLA) and associated budgetary provisions.*
- ix. PP needs to submit details of environment management cell and proposed performance including monitoring and their educational backgrounds.*

PP vide its letter No. Pacdi/MoEF/A/304/1909 dated 31.12.2019 (uploaded on PARIVESH on 06.01.2020) submitted the following information/clarification:

- i. The Committee observed that the amendment in ToR is not yet granted. The Committee mentioned that the Ministry will investigate the same and issue the amendment in ToR, if all necessary documents are submitted as sought in February 2019 EAC meeting. However, the Public Hearing carried out for the proposal shall be valid for consideration of appraisal as the same has been carried out as per the provision of EIA-2006, provided there is no significant change in basic proposal in the amended ToR.**

Submission of PP: Request letter has been submitted to MoEFCC for issuance of Amendment in ToR.

The Member secretary informed the Committee that amendment is under process.

ii. PP shall submit revised action plan to address the concerns raised in public hearing with budgetary provision and timeline.

Submission of PP: PP has proposed revised action plan to address the concerns raised in public hearing with budgetary provision as: i) to Improvements in Infrastructures of School earmarked with budget of Rs 2.0 Lakh and for School Bags & Kits Distribution to Students, Rs 1.0 Lakh; ii) during PH a budget of Rs. 2.0 Lakhs was proposed for Contribution in Temple & Gaushala Development, Rs. 1.00 Lakhs was earmarked for Roads Maintenance and development and Rs. 5.00 Lakhs for Skill development programme to unemployed people, Rs 1.0 Lakh for Free Medical Camps and Veterinary Camps, Rs 1 Lakh for Promotion of Swachhta Rs 1.00 Lakh Free Supply of Drinking Water to nearby community and Rs 1.0 Lakh for Deepening of water pond.

iii. PP needs to revise the CER budget as per the provisions of OM No. F. No. 22-65/2017-IA-III dated 01 May 2018.

Submission of PP: PP submitted the revised budget earmarked under Corporate Environmental Responsibility (CER) is Rs 15.0 Lakhs. Which include Activity-1 Education [i) provision for teaching aids for schools, (Rs 1.0 Lakh, timeline 1st year), ii) provision for Improvements in Infrastructures like provision of Washrooms of two Schools, supports in construction and maintenance of playground (Rs 2.0 Lakh, timeline 2nd year), iii) Providing Basic Necessary equipment to PHC like BP Instrument; Electric Auto Clave, SS Dressing Trolley, Instrument Trolley (Rs 1.0 Lakh, timeline 2nd year), iv) Providing Basic Necessary equipment to PHC like Oxy Kit with Filling Adaptor; Semi Fowler Hospital Beds, Electronic Weighing Scales (Rs 1.0 Lakh, timeline 1st year)], Skill development programme like Tailoring classes, Computer training (Sewing machines and computers will be provided by Company) (Rs 5.0 Lakh, timeline 1st year), iv) Renovation and Development of ShamshanGhat (Cemetery) at Pachhtardi, (Rs 1.0 Lakh, timeline 1st year), Providing Solar Powered Street Lights in Pachhtardi Village (Rs 2.0 Lakh, timeline 2nd year), Arrangement of RO facility for safe drinking water supply in schools and Gram Panchayat (Rs 1.0 Lakh, timeline 1st year), Deepening and maintenance of water pond (Rs 1.0 Lakh, timeline 1st year).

iv. PP requires to properly address the details of issues arises from shifting of school from MLA and find appropriate alternative land for shifting of school and their EMP along with budgetary provisions and timeline.

Submission of PP: PP submitted that District Magistrate and Collector, Devbhumi Dwaraka Jilla Seva Sadan has given the consent vide letter no. JAMAN - 1/VASHI/1612/2019 Date: 20.12.2019 for construction of primary school at an alternative site and also given consent to pay reasonable compensation for the agriculture farms. Accordingly, PP submitted that they have noted some parts of Government Waste lands are identified which are available nearby on the other side of the SH in Pachhtardi Village. These are about 250 mtrs and 500 m from existing school in the western side and 500 mtrs on Northern side of Lease boundary on same side, as in Existing School.

These parts of the land may be used for construction of New School Building, subject to allotment of the same by the District Administration.

v.PP needs to submit details of measures required for protection of agriculture land in the adjoining lands and probable impact zone area along with budgetary provisions.

Submission of PP: PP submitted that the mine lease area is surrounded by Agricultural Private Land in Northern and Southern sides of Mining Lease with the distance of 300m from North side of the mine lease area and 900 m in southern boundary of the lease and in compliance to the mitigation measures PP submitted that the mining will not be carried out by the drilling and blasting and Mining will be undertaken by eco-friendly Surface Miner/Ripper Dozer. PP also submitted that the 7.5 m width shall be left in-situ all along the agriculture land adjoining MLA. Green belt / Plantation shall be started in the First year of working and Besides green belt, stone parapet wall of 1.5' X 5' dimension shall be constructed all along the ML boundary to protect the fields from Risk of accidents as well as to arrest dust. PP also submitted that the Length of mine lease periphery is about 2687 m and therefore 7.5 m width on lease periphery having an area of 2.0150 ha will be developed as greenbelt with 5050 plants. Greenbelt will comprise herbs, shrubs and trees having high dust collection efficiencies. Further PP submitted that regular water sprinkling will be carried out on mining face and during loading tippers and on haul roads to suppress dust. Further, tippers will be covered with tarpuline or will have covers having hydraulic arrangement for closing so that spillage free transportation is there. Additionally, the vehicles will be restricted to speed limitation.

vi.PP requires to submit details and status of plantation in buffer zone and plans for protecting the same.

Submission of PP: PP submitted that as per the Land use/ Land cover status of the study area has been assessed using satellite data and as per analysis area under plantation is estimated as 5.85%. The Plantation in buffer zone area includes Trees and shrubs as mentioned in the list of Flora authenticated by concerned Forest Department. Plantation is there in private land as well as in forest land lying in the south-eastern part of study area along with the protective measures. Mining will be done by Ripper Dozer without Drilling and Blasting.

vii.PP needs to carry out the impact analysis on transportation of truck over 90 km road and also submit health impact considering the baseline health data of the people in the regions.

Submission of PP: PP submitted the impact analysis on transportation of truck over 90 km road along with the health impacts considering the baseline health data of the people in the regions as per study conducted by the PP it was noted that diseases found in the villages are Diabetes Mellitus, Hypertension, Chronic Low back ache, Eye ailments, Ear ailments, Dental ailments, Throat ailments, Respiratory ailments, DM with HT, Sciatica, Gastric ailments, Muscular

ailments, Joint ailments, Skin ailments and Anemia which are common not related to mining project. However, following measures are proposed.

- a. Greenbelt will be developed in safety zone of 7.5 m width on lease periphery having an area of 2.0150 ha with 5050 plants. Greenbelt will comprise herbs, shrubs and trees having high dust collection efficiencies.
- b. Transportation route has been selected away from forest area in opposite direction and does not pass through sensitive areas.
- c. Pollution control measures for ambient air, water, noise will be taken to maintain within the prescribed standards and Regular Ambient air quality monitoring, noise monitoring & water quality analysis will be done.
- d. Efforts will be made under CER to improve the hygiene, sanitation, education and infrastructure of the nearby villagers. All the employees when inducted will be medically examined. Further, they will also be medically examined at periodical interval.
- e. PP proposed 2.0 Lacs (Two years) for the above activities.

viii. PP needs to submit the details of precautionary measures considered for protection of village (Pachhtar- adjacent to MLA) and associated budgetary provisions.

Submission of PP: PP also submitted that Pachhtardi village is lying 50m away from Mining lease area in the western side, and Bhanvad-Porbander state Highway No.95 is passing adjacent to ML area and separating the MLA from Pachhtardi village. PP submitted that Avenue Plantation shall be maintained on either side of village road in coordination/ permission with Gram Panchaya. PP also submitted that water sprinkling will be done on the haul roads to suppress the dust. In addition to this PP also submitted that tippers will be covered with tarpuline or will have covers having hydraulic arrangement for closing so that spillage free transportation shall be there. Additionally, the vehicles will be restricted to speed limitation. PP also earmarked the budget for the above activities as for Plantation: Rs. 0.50 Lacs + 3.93 Lacs Per Annum; Dust Suppression Rs. 6 Lacs/Annum and AAQ & Noise Monitoring- Rs. 1 Lac/Annum.

ix. PP needs to submit details of environment management cell and proposed performance including monitoring and their educational backgrounds.

Submission of PP: PP submitted the details of environmental management cell as HOD (mines having the degree in mining with first class mine managers Certificate, Mines Manager, Manager (Safety and Environment) with the qualification of Environmental engineering/Science, Residential geologist with the qualification of masters in Geology, Mining Engineer with the qualification of Mining Graduate engineer and Mines foreman with the qualification of Diploma Mining.

x.PP ensured that a group of qualified and efficient engineers with technicians will be deputed for maintenance, up keeping and monitoring the pollution control equipment, to keep them in working mode at the best of their efficiencies.

Submission of PP: PP ensured that a group of qualified and efficient engineers with technicians will be deputed for maintenance, keeping and monitoring the pollution control equipment, to keep them in working mode at the best of their efficiencies.

The proposal was again placed in the 14th EAC Meeting held during February 26-27, 2020. Based on the discussion held the Committee **deferred** the proposal was of the view that PP need to submit the letter of agreement from the Local Panchayat for shifting of school along with the proper planning, budget and time line for completion of the School.

The Ministry informed the PP about the same on PARIVESH on 26.03.2020. In response to the ADS raised, **PP vide its letter No. Pacdi/MoEF/A/304 dated 29.07.2020 (uploaded on PARIVESH on 30.07.2020)** has submitted that an agreement from Gram Panchayat Pachhtardi has been obtained vide their letter no. 1/2020/Resolution dated 25.06.2020. PP has submitted a time bound action Plan with budget for shifting of school. PP has earmarked a budget of Rs. 2.00 Crores for the same. The break-up provided by the project proponent is as follows:

Proper Planning, budget and timeline for completion of the School

S. No	Activity	Timeline	Budget (Rs. In Lacs)		
			1 st year	2 nd year	3 rd year
1	Permission and seeking support from District Administration (Collector, District Education Officer & Mamlatdar/Tehsildar) and Village Panchayat	1 st year	-		
		(started)			
2	Meeting with stake holders to resolve issues and analysis of alternative land in the same village	1 st year	-	-	-
		(Under Process)			
3	Procurement of land through Government	1 st year	70	-	-
4	Construction of School:	2 nd year	-		-
	Building (10000 sq.ft x 1000 Rs)			100	
	Boundary wall			5	
	Two Toilets			1	
	Subtotal - A				106

5	Providing Benches to accommodate 2 students (200 no's x 4000 Rs)	3rd year	-	-	8
	Providing Furniture to Staff (20 x 5000)				10
6	RO for drinking water – 01 No.		-	-	0.5
7	Play Ground		-	-	0.5
8	Computer Lab (8 Computer @ 25000/-)		-	-	2
9	Others (Smart boards, Black boards & stationery etc)		-	-	3
	Sub total – B				24
	Total		70	106	24
		Total	200 Lacs OR 2.00 Cr.		

4. PP submitted that letter of intent (LOI) issued by Industries and Mines Department, Government of Gujarat, Gandhinagar vide letter no.MCR-1103-2119(2)-Chh dated 09.11.2005 in survey no78/paiki over an area of 18.03.88 ha. PP further submitted that earlier application was submitted to the Ministry for getting environment clearance on 04.09.2006 and the project was considered before EAC on 17.04.2007 for technical presentation. Project was closed and delisted by the Ministry on 25.08.2008 due to one court case pending. The proponent also submitted the order dated 17.10.2016 passed by Hon'ble Gujarat High Court wherein it was stated that "Hence, I do not find any illegality in the order dated 9.11.2005 passed by the Secretary, Industries & Mines Department, State of Gujarat by which the respondent No.4 has been granted mining lease for a period of 30 years to excavate limestone in different villages of Taluka Bhanvad, Dist. Jamnagar. Hence, the present petitions stand dismissed. Rule discharged in each of the petitions. Interim relief, if any, is hereby vacated forthwith." PP further submitted that the Industries and Mines Department, Government of Gujarat, Gandhinagar vide letter no. MCR-1103-2119(2)-CHH-CHH-1 dated 08.01.2017 granted the lease for a period of 50 years for the area of 18.03.88 ha and the lease was executed on 11.01.2017.

5. PP submitted that the mining plan with progressive mine closure plan has been approved by IBM, Ajmer vide letter no. 682 (23) (450)/2006-Udai dated 11.07.2006 and 21.07. 2006.

6. The PP submitted that the Mining will be by fully mechanized opencast method. Mining will be done using Surface Miner with loader combination or by Ripper dozer and Excavator combination. No drilling & blasting will be involved in the mining process. In case of Surface miner and loader combination, Pay loaders will be used for the purpose of loading of mineral in dumpers. In the case of Ripper dozer; hydraulic excavator will be used for loading of limestone into the dumpers. Study of slope stability has been conducted. Rock breaker will be used for breaking over size boulders. Transportation of limestone from working face to cement plant will be carried

out by hired Trucks / dumpers. Mining lease area of 18.03.88 ha has total geological reserves of 54,00,000 Tonnes, out of which, about 1381320 tonnes reserves (1198860 tonnes into the electric line barrier & boundary barrier of 7.5 m periphery of lease and 182460 tonnes of reserves blocked in benches) are blocked. Thus total mineable reserves will be 4018680 tonnes. Estimated life of mine will be about 12 years. At the conceptual stage, total excavated area will be 13.8690 ha which will be converted into water reservoir. About 2.015 ha area will be covered under Green belt along the 7.5 m lease periphery. Negligible amount of top soil will be generated which will be utilized concurrently for plantation purpose. There is no proposal for stacking the top soil. The quantity of basalt boulders is very less; hence No Waste dump is envisaged to be created, however excess boulders shall be kept at the designated places in the bottom of the bench for use as per requirement.

7. PP submitted that total water requirement for proposed project will be 22 KLD which includes 1) Dust Suppression (12 KLD), 2) Green Belt Development (04 KLD), 3) Surface Miner / Dozer ripper (04 KLD) and 4) drinking/sanitary use (02 KLD) which will be sourced from proposed bore wells to be constructed within the lease area and the application vide proposal no. 21-4/4141/GJ/MIN/2018 dated 16.07.2018 has been submitted to CGWA for ground water withdrawal.

8. Green belt / Plantation shall be started in the First year of working and Besides green belt, stone parapet walls of 1.5' X 5' dimension shall be constructed all along the ML boundary to protect the fields from Risk of accidents as well as to arrest dust. PP also submitted that the Length of mine lease periphery is about 2687 m and therefore 7.5 m width on lease periphery having an area of 2.0150 ha will be developed as greenbelt with 5050 plants. Greenbelt will comprise herbs, shrubs and trees having high dust collection efficiencies. PP submitted the as per the Land use/ Land cover status of the study area has been assessed using satellite data and as per analysis area under plantation is estimated as 5.85%. The Plantation in buffer zone area includes Trees and shrubs as mentioned in the list of Flora authenticated by concerned Forest Department. Plantation is there in private land as well as in forest land lying in the south-eastern part of study area along with the protective measures. However, Protection Plan for Plantation in Buffer Area includes: 1. Trees shall not be cut and Greenbelt/plantation along periphery will comprise herbs, shrubs and trees having high dust collection efficiencies. 2. Mass Awareness Programme on protection of tree / plantation shall be carried out in Buffer area. 3. Plantation programme in Peripheral area shall be conducted annually in coordination with concerned village Panchayat Plantation in the forest area will be undertaken as part of Conservation Plan for which necessary funds have been earmarked. 4. After care of plantation shall be done and monitored by EMC. Budget of Rs. 0.50 Lacs/Annum is earmarked for the same.

9. PP submitted that total mine lease area 18.03.88 ha which is a Govt. waste land and no forest land involved in the lease area. PP submitted a letter from office of Deputy Conservative of Forest, Porbandar Forest Division vide

letter no. K/JMN/T.7/203/2018-19 dated 18.06.2018 that no forest area is exist in the mine lease area.

10. PP submitted that the three Schedule –I species i.e. Peafowl, Monitor Lizard and Leopard were observed within the study area. PP further submitted that conservation plan along with the Budget has been prepared and submitted for approval.

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

12. Primary baseline data for specific micro-meteorology data, ambient air quality, waste quality, noise level, soil and flora & fauna has been collected during winter season (December 2017-February 2018). Based on the previous IMD data [Climatological Normals (1981-2010)], the pre-dominant wind direction (seasonal as well as annual) was considered. As per the data, pre-dominant wind direction throughout study period was observed West, according to which, the locations for ambient air quality monitoring were selected. Air quality monitoring has been carried out at 8 locations for 24 hours (twice a week) for three months (26 observations for one location). Ambient Air Quality Monitoring reveals that the concentrations of all parameters for all the 8 AAQM stations were found within limits. Noise level monitoring was carried out at 8 locations during the day and night time once in the study period. From the study it can be concluded that noise levels in the study area are well within the prescribed limits as prescribed by the CPCB. Water samples were collected from 2 surface water bodies within study area which were found potable as per the drinking water standards IS – 10500 : 2012. The quality of ground water was studied by collecting 10 water samples. The water sampling stations from representative borewells and open wells. No adverse impact on water quality is envisaged due to the proposed mining project as there is no surface water body exists within the lease area and no waste water will be discharged out side lease boundary. Samples collected from identified 8 locations indicate pH value ranging from 7.76 to 8.16. The results show that there is a need to replenish phosphorus to improve the productivity of the agricultural land in the study area, and should be taken care in green belt development. After identification of key impacts of the proposed mining project on flora, fauna or any key habitats of important species or their corridors, 3 schedule- I species were found in the study area during field survey. Therefore, Wildlife Conservation Action Plan for three species namely Indian Peafowl, Leopard and Monitor Lizard has been prepared.

13. PP submitted that the public hearing was conducted on 12.10.2018 at Survey No 78/P, near Pachhtardi primary school, Village: Pachhtardi, Taluka: Bhanvad, District: DevbhumiDwarka (Erstwhile Jamnagar), Gujarat under the chairmanship of Shri J.R. Dodiya (I.A.S), Collector & District Magistrate, Devbhumi Dwarka and Shri B.G. Sutreja, Regional Officer, Gujarat Pollution Control Board, Jamnagar. Public hearing notice for limestone mine was published in newspaper Gujrati News Paper (“Sandesh”) and National Daily English News Paper “The Times Of India” on 8th September, 2018. PP has proposed action plan to address the concerns raised in public hearing with budgetary provision as: i) to Improvements in Infrastructures of School

earmarked with budget of Rs 2.0 Lakh and for School Bags & Kits Distribution to Students, Rs 1.0 Lakh; ii) during PH a budget of Rs. 2.0 Lakhs was proposed for Contribution in Temple & Gaushala Development, Rs. 1.00 Lakhs was earmarked for Roads Maintenance and development and Rs. 5.00 Lakhs for Skill development programme to unemployed people, Rs 1.0 Lakh for Free Medical Camps and Veterinary Camps, Rs 1 Lakh for Promotion of Swachhta Rs 1.00 Lakh Free Supply of Drinking Water to nearby community and Rs 1.0 Lakh for Deepening of water pond.

14. PP submitted the budget earmarked under Corporate Environmental Responsibility (CER) is Rs 15.0 Lakhs. Which include Activity-1 Education [i) provision for teaching aids for schools, (Rs 1.0 Lakh, timeline 1st year), ii) provision for Improvements in Infrastructures like provision of Washrooms of two Schools, supports in construction and maintenance of playground (Rs 2.0 Lakh, timeline 2nd year),iii) Providing Basic Necessary equipment to PHC like BP Instrument; Electric Auto Clave, SS Dressing Trolley, Instrument Trolley (Rs 1.0 Lakh, timeline 2nd year), iv) Providing Basic Necessary equipment to PHC like Oxy Kit with Filling Adaptor; Semi Fowler Hospital Beds, Electronic Weighing Scales (Rs 1.0 Lakh, timeline 1st year)], Skill development programme like Tailoring classes, Computer training (Sewing machines and computers will be provided by Company) (Rs 5.0 Lakh, timeline 1st year), iv) Renovation and Development of ShamshanGhat (Cemetery) at Pachhtardi, (Rs 1.0 Lakh, timeline 1st year), Providing Solar Powered Street Lights in Pachhtardi Village (Rs 2.0 Lakh, timeline 2nd year), Arrangement of RO facility for safe drinking water supply in schools and Gram Panchayat (Rs 1.0 Lakh, timeline 1st year), Deepening and maintenance of water pond (Rs 1.0 Lakh, timeline 1st year).

15. PP has submitted that R& R has been completed for 1 village having 248 households.

16. The Project Proponent submitted that the capital cost for EMP is Rs. 0.50 Crore/- and recurring cost for EMP is Rs. 0.10 Crores per annum which includes i) Rs 33.0 Lakh (Capital) & Rs 5.0 Lakh (recurring) for Pollution Control (Dust Suppression Measures), ii) Rs 1.0 Lakh (recurring) for Pollution Monitoring, iii) Rs 5.0 Lakh (Capital) & Rs 2.0 Lakh (recurring) for Occupational Health, iv) Rs 12.0 Lakh (Capital) & Rs 1.0 Lakh (recurring) for Greenbelt Development/Mine/Township and 5) Rs 1.0 Lakh (recurring) for Reclamation / Rehabilitation of mined out area.

17. PP submitted that the medical records of the employees will be maintained. Under initial vocational training, the workers will be given training related to all safety and health aspects pertaining to their vocation and thereafter, special training courses/ awareness programme for Malaria eradication, STDs and health effects on exposure to mineral dust will be organized regularly for employed persons as well as for nearby villagers. The fresh employees when taken are thoroughly medically examined under initial medical examination and thereafter during continuation of employment; the periodic medical examination is being done suggested by DGMS. Rs 5.0 Lakh (Capital) & Rs 2.0 Lakh (recurring) for has been earmarked for Occupational Health.

18. PP submitted dated 31.12.2018 that they have complied with the conditions laid down in ToR dated 09.01.2018 and data submitted and information presented in the EIA report are factually correct.

Also, Consultant has given a declaration that they shall be fully accountable for any mis-leading information mentioned in this statement.

PP in Form-2 also gives an undertaking that the data and information given in the application and enclosures are true to be best of my knowledge and belief. And I am 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 our risk and cost. In addition to above, I hereby give undertaking that no activity/ construction/ expansion has since been taken up.

19. Project Proponent submitted that the project cost is Rs. 5 crores. The total manpower required for the proposed mining project will be around 73 persons including Supervisory staff, Skilled, Semi-skilled & Unskilled staff. Preference will be given to the local people as per their educational qualification, capability and experience.

20. Based on the documents submitted and presentation, the Committee during EAC meeting held on 19,20 & 21 August, 2020 **recommended** for Environmental Clearance of M/s. Shree Digvijay Cement Co. Ltd, Pachhtardi Limestone Mine with Production Capacity 0.35 million TPA (ROM) in the mine lease area of 18.03.88 ha Near Village: Pachhtardi, Taluka: Bhanvad, District: Devbhumi Dwarka (Erstwhile Jamnagar), Gujarat with standard conditions (Given at Annexure-III) and following specific conditions:

- i. The Project proponent shall undertake the plantation in 7.5 m width all along the boundary of the mining lease including stone parapet walls of 1.5' X 5' dimension shall all along the ML boundary and avenue plantation on either side of the village road within the first year of the commencement of mining operations with a native, broad leaved tree sapling of not less than 12 feet height and mainatanance of the same shall be carried.
- ii. 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 such as play ground, drinking water and furniture.
- iii. No drilling and blasting shall be carried. Mining shall be carried, as proposed by the PP, by using Surface Miner with loader combination or by Ripper dozer and Excavator combination.
- iv. The project proponent shall implement the conservation plan for Schedule-I species reported namely, Indian Peafowl, Leopard, monitor lizard in consultation with State Forest Department including the recommendations of the Chiefwildlife warden.

- v. The project proponent shall implement the measures suggested in the EIA/EMP report inter alia, including Dust control measures, Garland drains, plantation along the boundary and avenue plantation, Reclamation / Rehabilitation of mined out area, etc.
- vi. The project proponent under take the activities proposed under Corporate Environmental Responsibility (CER) as per the guidelines of Ministry's OM dated 1st May, 2018.

2.9 Seethainagar Limestone Mine located at Villages: Alambadi, Mallapuram, and Karikkali, Tehsil: Veda sandur, 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. [J-11015/518/2009-IA-II(M); IA/TN/MIN/155004/2020]

The proposal of M/s. Chettinad Cement Corporation Private Limited is 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 for Seethainagar Limestone Mine located at Villages: Alambadi, Mallapuram, and Karikkali, Tehsil: Veda sandur, District: Dindigul, State: Tamil Nadu in favor of M/s. Chettinad Cement Corporation Private Limited. The Project Proponent submitted that mining lease area falls under Survey of India Topo-Sheet No. 58 F/13, 58F/14, 58 J/1, 58 J/2 and between Latitude: N 10°42'2.80" to N 10°43'25.1" Longitude: E 78°03'8.0" to E 78°04'31.1". The mine lease area falls in Zone -II [as per IS 1893 (Part-I): 2002].

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under S. No. 1, Project or Activity 1(a) "Mining of Minerals" as the Mining lease area is more than 100 Ha.

3. Environmental Clearance for Seethainagar Limestone Mine was issued to M/s. Chettinad Cement Corporation Ltd. by MoEFCC vide letter No. J-11011/518/2009-IA.II (I) dated 02.08.2010 for Expansion of Cement Plant (Clinker 1.22 MTPA) to 2.80 MTPA, Cement 2.00 MTPA to 4.50 MTPA) along with Captive Power Plant (18 MW to 48 MW) at Village Karikkali and Dholipatti and Limestone Mine (Seethainagar Mines, 379 ha and 2.00 MTPA to 4.50 MTPA) at village Villages: Alambadi, Mallapuram, and Karikkali, Tehsil: Veda sandur, District: Dindigul, State: Tamil Nadu. PP reported that it had earlier applied for amendment in said EC vide proposal No IA/TN/MIN/149518/2020 on 18.03.2020. Subsequently, Essential Details were sought by MoEFCC on 01.04.2020, which PP replied on 24.04.2020. Again an EDS was raised by MoEFCC on 27.04.2020 stating that "On examination of material balance submitted, it is understood that the instant proposals is for production of the minor mineral from the waste dumps. It constitutes as dump mining and treated as expansion category. Therefore, you are requested to make an application for expansion in pursuant to the OM Z-11013/49/2018-IA. II(M) dated 18.06.2018, and as per the provisions of the

EIA 2006 Notification and subsequent amendments.” Therefore, PP vide **Proposal No. IA/TN/MIN/155004/2020 dated 31.05.2020** has submitted a fresh application for 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 for Seethainagar Limestone Mine located at Villages: Alambadi, Mallapuram, and Karikkali, Tehsil: Veda sandur, District: Dindigul, State: Tamil Nadu in favor of M/s. Chettinad Cement Corporation Private Limited. The proposal was then placed in EAC meeting held during 22-24 June, 2020 wherein the Committee deferred the proposal for want of requisite information. PP submitted the information online on 31.07.2020 and the proposal is placed in EAC meeting held during 19-21 August, 2020.

4. PP has submitted that Initially Mining lease was granted by Government of Madras for period of 20 years vide letter no. G.O (Ms) No. 1307 ILC dated 08.03.1965 which is valid upto 06.09.1985. Lease was first renewed for a period of 6 years vide letter dated 17.07.1985 (Valid upto 06.09.1991). Lease was secondly renewed for a period of 10 years vide letter dated 25.11.1991 (Valid upto 06.09.2001). Further lease was renewed for a period of 20 years vide letter no. G.O. (Ms) No: 81 dated 13.08.2003 for a period of 20 years which is valid upto 06.09.2021. Validity of mining lease deemed to be extended up to year 2030 as per section 8A of amended MMDR Act, 2015. PP has submitted that Permission has been obtained from State Govt. regarding removal / disposal of developmental Waste (20.13 million tonnes) as rough stone at an average of 2.12 million TPA from approved 8 dumps (38.05 ha) vide G.O (Ms) No. 158 dated 24.12.2018 and PP has executed a supplementary Mining lease deed for Existing Mining Lease on 24.09.2019 for the period of 10 years from 24.09.2019 to 23.09.2029.

Observation of EAC: The Committee observed that previously the lease was granted only for limestone and now PP has executed a supplementary lease for mining minor mineral Rough Stone from 8 dumps for a period of 10 years 24.09.2019 to 23.09.2029.

5. PP submitted that Mining Plan has been approved by IBM vide letter no TN/DGL/MP/LST/2048.MDS dated 17.07.2018.

6. The Proponent submitted that it is open-cast mining. Excavation during mining operation will be carried out. Hence, voids will be formed. As per conceptual land use total excavated area will be 99.29 ha which 54.35 ha area will be converted into water reservoir, about 31.91 ha of land will be used for waste dumps, about 6.89 ha land will be used for infrastructure including office, workshop etc and 3.85 ha will be covered under road & 95.1 ha area will be covered under greenbelt/plantation. Existing waste will be re-handled and rough stone from existing waste dump will be sent to stone crushers outside the lease area. Removal of these dumps mitigate the environmental problems associated with fresh mining of rough stone by elimination of Drilling & Blasting, etc. PP submitted that waste handling from Mine pit will be reduced from 3.98 MTPA to 1.87 MTPA in the lease GO 81 and instead of that the disposal of Developmental waste from Permitted dumps of about 2.11

MTPA, so that Total handling of Waste will be with in EC Qty = 2.11 (From Dumps to outside Mining Lease for other purposes) + 1.87 MTPA (Developmental Waste Generated from Mines to Dumps) = 3.98 MTPA that with in EC approved Qty. PP submitted that Waste generated from the all the mines has been disposed to 20 dump sites (Dump ID – 1, 2, 3A, 3B, 4,6 ,7, 7A, 7B, 8, 8A, 9, 9A, 10, 10A, 10C, 10E, 15, 21) out of which 10 dumps (Dump ID – 1, 2, 4, 6, 9, 10, 10E, 23. 24, 25) are active and other 10 dump (Dump ID –3A, 7, 7A, 7B, 8, 9A, 10A, 10C, 15, 21) are inactive. The back filling programme has not been proposed as such the existence of Limestone has been proved up to a depth of 150 m. Developmental waste will be utilized as rough stone for construction & shall be disposed by mean of dumping. During the time of increase in depth of mine pit & mine space total waste 24.45 Million TPA will be generated and will be dumped at the active dump sites of G.O. 81. Waste of 2,01,35,057 tonnes (20.13 Million Tonnes) in 8 dumps proposed (Extent: 38.050 Hectares) Dump Nos 2,6,7A,7B,10,10A, 10C and 10E located inside the Mining Lease area for disposal considering the period as 10 years (Minor Mineral Max Lease Period -10 years) as per Rule 12(1)(k) of Mineral (Other than Atomic Minerals) Concession Rules. PP submitted that there will be no change in process of mining except following: (i) Waste handling from Mine pit will be reduced from 3.98 MTPA to 1.87 MTPA and instead of that, remaining 2.11 MTPA of Developmental waste will be transported to outside the lease area, (ii) for the 2.11 MTPA, the Drilling and Blasting will be Eliminated and only Loading part will come in respect of waste disposal from Dumps, (iii) the Waste Handling reduced from the year 2010 to till date and developmental waste handling slowly reduces further for want of dumping space, (iv) almost all pits of GO-81 reached Mining Lease boundary and could not be possible to move further and shifting of waste also not possible for us for space constraint. PP submitted that the waste rock intended for disposal under the proposal is mainly consists of Calc-gneiss, Pegmatite and Granite-biotite gneiss. The CaO and MgO content in the waste sample is ranging from 8 to 17% and 1.4 to 2.16% respectively, which is well below the threshold value of limestone notified by IBM on 25.04.2018 and is not suitable for use in cement plant for manufacturing cement. Besides, there is no market for this waste material during the MCDR inspection carried out by this office.

Observation of EAC: During the meeting Committee deliberated on the provision of rule 12(k) of MCR 2016 and if of the view that this rule is applicable for minerals other than minor mineral and it has already mentioned by the PP that during MCDR inspection, it has found that there is no market for waste material. But PP in its proposal proposed for selling of the mineral in the open market this is contradicting. The Committee found that in the instant case mining from dumps is proposed for Rough Stone which is a minor mineral as per Tamil Nadu Mineral Concession Rule 1959 (as amended). The Tamil Nadu State Government amended the Tamil Nadu Mineral Concession Rule 1959 vide G.O. (Ms.) No. 70, Industries (MMC.1), 22nd April 2016 wherein the maximum period of quarrying lease is 10 years. Therefore, in the instant case also the State Government granted the fresh

quarrying lease for mining of rough stone from old dumps for a period of 10 years.

The Committee is also of the view that IBM publish the threshold value of various minerals and material which is below the threshold value is considered as waste. But in the instant case the so-called waste is rough stone which is a minor mineral as per Tamil Nadu Mineral Concession Rule 1959 (as amended). The rough stone is available in the previously dumped material in old dump yard and the same will be generated during the course of mining in future. The district survey report also shows that there are other quarry leases of the rough stone in the district. The Committee asked the PP about the utilization of fresh waste/reject (OB/ IB/SB) coming out of the mine and why the same cannot be dispatched directly. PP informed the Committee that fresh development waste generated during the course of mining will be dumped in the dump yard. PP also informed that at present to extract the limestone waste is to be removed and they have no space for dumping of fresh waste. Therefore, permission for disposal of rough stone from old dump yard is required so that space can be created for dumping of waste generated during the course of mining. In addition to above Committee also asked the PP/Consultant to show the detail mentioned in previous EC for utilization & quantity of waste, but the PP/Consultant unable show the same. The Committee also observed that in the Form-1 submitted for the previous EC the expansion from this mine is shown from 1.40 to 2.97 Million Tone and there is no mention of total excavation quantity. In addition to this in the document submitted for the previous EC it has mentioned that intestinal waste will be backfilled after 10 years of mine operation. The Committee also observed the Ministry issued O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, wherein the mining lease holder shall after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. This shows that backfilling is an important activity for the compliance of the above order.

The Committee is of the view that in pursuance to the order of Hon'ble Supreme Court dated the 27th February, 2012 in I.A. No.12-13 of 2011 in Special Leave Petition (C) No.19628-19629 of 2009, in the matter of Deepak Kumar etc. Vs. State of Haryana and Others etc., prior environmental clearance has now become mandatory for mining of minor minerals irrespective of the area of mining lease and due to this Ministry has issued S.O. 141(E) 15.01.2016 & S.O. 3977(E) dated 14.08.2018 wherein the procedure for obtaining EC for minor minerals is defined. The Hon'ble Supreme Court dated 7th February, 2018 in SLP (Civil) No 32138 of 2015 in matter of Goa Foundation vs M/s Sesa Sterlite Ltd. & Ors, mentioned that fresh lease will require fresh EC. Further, as per para 2 of EIA Notification 2006 (as amended) prior EC for the activities mentioned in the schedule of the notification which is "Mining of Minerals". In the instant case the previous EC was granted for limestone only and now as State Government granted

lease for rough stone there is a requirement of EC as per EIA Notification 2006 & Judgment mentioned above. But in the instant case PP applied for EC under 7(ii) of EIA Notification 2006 for expansion in place of ToR. In addition to this in the instant proposal PP has proposed to dispatch 2.12 million TPA of rough stone in addition to 2.97 Million TPA of limestone. Therefore, there is an increase of total increase in the dispatch is 71.38%. The Committee therefore is of the view that the proposal does not qualify under para 7(ii) of EIA Notification. However, considering the environmental benefit of the project and non-availability of dumping space which will hamper the existing production, the Committee is of the view that relaxation may be granted for dispatching of rough stone from the old dumps, keeping the total dispatch from the mines same for which previous EC was granted i.e. 2.97 Million TPA.

7. PP submitted that Range of Water Table varies from 1110 to 120 m bgl during Pre-Monsoon Season and 100 to 110 m bgl during Post- Monsoon season. There will be no ground water intersection. Total water requirement for this proposal is 84.5 KLD which will be sourced from rain water collected in existing mine pits. There is no impoundment, damming, culverting, realignment or other changes in the hydrology of watercourses or aquifers. However, rain water harvesting structures as per the guidelines of MoEFCC/CGWA/ CGWB have been constructed for ground water recharging purpose. Domestic waste water 8.08 KLD will be generated which will be disposed in soak pit via septic tank.

8. PP has submitted that as per conceptual land use total excavated area will be 99.29 ha out of which 95.1 ha area will be covered under greenbelt/plantation which is 37.72 % of Total Project Area. Total number of 158000 saplings will be planted. The funds allocated towards Green Belt/ plantation is Rs. 5.0 Lakhs. The PP submitted that No Forest land is involved. Total Mining Lease area is 251.59 ha, out of which, 35.30 ha is Private Land and 216.29 ha is Poramboke land. There is no Ecological and Environmental Sensitivity Zone Within 10 Km radius. PP has reported there is no Schedule-I Species in the lease area. PP submitted that Consent to Operate was issued vide Order No. 1808112396242 dated 14.08.2018 which was valid till 31.03.2020. PP has further submitted that Letter has been issued by TNPCB vide letter no TNPCB/P&D/2020 dated 01.04.2020 regarding extension of validity period of consent to operate for a period of three months till 30.06.2020. PP has submitted the EC Compliance Report certified by RO, MoEF&CC, Chennai vide letter No. EP/12.1/2010-11/9/TN/1544 dated 28.09.2018.

9. PP has submitted that dust will be generated during loading/unloading of waste material. Adequate Dust control & suppression measures will be taken to keep emission within prescribed limit. Domestic waste water generated from mine office will be disposed of in soak pit via septic tank. There will no odour due to this proposal. Noise will be generated due to transportation of waste material from existing waste dump. Proper noise abatement measures such as Proper low noise generation equipment, development of greenbelt & plantation, regular maintenance of mining

machinery will be adopted to keep noise level within the prescribed limit by CPCB. PP submitted that in the Limestone mining project, emission rates are calculated from the activities transportation activity from Mine to different location. (ARAI, 2007), ambient air quality has been monitored near Mine pit, it has been found that PM₁₀ was varied from 43.0 to 60.0 µg/m³, PM_{2.5} was found between 17.0 to 29.0 µg/ m³, SO₂ from 5.0 to 19.0 µg/ m³, NO₂ from 11.0 to 24.0 µg/ m³. All the values are below the NAAQS 2009. PP submitted that impact prediction (Line source ambient Air quality modelling) has also been done due to increase in dispatch quantity and ground level incremental values were noted and ground level incremental values were noted for PM₁₀, PM_{2.5}, SO₂ & NO₂ is as 1.85 µg/ m³, 0.74 µg/ m³, 1.9 µg/ m³, 1.4 µg/ m³ respectively and resultant values will be within prescribed standards. PP submitted that vehicle with valid PUC will be used for transportation, overloading of the material will be avoided, regular maintenance of HEMMs & transportation vehicles, vehicular emission will be kept under control, regular monitoring of the emission levels, regular water spraying on the haul roads to suppress the fugitive dust emissions, personal protective equipment provided to all workers, training will be given to all drivers about safe and environment friendly driving, GPS tracking system in all the vehicle to monitor the vehicle speed Compaction of haul roads will be done and Plantation will be carried out on either side of the haul road. PP submitted that sharp drill bit with wet drilling arrangements, closed cabins are being provided for drill operator, use of Rock breaker in place of secondary blasting, Proper maintenance and lubrication of mining machineries is being done, use of personal protective equipment like ear plug and ear muffs by all working persons at the site, green Belt /Plantation is being carried out. PP submitted that there will be no use of water in dump mining, so no change in water requirement, domestic Waste water generated from the office toilets is being disposed of in soak pit via septic tank, the wastewater generated from work shop during washing of mining machineries is being treated with the help of oil-water separator and the treated water is recycled for washing of HEMM.

10. The Project Proponent in the Form-2 reported that details w.r.t. Public Hearing is not applicable. PP has submitted that the fund allocated towards CER (Corporate Environment Responsibility) is Rs. 0.0052 Crores.

Observation of EAC: The Committee is of the view that total dispatch from the mine is restricted to previous EC capacity i.e. 2.97 Million TPA therefore there is no expansion in the production capacity. However, there is a change in product from limestone to limestone & Rough Stone. As the PH for the 2.97 MTPA has already conducted for this mine there is no requirement for the same at this stage. Further, this is permission will be subject to maintaining the total dispatch of 2.97 MTPA. The Committee also observed that during the meeting PP has earmarked an amount of 0.007 Cr for CER.

11. PP reported that there is no rehabilitation and resettlement proposed in the lease area. The Project Proponent submitted that the funds allocated for Environment Management (Capital) is Rs. 0.20 Crores and Rs. 0.10 Crores

(recurring per annum). PP submitted that here is no litigation pending against the project and/or land in which the project is proposed to be set up.

12. PP has given undertaking in Form-2 that hereby gives undertaking 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 hereby give undertaking that no activity/ construction/ expansion has since been taken up.

13. The Proponent submitted that total project cost will be Rs. 0.35 Crore. This is an existing Limestone Mine. Managerial staffs, supervisory staffs and workmen are already there for existing mine. Many of the workmen are from local area. There will be some additional requirement of manpower for the expansion project to fulfill both long-term and short-term needs. The short term requirement involves proposed additional crusher commissioning. The total manpower (33 person) engaged for mining activity will be used for transportation of rough stone from existing waste dump.

14. **The proposal was placed in the 18th EAC (Non-coal Mining) held during 22-24 June, 2020.** After detailed deliberations on the proposal, the committee was of the view that the proposed utilization of the waste is good from the environment perspective. However, the issues associated with the transportation of the waste material (rough stone) shall be predicted and mitigation plan shall be prepared accordingly including the assessment of road infrastructure. Further, the Committee was of the view that the total excavation may remain same but the previous EC was granted only for production of limestone. The instant proposal of production of 2.10 MTPA of Rough Stone from the waste dump, though considered as additional mineral, considering the advantage of the utilization of waste, the committee proposed for reconsideration after submission of the impact due to transportation, additional crushing facility and handling of the dump. Therefore, the proposal was **deferred. The Ministry informed the same to PP on PARIVESH on 01.07.2020.**

PP vide its letter Ref. No. CCCPL/SLM/MOEF&CC/2020-21/03 dated 30.07.2020 has submitted the following information/clarification:

- Project proposal is for Permission for removal/disposal of developmental Waste as rough stone @ 2.12 million TPA in G.O.No.81 (ML Area 251.59 ha) without change in total excavation.
- Project activity involves, waste dump handling, crushing and transportation of waste from existing waste dump in ML Area to various crushing units.
- Waste handling from Mine pit will be reduced from 3.98 MTPA to 1.87 MTPA in the lease GO 81 and instead of that the disposal of Developmental waste from Permitted dumps of about 2.11 MTPA, so that Total handling of

Waste will be within EC 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 that within EC approved quantity

- Total excavation will not be changed due to this proposal.
- Total 20 nos of dumps were generated in which 10 dumps are Non-active and 10 dumps are active in total ML area of 379.49 ha. Out of 10 non-active dumps, 8 nos are located within mining lease area of G.O.81 (251.59 ha) were granted permission under Rule 12(1)(k) of MCR-2016.
- No Additional crushing facility inside the ML area. About 71% material from existing waste dump will be transported to the proposed own stone crusher unit (different entity) located within 1.0 km and remaining waste will be distributed to different industrial clusters (Karur Cluster, Dindigul cluster, Palani Cluster, Trippur Cluster, Dharapuram Cluster, Namakkal Cluster, Trichy & Pudukottai Cluster) outside the lease area.
- Report on Impact Due to Transportation, Additional Crushing Facility and Handling of Dump has been prepared and is submitted by PP as **Annexure-1 to the letter.**

15. Based on the discussion held and document submitted 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) Dump Nos 2,6,7A,7B,10,10A, 10C and 10E located inside the Seethainagar Limestone Mine located at Villages: Alambadi, Mallapuram, and Karikkali, Tehsil: Veda sandur, District: Dindigul, State: Tamil Nadu, in addition to limestone keeping the total dispatch same as 2.97 million TPA, subject to following specific conditions in addition to the conditions prescribed in the earlier EC.

- a) The total dispatch shall not be more than 2.97 MTPA including the limestone and rough stone.
- b) The waste being left after extracting the rough stone from the old dumps shall be stocked systematically and the reclaimed with native species including the area made free of the old dumps.
- c) Proper arrangement for water spraying preferably mist spray arrangements shall be made while re-handling and transportation of the mineral. The tipper used for transportation of rough stone should not overload and covered with tarpaulin while transporting the mineral.
- d) PP shall ensure that all safety measures and permission from DGMS if applicable and condition mentioned therein shall strictly adhere for safe extraction of mineral.

2.10 Amendment in General condition (i) B w.r.t. Change in technology in existing EC vide letter no J-11015/375/2005-IA.II(M) dated October 4, 2006 of Garbham Manganese Ore Mine of M/s Rashtriyaspat Nigam Limited at Village Garbham, Tehsil Merakamuddam in District Vizianagaram in Andhra Pradesh (264.540 Ha. 50 TPD) [Proposal no: IA/AP/MIN/11447/2006; File No. J-11015/375/2005-IA.II(M)] - Amendment in EC.

The proposal of **M/s Rashtriya Ispat Nigam Limited** is for amendment of EC condition sought for change in technology vide clause (i) of “B” of General conditions of existing EC granted vide letter No. J-11015/375/2005-IA.II (M) dated 04.10.2006 for Garbham Manganese Ore Mine of M/s Rashtriya Ispat Nigam Limited at Village Garbham, Tehsil Merakamuddam in District Vizianagaram in Andhra Pradesh (264.540 Ha. 50 TPD).

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

3. PP has submitted that the environmental clearance was granted by MoEF&CC vide letter no. J-11015/375/2005-IA.II (M) dated 04.10.2006 with a general condition no. B (i) “*No change in mining technology and scope of working shall be made without prior approval of Ministry of Environment & Forest.*” PP vide its Proposal No. **IA/AP/MIN/11447/2006 dated 11.11.2016** has applied for amendment in EC w.r.t. the above-mentioned general condition B (i) for change in technology. The PP has mentioned that the modernization through mechanized screening would bring down the demand supply gap. Hence it is proposed to set-up screening plant with a handling capacity of 40 MT/hour powered by Diesel Generator set. **The proposal was earlier placed in the EAC meeting held during 23rd -25th November, 2016 wherein the Committee deferred** the proposal for want of requisite information. The PP submitted the requisite information online on 30.07.2020 and the proposal is placed in EAC meeting held during 19-21 August, 2020.

4. During the meeting in addition to information submitted by the PP the Committee observed that area is also most virgin as very less quantity of the mineral was excavated. The Committee also noted that the EC granted in this case was granted under EIA Notification 1994 and PP was required to apply as per provision of S.O. 1530(E) dated 6.04.2018. The Committee is of the view that if PP would have submitted the information on time the amendment in EC was granted under EIA 2006 and PP is not required to apply as per S.O. 1530(E). PP informed the Committee the delay in reply to the ADS is due to delay in preparation and approval of the modified mining plan & preparation of impact study for DG Set. The Committee is of the view that EC is no more valid the amendment in the same could not be granted at this stage, however as the proposal was already under consideration in the Ministry, before the issuance of S.O. 1530(E) dated 6.04.2018, the PP may be allowed for lateral entry, under S.O. 1530(E) dated 6.04.2018, to apply in Form-1 for grant of ToR. The Committee therefore **returned the proposal in present form** and

asked the PP to apply afresh in Form-1 for obtaining EC as per provision of S.O. 1530 (E) dated 6.4.2018.

2.11 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, District Bhilwara, Rajasthan [Proposal No: IA/RJ/MIN/164255/2020 File No. J-11015 / 41 / 2012 - IA .II (M)] -Extension of validity of EC.

The proposal of M/s Bhilwara Mines & Minerals is for *extension of validity of EC granted* vide Letter No. J-11015/41/2012-IA.II (M) dated 07.07.2015 *coterminous with Mining lease* for 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 ML area of 278.69 Ha by M/s Bhilwara Mines & Minerals, located at village(s) Itawa&kesarpura, Tehsil-Kotri, District Bhilwara, Rajasthan.

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 by the vide letter no. J-11015/41/2012 IA. II (M) dated July 7th, 2015 for China Clay and Red Ochre Mining Lease (M.L No. 34/95, M.L Area: 278.69 ha) at Villages: Itawa&Kesarpura, Tehsil: Kotri, District: Bhilwara (Rajasthan) of M/s. Bhilwara Mines & Minerals for enhancement in production capacity of china clay from 0.025 MTPA to 0.24 MTPA & production of 0.045 MTPA (million tonnes per annum) red ochre from the existing mine. In para 3 of EC letter, it is mentioned that, **“Total minerable reserves are (China Clay: 64,0,431 tonnes, Red Ochre: 2,48,429 tonnes). The life of the mine is 27 years for China Clay and 6 years for Red Ochre.”**

PP vide its Proposal No. **IA/RJ/MIN/164255/2020 dated 28.07.2020** has applied for amendment in EC w.r.t.*the extension of validity of EC coterminous with the increase in the life of mine*. PP has stated that as per the scheme of mining approved vide letter dated 08.07.2020, **total mineable reserves of red ochre have been increased to 15,39,759 tonnes, thereby increasing the life of mine of red ochre for 55 years.** Therefore, as per EIA notification 2006 (as amended) PP is applying for extension of validity of Environmental Clearance coterminous with increase in the life of mine of mineral red ochre and amendment in EC for the same.

3. PP has submitted that the Mining lease for mineral China Clay (M.L no. 34/95, M.L. Area 278.69 hectares) was granted vide Government order no. F.2 (52) Gr.3/80, dated 20.03.1980 and registered on 28.06.1980 for 20 years. Mining lease was renewed for further twenty years from 28.06.2000 to 27.06.2020 vide Directorate of Mines and Geology order no. DMG/Bhil/cc.9/F-1(1)/34 /95/1957 dated 25.09.1999. The mineral Red Ochre was included in the mining lease vide Directorate of Mines & Geology, order no. DMG/Bhil/CC-

III/ F-(1) 34/95/1366, dated 29.09.2000. The Rider agreement was executed on 07.11.2000.

4. PP has submitted that Mining Plan with progressive mine closure plan for 0.24 MTPA China Clay & 0.045 MTPA red ochre has been approved under rule 22 of Mineral Concession Rules (MCR), 1960 & rule 23 A of Mineral Conservation & Development Rules (MCDR), 1988 by IBM vide letter 584(4)(3)(1117)/10-RCM-AJM, dated 21.09.2010. Scheme of Mining with Progressive Mine Closure Plan has been approved by SME, Bhilwara vide letter No. A.Kha.A / Bheel-Vrat / C.C.1 / Bheel / Kha.Pa.34 / 1995 /1052 dated 08.07.2020.

5. PP has submitted that NOC from Rajasthan State Pollution Control Board for Environmental Clearance was obtained for production of China Clay upto 55,000 TPA & Red Ochre 25,000 TPA vide letter no. F.12 (8-119) RPCB/GrIII/5143-47 dated 29.12.04. The consent to operate granted in favour of M/s Bhilwara Mines & Minerals for major mineral mine vide letter no. F (mines)/Bhilwara (Kotri)/4(1)/2009- 2010/10472-10476 dated 25.03.2013 valid upto 31.01.2014. Presently, Consent to operate has been issued by the Rajasthan State Pollution Control Board vide order no. 2018-2019/Mines/9850 dated 31.10.2018 valid from 20/09/2018 to 31/08/2023.

6. PP has submitted the past production details for the period from 2015-2016 to 2019-2020 authenticated by DMG, Bhilwara Rajasthan vide letter No. Sa.Kha.A./Bheel/Parya/2016/46 dated 30.06.2020.

7. PP has submitted the affidavit in India non-judicial Stamp vide Certificate No. AW 882291 dated 17.06.2020 in compliance to Ministry's Office Memorandum No.350/2017-IA.III(Pt.), dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors and there is no violation as per the judgement order dated 02.08.2017, Section 21 (5) of MMDR Act, 1957, Water Act (1974), Air Act (1981) and EIA Notification 2006. Further, PP has stated that there is no litigation pending against the project.

8. The committee observed that extension of validity was asked for co-terminous with the increase in the life of the mine but the mining lease was valid till 27.06.2030. Therefore, the EC may be extended co-terminous with the validity of Mining Lease as it was proposed with same capacity, same Lease area, no change in mining process and overall compliance of EC.

9. Based on the discussion held, the Committee **recommended** the proposal for grant of extension of validity of EC, co-terminous with the mining lease i.e up to 27.06.2030 for 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 ML area of 278.69 Ha. All other terms & conditions of the EC granted vide J-11015/41/2012 IA. II (M) dated July 7th, 2015 shall remain same and EC is valid up to 27.06.2030.

2.12 Collection of Reta, Bajri and Boulder (Minor Mineral) from the River Bed of Sharda River by M/s Uttaranchal Forest Development Corporation, located in Tanakpur in the Haldwani Forest Division, District Champawat, Uttarakhand (384.69 ha) [Proposal No: IA/UK/MIN/8720/2011 File No: J-11015/362/2009- IA.II(M)] – Extension of validity of EC.

The proposal of M/s Uttaranchal Forest Development Corporation is for Amendment w.r.t. *the extension of validity of EC coterminous with the validity of Forest Clearance i.e. 11th February, 2023*. The EC was granted vide Letter No. No. J-11015/362/2009-IA.II(M) dated 15.04.2011 for Collection of Reta, Bajri and Boulder (Minor Mineral) from the River Bed of Sharda River by M/s Uttaranchal Forest Development Corporation, located in Tanakpur in the Haldwani Forest Division, District Champawat, Uttarakhand (384.69 ha).

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

3. PP has submitted that Environmental Clearance was granted vide Letter No. No. J-11015/362/2009-IA.II(M) dated 15.04.2011 wherein at Para 6 of EC letter it has specifically mentions that, *“The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and hereby accords environmental clearance..... for a period of 10 years or till the forestry clearance whichever is earlier, subject to implementation of the following conditions and environmental safeguards.”* PP submitted that MoEF&CC vide its letter F. No. 8-61/1999-FC (pt-III) dated 11.02.2013 granted Forest Clearance for a period of 10 years and is valid till 11.02.2023. Since, EC is also valid for a period of 10 years i.e. till 14.04.2021, therefore, PP has requested for extension of validity of EC coterminous with the validity of Forest Clearance i.e. 11th February, 2023 for hassle free operations and applied for extension of validity of EC vide its Proposal No. **IA/UK/MIN/8720/2011 dated 30.07.2020** and the proposal is placed in EAC meeting held during 19-21 August, 2020.

4. Based on the document submitted and discussion held the Committee recommended the proposal of extension of **validity of EC dated 15.04.2011 till 11.02.2023** subject to the following additional conditions.

- i. The PP shall implement the conditions prescribed in **Enforcement & Monitoring Guidelines for Sand Mining 2020, as applicable for PP**. Implementation report with supporting documents & photographs before and after shall be submitted to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- ii. All other terms and conditions precibed under EC dated 15.04.2011 shall be remain unchanged

2.13 Expansion of mine from 12 MTPA to 19.5 MTPA ROM with total excavation of 22.14 MTPA, and beneficiation plant throughput capacity planned to increase from 12 MTPA to 17.6 MTPA in Joda East Iron ore mine of M/S Tata Steel Limited located in the villages Joda, Kamarjoda, Banspani, Khuntpani & Baitarani reserve Forest in Barbil tehsil/ taluka, Keonjhar district, Odisha. [Proposal No. IA/RJ/MIN/166045/2020. File No: J11015/16/2020.IA.II (M)] – Terms of Reference.

The Proposal of M/S Tata Steel Limited is for grant of Term of Reference for expansion of its mine from 12 MTPA to 19.5 MTPA ROM with total excavation of 22.14 MTPA, and its beneficiation plant throughput capacity is planned to increase from 12 MTPA to 17.6 MTPA. The mine site is located in the villages Joda, Kamarjoda, Banspani, Khuntpani & Baitarani reserve Forest in Barbil tehsil/ taluka, Keonjhar district, Odisha. The mine is located between latitude 21°59' N to 22°03' N and longitude 85°25' E to 85°27' E, and within survey of India topo-sheet Nos. 73 F/8 & 73 G/5.

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 2(b) of "mineral beneficiation" and is Category "A" project.

3. PP has submitted that the Environmental Clearance for the mine was obtained from MoEF & CC, Govt. of India to enhance production of ROM of iron ore from 6 MTPA to 12 MTPA and expansion of beneficiation plant from 6 MTPA to 12 MTPA vide letter No. J-11015/215/2008-IA.II (M) dated 11th March, 2013. Further an amendment was made in Environment Clearance due to modernization of technology while keeping production capacity same, which was approved by MOEF&CC vide letter No. J11015/215/2008-IA-II(M) dated on 29th July 2019. **PP has now applied vide Proposal no: IA/RJ/MIN/166045/2020 dated 31.07.2020 in for grant of Term of Reference for expansion of Iron Ore production from 12 MTPA to 19.5 MTPA (ROM) with total excavation of 22.14 MTPA and enhancement of beneficiation plant capacity from 12 MTPA to 17.6 MTPA (throughput).** PP also submitted Form-1 & Pre-Feasibility Report. The proposal is placed in EAC meeting held during 19-21 August, 2020.

4. PP has submitted that the lease block of Joda East Iron Mine covering an area of 671.093 ha along with the adjoining region was secured by TSL under a prospecting license in the year 1916. Lease period was extended upto 31.03.2030 vide letter no. III(A) SM -13/2012/3283/SM, Bhubaneswar dated 18.04.2015 issued by Department of Steel & Mines, Govt. of Odisha in compliance with MMDR Amendment Act' 2015. The supplementary lease deed was executed on 05.05.2015. The 671.093 ha area of Joda East lease also includes 16.35 ha area of Manmora Manganese lease which was granted to the Steel company for the mining of Manganese ore from the Joda East lease area. Hence, Manmora Manganese lease is a part of Joda East lease. The Joda East Iron Mine lies in Joda, Kamarjoda Banspani, Khuntpani and Baitarini RF, in Keonjhar district of Odisha. In addition to the Mining lease the company has 252.17 acres of Land lease in Joda.

Observation of EAC: *The Committee is of the view that it appears that on discovery of new mineral the State Government did not include the same in this lease rather allocated the separate lease for the same. Although, for this proposal application was made for entire lease area including the Manmora Manganese lease (16.35 Ha) but the mining activity shall be limited to excluding the Manmora Manganese lease. At the time of EC, PP shall provide the complete details of Manmora Manganese lease, whether it is still operational or not. Whether the mine closure activities have been initiated or not etc.*

5. PP has submitted that the lease has a total of 625.48 ha forest land. MoEF & CC accorded Stage-II Forest Clearance over an area 567.087 ha of land vide letter no. F. No. 8-32/1993-FC (vol.II) dated: 24.09.2007. For the balance forest area, the company has applied for the diversion of 41.819 ha forest area which includes 32.425 ha of forest area & 9.394 ha of safety zone vide letter no. MD/LO/823/394/2006 dated 15.11.2006 and 16.574 Ha of Forest land vide letter No. JCO/13/453/5-B dated 01.07.2016. PP also submitted that there is no national park, wild life sanctuary, eco sensitive area, CRZ or areas protected under international conventions.

Observation of EAC: *The Committee is of the view that at the time of EC the PP shall provide the status of the forest clearance.*

6. PP has submitted that Review of Mining Plan (under rule 17(2) of MCR' 2016) along with Progressive Mine Closure Plan (under Rule 23 of MCDR'2017) containing detailed proposal for the period 2020-21 to 2024-25 of Joda East Iron Mine was approved by Regional Controller of Mines, Indian Bureau of Mines vide letter no RMP/A/43-ORI/BHU/2019-20 dated 21.02.2020. PP has submitted that the Mechanized method of open pit mining has been adopted for mining iron ore with drilling & blasting. At present, Joda East Iron Mine is having both Wet and Dry processing facilities. The total existing capacity of dry processing and wet processing is 12.0 MTPA. Depending on the proportionate blend required to achieve Ore feed quality Dry and Wet processing plants will be operated to be fed a total of 17.6MTPA of Ore. The ore with high alumina content is subjected to Wet Processing while ore low in alumina is processed through Dry Processing. Wet Processing includes crushing, washing, scrubbing, screening, classification and hydro cycloning of ore, which generates wet sized ore & Classifier Fines as product and slime as rejects. Dry processing includes crushing and screening of ore to generate Ore. The fines ore generated from wet and dry processing are blended together to get the desired quality for dispatch to Tata Steel plants & sister concerns. The waste is generated in the form of slime and is rejected.

7. PP has submitted that the as all mining operations are concentrated on hill top, it will not intersect ground water table during the plan period. The peak water requirement in the future will increase up to 17500 m³/day. It is proposed that water requirement will be met from nearby Kundra Nalla which has sufficient capacity throughout the year and water regime will remain unaffected because of the increase in production. The slime dam is designed for pumping back the clear water discharge back to the plant for reuse. This will reduce our pumping requirements from Kundra Nalla. At present, the

mine has four slime dams (Tailing1, Tailing1A, Manmora & Tailing 2). During the plan period in-pit slime dam Tailing 2 located in North Pit will be used for disposal of slime. At the conceptual stage, the mine will have another in-pit tailing dam called Tailing3 which would be located in South Pit. During monsoon, mine wash-off from pits will be arrested by series of check dams proposed on the downstream side and only clear water will leave from lease boundary. Because of the above, no impact is envisaged on water regime and surface water quality. There is no colony within the lease belonging to lessee. Domestic discharges are treated in septic tanks and their overflows reach soak pits. Canteen effluent is treated in 10 KLD ETP. The treated water from plant is used for horticulture activities.

Observation of EAC: *The PP should submit the permission obtained from concerned authorities for withdrawal of water from the surface water body needs to be submitted along with EIA/EMP Report.*

8. PP has submitted that no R&R plan is required as no displacement of people is proposed for the expansion of mining project.

9. PP has submitted the Earlier EC Compliance Report certified by RO, MoEF&CC vide letter No. 101-529/EPE/446 dated 05.03.2019. PP has also submitted Half Yearly EC Compliance Report for the period from October, 2019 to March 2020 submitted to RO, MoEF&CC vide letter no. MD/ENV/672/102/2020 dated 26.05.2020. Further, PP has submitted the Application vide its letter No. MD/ENV/547/102/2020 dated 27.02.2020 submitted to RO MoEF&CC for certification of EC Compliance.

10. PP has submitted the past production data for the period from 1993-1994 to 2019-2020 authenticated by DMG, Joda, Keonjhar vide memo No. 2388/Mines dated 31.07.2020. 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. PP also submitted a copy of demand raised by DMG vide letter No. 4138/Mines dated 02.09.2017 with respect to mining in excess of EC capacity during 2000-01 to 2010-11. Further, w.r.t. demand raised and subsequent payment made by PP, intimation of the same to DDM, Joda Circle was made by PP vide its letter GM/PL/751/225/17 dated 22nd December, 2017. PP has also submitted copy of Revision Authority (RA) Stay order for Mining Plan and CTO Demand dated 27th December 2017, RA order dated 8th March, 2018, NOC from Directorate of Mines vide letter No. 5015/DM dated 28.06.2018 for processing of ToR/EC application and RA order dated 26th November, 2018. PP also submitted an undertaking by way of Affidavit in India non-judicial stamp vide certificate No, 46AA 814249 dated 26.01.2020 in pursuance MoEF&CC guidelines NO. 3-50/2017-414.III(Pt) dated 30th May 2018, and has stated that *“this is to undertake that Tata Steel Limited would comply with all the Parte requirements and Judgement of Hon'ble ‘Supreme Court dated 2nd August 2017 in the Writ Petition (civil) No 114 of 2014 in the matter of common cause versus Union of India and Ors. with respect of Joda East Iron Mine owned and operated by it. This undertaking is without prejudice to rights and contentious of the Project Proponent with respect to the present*

legal proceedings and will be subject to final outcome of the proceeding and finality of the issue.”

11. PP has reported that there is no litigation pending against the project and/or land in which the project is proposed to be set up. PP has submitted that Consent to Operate has been obtained from SPCB, Odisha vide letter NO. 2737/IND-I-CON-184 dated 07.03.2020 which is valid upto 31.03.2021.

12. PP has submitted that the total Project capital Cost is Rs. 1915 crores. The total employment potential will rise to ~ 1500 persons. At present about 588 workers are engaged as direct employment and besides the direct employment, almost 517 persons are benefited through indirect employment as contract labor's, which are mainly extended to the local tribes. For carrying out the proposed expansion, further employment will be provided to 185 people as direct employment and besides the direct employment, almost 618 persons will be benefited through indirect employment as contract labor's, which are mainly extended to the local tribes.

10. PP has submitted that no R&R plan is required as no displacement of people is proposed for the expansion of mining project.

13. Based on the discussion held and document submitted the Committee **recommended** the proposal of M/s Tata Steel Limited is for grant of Term of Reference for expansion of its mine from 12 MTPA to 19.5 MTPA ROM with total excavation of 22.14 MTPA, and its beneficiation plant throughput capacity is planned to increase from 12 MTPA to 17.6 MTPA. The mine site is located in the villages Joda, Kamarjoda, Banspani, Khuntpani & Baitarani reserve Forest in Barbil tehsil/ taluka, Keonjhar district, Odisha. In addition to Standard Term of Reference for non-coal mining & beneficiation, standard ToR as per the recommendation made by NEERI in its carrying capacity study for Odisha, the Committee also prescribed the following specific term of reference for this project:

- 1) The PP shall conduct public consultation including public hearing at the site through State Pollution Control Board as per the provisions of EIA Notification, 2006.
- 2) The total excavation (minerals, waste, top soil) to be excavated needs to be bring out clearly in production and development plan. The mineable reserves, blocked reserves need to be mentioned along with life of mine. PP should add an annexures 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.
- 3) PP should submit the revenue plan for mining lease, revenue plan should be superimposed on the satellite imaginary clearly demarcate the Govt. land, private land, agricultural land, forest land etc.

- 4) PP should submit the real-time aerial footage & video of the mining lease area and of the transportation route.
- 5) PP should submit the detailed plan in tabular format (year-wise for life of mine) for afforestation and green belt development in and around the mining lease. The PP should submit the number of saplings to be planted, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. In addition to this PP should show on a surface plan (5-year interval for life of mine) of suitable scale the area to be covered under afforestation & green belt clearly mentioning the latitude and longitude of the area to be covered during each 5 years. The capital and recurring expenditure to be incurred needs to be submitted.
- 6) PP should submit the quantity of surface or ground water to be used for this project. The complete water balance cycle need to be submitted. In addition to this PP should submit a detailed plan for rain water harvesting measures to be taken. The PP should submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted. The permission for withdrawal of surface water from Kundra Nalla from concerned authority needs to be submitted.
- 7) PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged for implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.
- 8) PP should submit the year-wise, activity wise and time bound budget earmarked for EMP, occupational health surveillance & Corporate Environmental Responsibility needs to be submitted. The capital and recurring expenditure to be incurred needs to be submitted.
- 9) PP should submit the measures/technology to be adopted for prevention of illegal mining and pilferage of mineral.
- 10) PP should submit the detailed mineralogical and chemical composition of the mineral, waste and tailing from NABL/MoEF&CC accredited laboratory.
- 11) PP should clearly show the transport route of the mineral and protection and mitigative measure to be adopted while lading/unloading and transportation of the mineral. The impact of all the activities involved in the mining operation should be clearly brought out supported with

the Area & 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 in the vicinity of mining lease 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.

- 12) The PP should ensure that only NABET accredited consultant shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that accreditation of consultant shall be valid during the collection of baseline data, preparation of EIA/EMP report and during the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and PP and consultant are fully accountable for the same.
- 13) 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.
- 14) PP shall provide details in respect of involvement of Forest land, distance from protected area, list of flora & fauna should be duly authenticated.
- 15) A detailed study regarding the impact of chemicals proposed to be used for dust suppression in consultation with reputed institute shall be submitted along with EIA/EMP. In addition to this PP has proposed to use mist generator water tanker, the amount of water saved as compared to conventional water tanker needs to be submitted.
- 16) PP shall provide the complete details of Manmora Manganese lease, whether it is still operational or not. Whether the mine closure activities have been initiated or not etc.

2.14 Expansion of Naredi-I and Naredi-II Bauxite Mining Project of M/s Gujarat Mineral Development Corporation Ltd., located in Village Naredi, Tehsil Abdasha, District Kutch, Gujarat (129.3353 ha) [Proposal No: IA/GJ/MIN/150429/2020; File No: J-11015/336/2005-IA.II(M)] - Extension of validity of EC.

The proposal of **M/s Gujarat Mineral Development Corporation Ltd.** is for extension of validity of EC granted vide Letter No. J-11015/336/2005-IA.II (M) dated 10.11.2006 for Expansion of Naredi-I and Naredi-II Bauxite Mining Project of M/s Gujarat Mineral Development Corporation Ltd., located in Village Naredi, Tehsil Abdasha, District Kutch, Gujarat (129.3353 ha). The mining lease area lies between 23°13'05" to 23°12'10" N latitudes and

69°10'46" to 69°11'41" E longitudes and falls in Survey of India Topo Sheet No. 41 E/4.

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 by the Ministry vide Letter No. J-11015/336/2005-IA.II (M) dated 10.11.2006 for Expansion of Naredi-I and Naredi-II Bauxite Mining Project of M/s Gujarat Mineral Development Corporation Ltd., located in Village Naredi, Tehsil Abdasha, District Kutch, Gujarat.

PP vide its Proposal No. **IA/GJ/MIN/150429/2020 dated 20.07.2020** has applied for extension of validity of EC upto 31.03.2030 in view of extension of mining lease validity upto 31.03.2030. PP has stated that earlier the lease was valid till 31.03.2020 which is now extended upto 31.03.2030. Hence, this application is made to extend the validity of EC upto 31.03.2030 keeping the same land area, same production capacity and same mining method.

3. As recorded in the EC letter dated 10.11.2006, there are **two mining leases namely Naredi-I and Naredi-II** adjacent to each other **comprising total mine lease area of 129.3353 ha** which is a private land. PP has further submitted the letter issued by Industries and Mines Department, Government of Gujarat vide Order No. MCR-1574-G-18-208-CHH dated 13.03.2020 stating that the lease area of **62.36 ha** was granted to GMDC for 20 years vide Order No. MCR-1574-G-18-208-CHH dated 31.01.1977 and the deed was executed on 30.7.1977. As per the section (A) (6) of the MMDR Act 1957, the order dated 04.04.2016 of Honorable Supreme Court on WP(Civil) No. 114/2014 and The MMGC Rules, 2015, the Mining lease (62.36 ha area) of GMDC is extended till 31.03.2030. Similarly, Industries and Mines Department, Government of Gujarat vide Order No. MCR-1576(G-31)7074/CHH dated 13.01.2020 has stated that the lease area of **66.9753 ha** was granted to GMDC for 20 years vide Order No. MCR-1576(G-31)472/CHH dated 20.04.1979 and the deed was executed on 25.06.1979. First renewal for 20 years was granted vide Order No. MCR-1576(G-31)7074/CHH dated 24.02.2006 and deed was executed on 17.07.2006. As per the section (A) (6) of the MMDR Act 1957, the order dated 04.04.2016 of Honorable Supreme Court on WP(Civil) No. 114/2014 and The MMGC Rules, 2015, the Mining lease (66.753 ha area) of GMDC is now extended till 31.03.2030.

4. PP has submitted that Consent to operate has been issued by the Gujarat Pollution Control Board vide order no. AWH-88354 dated 16/09/2017 valid upto to 04.09.2022.

5. PP has submitted the past production details for the period from 2006-2007 to 2018-2019 authenticated by DMG, Bhuj-Kutchh vide letter dated 11.12.2019 separately for the both the Mining Leases namely Naredi-1 (M.L. - 161) and Naredi-2 (M.L. -163). PP has also submitted the Annexure-III.

6. The proposal was deliberated during EAC meeting held on 19-21 August, 2020. The committee asked the PP for reasons for closure of operations from last few years, status of compliance of earlier EC including development of green belt along the boundary. The Project proponent has sought for some time to respond to the queries. Subsequently, the PP sought **deferral** and vide email dated 21st August, 2020 send to Ministry, that the proposal not to be considered till 20th September, 2020. Therefore, the proposal is **deferred**.

2.15 Mining of 4.0 Million TPA of Limestone from Chintalayapalle Limestone Mine [ML Area 491.55 Ha] located at Village-Chintalayapalle & Itikyala, Tehsil-Kolimigundla, District- Kurnool, State- Andhra Pradesh by M/s. the Ramco Cements Limited [Proposal No: IA/AP/MIN/62749/2017; FileNo: J-11015/15/2017- IA.II (M)]- Amendment in EC vide letter no. J11015/15/2017-IA.II (M) dated 23rd March, 2020 w.r.t. extension of time for erection and commissioning of crusher & Conveyor system from Mines to cement plant.

The proposal of M/s The Ramco Cements Limited is for Amendment w.r.t. extension of time for erection and commissioning of crusher & Conveyor system from Mines to cement plant in the EC granted vide letter no. J-11015/15/2017-IA.II (M) dated 23rd March, 2020 for Limestone production of 4.0 Million TPA (ROM) & 521800 m³ of top soil (over the life of mine) from Chintalayapalle Limestone Mine [ML Area 491.55 Ha] located at Village-Chintalayapalle & Itikyala, Tehsil-Kolimigundla, District- Kurnool, State- Andhra Pradesh.

2. The Ministry vide letter no. J-11015/15/2017-IA.II (M) dated 23rd March, 2020 granted EC to M/s The Ramco Cements Limited for Limestone production of 4.0 Million TPA (ROM) & 521800 m³ of top soil (over the life of mine) from Chintalayapalle Limestone Mine [ML Area 491.55 Ha] located at Village-Chintalayapalle & Itikyala, Tehsil-Kolimigundla, District- Kurnool, State- Andhra Pradesh. The EC was granted with a Specific Condition 17 A. 1) which reads as “PP shall install conveyor belt from mines to cement plant and transportation is only through conveyor belt except in the case of maintenance & breakdown of conveyor belt, road transportation shall be carried out. PP shall keep the record of road transportation.” PP vide Proposal No. **IA/AP/MIN/62749/2017 dated 06.07.2020** has applied for amendment in EC w.r.t. seeking time Extension of 3 years due to COVID-19 - for installation and commissioning of Belt conveyor for transport of Limestone from Mines to cement Plant and the proposal is placed in EAC meeting held during 19-21 August, 2020.

3. During the meeting the PP gave following justification for the said amendment in EC.

a) *The distance to the cement plant from the Mining Lease area is about 6 Kms (aerially 3.70 Kms). They are partially Govt Lands and remaining is Patta land. We have applied for alienation of the Govt land for transportation of Limestone from Mines to cement plant. Similarly, the remaining area containing the Private lands falling en-route are mostly purchased and*

involves negotiation and procurement from the remaining parties. This is in progress.

- b) The layout Design, Machineries and Installation of Closed Conveyor to a distance of 6 Kms in different terrains (Mine is located at 305 m AMSL and the Plant is located at 250-280 m AMSL) requires a longer gestation period. We have initiated the project conceptualization and design along with our suppliers. The Contour Survey has been completed for the stretch of 6 kms area where the Conveyor route is proposed.*
- c) The pre-requisite to install a conveyor belt involves installation of a 4 MTPA Crusher located at Pit head to reduce the size such that material can be transported through the conveyor belt for which the design concept has been initiated with suppliers.*
- d) The condition on Conveyor belt requirement as a pre-requisite for operation of the cement plant would stall the commissioning of the cement plant as committed to the authorities, which will also be causing serious implications on the proposals.*
- e) The Proposals are already lagging behind the Schedule as committed to the Governments, and will have techno-commercial bindings / commitments / impacts.*
- f) Added to the above, the Nation is now faced with a major Lockdown due to COVID-19 Pandemic constraining our Project site operations as below:*
 - a. All construction activities have come to a Halt at the Project site.*
 - b. The Migrant labors engaged in the site have already left the site to reach their hometowns in different other states which was safely arranged through Govt. machinery.*
 - c. The company is facing serious financial implications due to this National lockdown and sales realization is yet to be achieved.*
 - d. The Company's contractors and suppliers whom we depend on Design, Fabrication, and supply of materials, Construction and Erection activities are also subjected to severe issues as faced by us.*
 - e. As a responsible corporate, our company has actively involved along with the local district authorities and the State of Tamil Nadu, Andhra Pradesh, Kerala, Karnataka & Orissa in all possible means by involving our people, financial and other resources in supporting the Govt to contain the spread of COVID-19 Pandemic effect during Lockdown.*
 - f. Due to the COVID-19, issues, the negotiations for purchase of Lands towards installation of conveyor Belt could not be progressed, hence we are facing uncertainty in this.*
 - g. We have to obtain alienation of Govt lands located in between the Plant*

and Mining Lease, which is also volatile.

- h. We need to obtain Govt clearances for the elevated Conveyor belt crossover for the State Highway falling in between Mining Lease and Cement Plant area.*
- i. The entire Government machinery is presently in the focus to combat COVID19 pandemic issues and hence we foresee delay in obtaining the above clearances.*
- g) As we are slowly beginning to come out of this lockdown, we are constrained to focus on priority issues like completing the commissioning of the Plant which is in midway and make it operational to meet the commitments on stakeholders and provide local employment. This by itself is a challenging task ahead due to lack of skilled manpower, financial crunch our company is facing and uncertainty surrounding COVID-19 issues.*
- h) The Projects are proposed in rural parts of the Region and there are no eco sensitive zones within the Impact Area. The transportation of Limestone in the existing road networks for a short period will not have any significant impact on the confined area.*

Despite our best efforts to implement the installation of Conveyor, due to the unforeseen Global pandemic issues, the progress of all the project activities at site has been seriously hampered. Thus we are requesting the Honorable committee and Authority to consider favorably in extending the time period for installation of the closed conveyor from the mine to the Plant within 3 years from Date of EC and award the amendment in EC accordingly. Till such time, road transport may kindly be permitted.”

4. Based on the document submitted and discussion held the Committee is not convinced with the justification provided by the PP and is of the view that transportation of mineral will only start after the installation of Cement Plant which is yet to be completed. Further the committee observed that seeking an extension of time just after few months from the grant of EC, without making the efforts and the instant request is very pre-mature. PP should take all best possible efforts for installation of conveyor belt and may approach this Committee 2-3 months before the completion of Cement Plant, in case, conveyor belt is not installed till that time. The Committee therefore **returned the proposal in present form.**

2.16 Proposal under the provision of Notification S.O. 1530(E) dated 06.04.2018 of Nimbahera-Ahripura Limestone Mine (Area:403.1875 Ha) located at Village - Ahirpura&Murlia, Tehsil - Nimbhera, District - Chittorgarh (Rajasthan) with production capacity of 2.0 MTPA of mineral Limestone by M/s JK Cement Ltd -Reconsideration of ToR regarding [Proposal No: IA/RJ/MIN/11656/2004; File No: J-11015/83/2004-IA.II(M)]

The existing environmental clearance was granted in the year 2005 for the capacity of 2.0 Million TPA. Now, the proposal is for validation 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" Sub-grade Mineral:0.0050 Million TPA, Inter-burden: 0.0220 Million TPA and Top Soil:-0.007 Million TPA).

2. The project falls under the category 'A' with activity of 1 (a) – Mining of Minerals.

3. The Total cost of the existing project is Rs. 21.30 Crores. The mine lease area falls between Latitude- 24°38'10.397" N to 24°41'14.503" N and Longitude 74°38'42.003" E to 74°41'02.730" E. The mine lease area is located on Survey of India Toposheet No 45 L/10.

4. Initially, Mining Lease was originally sanctioned in favor of J.K. Cement Works for an area of 652.3125 Ha. vide letter no. F-14(35)Ind/B/65 dated 30.12.1967. Lease was executed on 24.01.1968. Thereafter, first renewal of mining lease was issued vide letter no. P-4 (20) Khan/Group-2/87 on 26.04.1989 and Second renewal issued vide letter no. P-16 (49) Khan/Group-1/97 on 24.01.2002. An area of 249.125 Ha. has been surrendered due to low grade limestone vide letter no. AME/Nimba/CC1/ML 2/97/Renewal/947 dated 14.05.2008. Lease validity upto 31.03.2030 issued vide letter no. AME/Nimba/CC-1/ML 2/1997/2028 dated 27.02.2015 as per Rule 8A [5] of MMDR Amendment Ordinance 2015. The recent Review of Mining Plan with Progressive Mine Closure Plan was approved vide letter no. 584 (4) (3) (1807)/2019-R Mining - Ajmer/1861 dated 06.11.2019 with reduction of total capacity (ROM) from 2.0 Million TPA to 0.8949 Million TPA.

5. Nimbahera-Ahirpura Limestone Mine was granted first Environmental Clearance for the production capacity of 1.4 Million TPA for an area of 652.3125 Ha. vide letter no. J-11015/I//2004-IA.II on dated 04.10.2004. Further expansion in production from 1.4 Million TPA to 2.0 Million TPA was granted for an area of 652.3125 Ha. vide letter no. J-11015/83/2004-IA.II on dated 30.05.2005.

6. Application for amendment in EC for area reduction from 652.31 Ha. to 403.1875 Ha. and installation of crusher in mining lease area submitted on 28.02.2017. The proposal recommended by the EAC (Non-Coal Mine) for lease reduction and to submit a fresh application for crusher on 23rd October 2017. Issuance of amendment in EC for lease area reduction is still awaited.

7. Further, application for revalidation of EC under EIA Notification 2006 in compliance of MoEF&CC Gazette Notification dated 06.04.2018 was applied on 26.09.2018. The proposal was considered by the EAC (Non-Coal Mine) on 23.01.2019. The proposal was recommended for grant of TORs subject to submission of revised form-1 (total excavation per annum, quantity of mineral, waste, OB, top soil etc) and authenticated production

details and annexure-1 for which a ADS was issued on 25.02.2019. ADS reply was submitted by the PP on 06.04.2019. The project delisted and again relisted on 25.06.2020 and reply of the ADS dated 25.02.2019 was submitted through online portal on 15.07.2020 with reduction in production capacity of ROM from 2.0 Million TPA to 0.8949 Million TPA as per approved review of mining plan with Progressive Mine Closure Plan by Indian Bureau of Mines vide letter no. 584 (4) (3) (1807)/2019- R Mining - Ajmer/1861 on dated 06.11.2019.

8. Present water demand – 20.0 KLD; and the Source of water for Domestic Purpose: - 1.5 KLD is tube well and rest from rain water collected in mine pits for Dust Suppression–10 KLD, Plantation– 7.0 KLD and Mine operation – 1.5 KLD. CGWA NOC has been granted for the use of ground water vide letter 21-4(34)/WR/CGWA/2005-907 dated 14.05.2018. Renewal has been submitted on 12.02.2020.

Consent to operate has been obtained from RSPCB, Jaipur vide letter No. F (Mines)/Chittorgarh (Nimbahera)/1869(1)/2017-2018/2136-2140 dated 20.06.2017 which is valid up to 31.05.2022.

9. The committee, after detailed deliberations, observed that the instant proposal is for ratification of the EC granted under 1994 notification under the provisions of Notification S.O. 1530(E) dated 06.04.2018. Further, there is a reduction of lease area from 652.3125 ha to 403.1875 ha. The committee also observed that the production from the mine is exceeded w.r.t to the base level of 1993-94 and also without consent under Air and Water Acts, before the grant of EC in 2004 and attracts the violation as per the directions of Hon'ble SC in the matter of Common Cause Vs Union of India. Therefore, the ministry may initiate action under section 15/19 of Environment (Protection) Act, 1986 for the violation component, and may consider the case for grant of ToR pallelly. Further, on request of the exemption of fresh public consultation by the PP during the meeting, the committee observed that the public consultation was conducted on 19.05.2004 while granting the EC dated 30th may, 2005. Since the production capacity remain same and ML area has reduced to the earlier extent, as decided by the committee in is meeting held during 20-21 April, 2020 decided as follows: -

The committee, after detailed deliberations, has decided that in certain cases the public hearing can be exempted, but the PP needs to invite the suggestions/objections as wider part of pubic 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:-

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;

ii. The present proposal shall be with 'No increase in the production capacity and Mining lease;' and

iii. No change in mining namely, mining method, mining plan, mineral transportation, water requirement, reclamation plan.

iv. The Proposal shall not be a violation case.

Since, the instant case involves the violation under common cuase judgement, the proposal is not eligilble for exemption of the public hearing component. Therefore, the PP shall carryout the public consultation as per the provisions of EIA Notification, 2006 including inviting the written comments and public hearing at the site.

10. Based on the discussion held and document submitted, the Committee **recommended** for grant of the proposal under the provision of Notification S.O. 1530(E) dated 06.04.2018 of M/s JK Cement Ltd of Nimbahera-Ahripura Limestone Mine (Area:403.1875 Ha) located at Village – Ahirpura & Murlia, Tehsil - Nimbhera, District – Chittorgarh, Rajasthan with production capacity of 2.0 MTPA of mineral Limestone for grant of standard Term of Reference with following specific ToRs:

- 1) The total excavation (minerals, waste, top soil) to be excavated needs to be bring out clearly in production and development plan. The mineable reserves, blocked reserves need to be mentioned along with life of mine. PP should add an annexures showing the year-wise production and development plan (tabular format) till the end of life of mine. The location of mineral stacking, dumping sites, plantation and other infrastructures needs to bring out clearly in the mining plan. PP needs to bring out the waste to be generated during the entire life of mine and where it will be dumped/backfilled.
- 2) PP should submit the real-time aerial footage & video of the mining lease area and of the transportation route.
- 3) 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.
- 4) 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. The permission for withdrawal of surface water from Kundra Nalla from concerned authority needs to be submitted.
- 5) 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.
 - 6) PP should submit the year-wise, activity wise and time bound action plan for EMP, occupational health surveillance & Corporate Environmental Responsibility needs to be submitted. The capital and recurring expenditure to be incurred needs to be submitted.
 - 7) PP should submit the detailed mineralogical and chemical composition of the mineral, waste and tailing from NABL/MoEF&CC accredited laboratory.
 - 8) PP should clearly show the transport route of the mineral and protection and mitigative measure to be adopted while lading/unloading and transportation of the mineral. The impact of all the activities involved in the mining operation should be clearly brought out supported with the Area & 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 in the vicinity of mining lease 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.
 - 9) The PP should ensure that only NABET accredited consultant shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that accreditation of consultant shall be valid during the collection of baseline data, preparation of EIA/EMP report and during the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and PP and consultant are fully accountable for the same.
 - 10) 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.

- 11) PP has proposed to use chemical for dust suppression, a detailed study regarding the impact of such chemicals needs to be submitted along with permission for the concerned authority. In addition to this PP has proposed to use mist generator water tanker, the amount of water saved as compared to conventional water tanker needs to be submitted.

2.17 Expansion in Limestone Production Capacity from 3.8 to 7.62 Million TPA and Top Soil 0.1051 Million TPA, Over burden 0.3549 Million TPA (Total Excavation: 8.080 Million TPA) along with one existing crusher of 1200 TPH Capacity and installation of proposed crusher of 1200 TPH Capacity in Kodla Limestone Mine ML Area- 517.61 ha of M/s Shree Cement Ltd. located at village Kodla & Benakanahalli; Tehsil: Sedam; District Kalaburagi; State: Karnataka. [Proposal No: IA/KA/MIN/163022/2020; IA-J-11015/31/2019-IAII (M)] - Modification of ToR.

The proposal of M/s Shree Cement Ltd. is for amendment in TOR w.r.t. total excavation with top soil and over burden production in the Term of Reference granted vide letter no. J-11015/31/2019-IA.II (M) dated 24th April, 2019 for Expansion in Limestone Production Capacity from 3.8 to 7.62 Million TPA and Top Soil 0.1056 Million TPA, Over burden 0.3564 Million TPA (Total Excavation: 8.0820 Million TPA) along with one existing crusher of 1200 TPH Capacity and installation of proposed crusher of 1200 TPH Capacity in Kodla Limestone Mine ML Area- 517.61 ha of M/s Shree Cement Ltd. located at village Kodla & Benakanahalli; Tehsil: Sedam; District Kalaburagi; State: Karnataka.

2. PP earlier had applied online vide proposal no **IA/KA/MIN/93756/2019 dated 23rd February, 2019** for grant of ToR and submitted Form-1 & PFR. The proposal was placed in the EAC meeting held during 25-26 March, 2019. The Committee after detailed deliberations on the proposal recommended the proposal. The Ministry issued the Term of Reference (ToR) under the provisions of EIA notification, 2006 along with the specific Terms of Reference and Standard conditions for undertaking EIA and preparation of Environmental Management Plan (EMP) **vide Letter No. J-11015/31/2019-IA-II (M) dated 24.04.2019.**

4. PP has now applied vide **Proposal No. IA/KA/MIN/163022/2020 dated 12.07.2020** seeking amendment in the above granted TOR w.r.t. total excavation (from 8.082 MTPA to 8.080 MTPA) along-with top soil (from 0.1056 MTPA to 0.1051 MTPA) and over burden production (from 0.3564 MTPA to 0.3549 MTPA). PP has stated that, "Modification in the Mining Plan with Progressive Mine Closure Plan has been approved by IBM vide letter No. 279/1043/2009/BNG dated 06.03.2020. As per new Modified Mining Plan, the total Excavation has been reduced from 8.082 Million TPA to 8.080 Million TPA but there is no change in Limestone Production Capacity which is 7.62 Million TPA. In view of the same, the changes mentioned in the Modified Mining Plan are given below for Amendment in the TOR letter:

S.No.	Particulars	TOR Letter dated 24.04.2019	As per approved Modified Mining Plan dated 6.03.2020	Remarks
1.	Limestone	7.62 Million TPA	7.62 Million TPA	No change
2.	Top Soil	0.1056 Million TPA	0.1051 Million TPA	Decrease-0.0005 Million TPA (0.47%)
3.	Over Burden	0.3564 Million TPA	0.3549 Million TPA	Decrease-0.0015 Million TPA (0.42%)
4.	Total Excavation	8.082 Million TPA	8.080 Million TPA	Decrease-0.002 Million TPA (0.024%)
5.	Crusher Capacity	Existing crusher - 1x1200 TPH Proposed Crusher - 1x1200 TPH Total - 2x1200 TPH (2400 TPH)	Existing crusher - 1x1200 TPH Proposed Crusher - 1x1200 TPH Total - 2x1200 TPH (2400 TPH)	No change
6.	M.L. Area	517.61 ha	517.61 ha	No change

5. Based on the documents submitted and discussion held the Committee recommended the proposal for amendment in ToR granted vide Letter No. J-11015/31/2019-IA-II (M) dated 24.04.2019 for change in total excavation from **8.082 Million TPA** (7.62 Million TPA limestone; 0.1056 million TPA of Top Soil; 0.3564 Million TPA of Overburden) **to 8.080 Million TPA** (7.62 Million TPA limestone; 0.1051 million TPA of Top Soil; 0.3549 Million TPA of Overburden). The other terms & conditions mentioned in ToR letter dated 24.04.2019 shall remain same.

2.18 Proposal under the provision of Notification S.O. 1530(E) dated 06.04.2018 of M/s Tamilnadu Cements Corporation Limited for Expansion in production capacity from 0.26 MTPA to 1.5 MTPA of Anandavadi Limestone Mines (ML area 110.68.5 Ha) located at village Anadavadi, District- Ariyalur, Tamilnadu by M/s Tamilnadu Cement Corporation Ltd. [Proposal no: IA/TN/MIN/75302/2018; File No J11015/173/2018-IA.II(M)] – Terms of Reference.

The proposal of M/s Tamilnadu Cement Corporation Ltd. is for increase in limestone Production Capacity from 0.26 MTPA to 1.5 MTPA of Anandavadi

Limestone Mines (ML area 110.68.5 Ha) located at village- Anadavadi, District- Ariyalur, Tamilnadu. The Project Proponent submitted that mining lease area falls under Survey of India Topo-Sheet 58 M/4 and between Latitude: N 11°11'12" to N 11°11'27" & Longitude: E 79°10'54" to E 79°11'56".

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.

3. PP submitted that M/s Tamilnadu Cement Corporation Ltd has obtained EC under the EIA Notification 1994, for this mining project vide Ministry's letter No. J-11015/15/99-IA. II (M), dated 22.11.1999 for production of 0.26 MTPA of limestone from ML area of 110.68.5 Ha. As per the Ministry's Notification S.O. 1530(E) dated 6.04.2018 the application for ToR was submitted vide proposal No. **IA/TN/MIN/75302/2018** dated 5.06.2018 i.e. before the due date of 5.10.2018. PP submitted the Form-I and submitted Pre-Feasibility Report and the proposal was placed in EAC meeting held during 15-16 November 2018 wherein the Committee deferred the proposal for want of requisite information. PP submitted the requisite information on 19.02.2019 and the proposal is now considered in EAC meeting held during 19-21 August, 2020. The information submitted by the PP and observation of EAC are as follows:

a) Submit the updated form-1 for total excavation per annum (quantity of mineral, waste, O.B, top soil etc.)

PP has submitted Revised Form-I and copy of relevant pages of mining plan wherein it has mentioned that the maximum total excavation from the mines will be 3.00 Million Tone which include (1.5 Million Tons of Limestone, 0.37 Million Tone of Top Soil , 0.64 Million Tonne of OB/IB/SB and 0.49 million Tone of Mineral Reject).

b) Submit the details as per Annexure-I to examine the matter in light of Common Cause Order dated 02.08.2017 and S.O. 804(E) dated 14.03.2017

PP submitted the annexure-III as per which the production is well within the EC Capacity.

Observation of EAC: *The Committee is of the view that the PP also submitted the past production details duly authenticated by the DMG vide LR No 257/G&M/2018 dated 11.09.2018. On perusal to Annexure-III submitted by the PP the Committee observed that Consent to establish was granted on 28.02.2000 and first consent to operate was issued on 14.07.2008. The past production details show that the PP has carried out mining from 2001 to 13.07.2008 without valid consent to operate and thus it is a violation of Common Cause Order dated 2.08.2017 and also non-compliance of General Condition No (x) of EC granted to PP vide Lr. dated 22.11.1998. But after 14.07.2008 the PP has valid Consent to Operate till 31.03.2017 and*

thereafter it is under process. The PP has submitted the consent fees vide Lr dated 31.07.2017. The Committee noted that as per past production a detail the PP has not exceeded the EC Capacity. The Committee is of the view that PP should submit an undertaking in compliance of Ministry's O.M dated 30.05.2018 to comply with all the statutory requirement and direction of Hon'ble Supreme Court dated 2.08.2017 in the matter of common cause.

c) A letter from State Forest Department that there is no forest land involved in the mining lease area.

PP submitted the letter No. N.K.No:1756: /Dated 3.10.2018 issued by DFO, Ariyalur Forest Division wherein it has mentioned that the mining lease area of 110.68.5 Ha is public and private waste land and there is no wildlife sanctuaries, national parks or wildlife pathways located within 10 KM radius of the area.

d) It has observed by the Committee that PP has not achieved the already approved production capacity and now applying for expansion. Thus, justification in this regard needs to be submitted.

PP submitted that the entire limestone mineral extracted from Anandawadi Mine is utilized in Ariyalur Cement Works of the company. The capacity of Ariyalur Cement works has been enhanced recently from 0.5 MTPA to 1.5 MTPA, leading to increased demand of lime stone. Moreover, in the past, major part of limestone demand of the Ariyalur Cement Works was met from its Kallankurichi Limestone Mines, which are non-operational since last few years due to violation of EC norms. The proposed enhanced capacity of Anandawadi will, to some extent, meet the requirements of the Company's Ariyalur Cement works.

4. The PP submitted that the mining lease was initially granted vide G.O. No. 624 dated 23.09.1998 over an area of 110.685 Ha. The lease was executed on 16.03.2000 for a period of 30 years (i.e. up to 15.03.2030). The PP also submitted that as per the section 8 A (5) of new MMDR amendment act 2015, the validity of this lease is deemed to be extended till 16.03.2050.

5. PP has submitted that there is no forest land involved in the M.L. area. There are no wildlife sanctuaries, national parks or wildlife pathways located within 10 k.m. radius of that area. The NOC from the DFO has been obtained vide N.K. No:1756/Dated: 03.10.2018.

6. PP has submitted that Mining Plan was initially approved vide Letter No. TN/PBR/LST-MP/916-SZ dated 18.10.2000. The scheme of mining has been approved by Indian Bureau of Mines under Rule 12(3) of MCDR 1988 for the period 2016-17 to 2020-2021 vide approval No. TN/ALM/LST/MS-1300-MDS, dated 25.01.2016. The modification to the approved Mining Plan with PMCP has been approved for the period 2018-19 to 2020-21 under Rule 17(3) of MCR-2016 vide letter No. TN/ALR/MP/LST/2050.MDS, dated 24.07.2018.

7. PP has submitted that total water requirement will be 35.2 KLD for domestic (1.2 KLD), plantation (25 KLD) and dust suppression (9 KLD), which shall be met from G.O 344 reservoir and water tanker. There will be no waste water generation from Mining activities. However, a small amount of domestic wastewater generation will happen as a result of water used by humans which will be treated in septic tank and soak pit.

8. PP has submitted that Consent to Establish was granted from Tamil Nadu Pollution Control Board vide order no 1970, dated 28.02.2000. Consent to Operate has been granted by Tamil Nadu Pollution Control Board, vide its letter no – T6/TNPCB/F.1200/TRY/RM/A/08 dated 14.07.2008 and extended its validity upto 30.09.2020 vide letter no. TNPCB/P&D/2020 dated 01.07.2020 under Water (Prevention and control of pollution) Act 1974 and Air (Prevention and Control of Pollution) Act, 1981.

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

10. PP has submitted that the total Project capital Cost is Rs. 100 lakhs. The total strength of workforce in the mine is 41 (Direct-7 & Indirect-34).

11. Based on the document submitted and discussion held during the 20th EAC meeting held during August 19-21, 2020 wherein the Committee is of the view that proposal was last considered in EAC meeting held during 15-16 November 2018 wherein the Committee deferred the proposal for want of requisite information. The Ministry vide letter dated 9.01.2019 asked the PP to submit the desired information and the PP submitted the same online on 19.02.2019 and due to some technical issue in the online portal Standard ToR was issued on 26.02.2019. The PP based on the standard ToR conducted the public hearing. The Committee is of the view that there is no fault on the part of PP as they have submitted the requisite information and followed the procedure laid down in EIA Notification 2006 for conducting public hearing. The Committee is of the view that system generated Standard ToR is sufficient to appraise the project and there is no requirement of public hearing again. The Committee therefore **recommended** the proposal for grant of Standard ToR formally by the Ministry for increase in limestone Production Capacity from 0.26 MTPA to 1.5 MTPA of Anandavadi Limestone Mines (ML area 110.68.5 Ha) located at village- Anadavadi, District- Ariyalur, Tamilnadu with Total excavation of 3.0 Million TPA which include (1.5 Million Tons of Limestone, 0.37 Million Tone of Top Soil , 0.64 Million Tonne of OB/IB/SB and 0.49 million Tone of Mineral Reject) by **M/s Tamilnadu Cements Corporation Limited.**

2.19 Proposal under the provision of Notification S.O. 1530 (E) dated 06.04.2018 for Lakheri Limestone Mine (Area: 1516.88 ha.) of M/s ACC Ltd. with Limestone Production Capacity of 1.5 Million TPA and waste / topsoil 11.25 Lakhs CuM per annum (Maximum) with existing Wobbler & screening plant of 400 TPH at Villages Gendoli Kala, GendoliKhurdh, Pholai, Gutha, Mahuwa, Dangaheri, Budel, Kankra, Chamavali, Uttarana, Lakheri, Sakhoda, Nayagaon&Papadi, Tehsil: Indergarh, District: Bundi,

Rajasthan. [File No: J -11015/167/2018-IA. II(M); Old File No. J-11015/14/2003-IA. II); Proposal No. IA/RJ/MIN/81291/2018] - Reconsideration for ToR.

The proposal of M/s ACC Ltd. is for Lakheri Limestone Mine (Area: 1516.88 ha.) with Limestone Production Capacity of 1.5 Million TPA and waste / topsoil 11.25 Lakhs CuM per annum (Maximum) with existing Wobbler & screening plant of 400 TPH at Villages Gendoli Kala, GendoliKhurdh, Pholai, Gutha, Mahuwa, Dangaheri, Budel, Kankra, Chamavali, Uttarana, Lakheri, Sakhoda, Nayagaon&Papadi, Tehsil: Indergarh, District: Bundi, Rajasthan. The Project Proponent submitted that mining lease area falls under Survey of India Topo-Sheet 45 O/14 & 54 C/2 between Latitude: N 25°31'54.6" to N 25°39'39" & Longitude: E 75°56'46.4" to E 76°15'27.2" and in Seismic Zone –II.

2. As per EIA Notification dated 14th September, 2006 as amended from time to time, the project falls under S. No. 1, Project or Activity 1(a) – 3 for “Mining of Mineral” as the Mining lease area is more than 100 Ha.

3. PP submitted that M/s ACC Ltd. has obtained EC under the EIA Notification 1994, vide Ministry’s letter No. J-11015/14/2003- IA. II (M) dated 26.12.2005 for the expansion of limestone production from 0.5 to 1.5 Million TPA. As per the Ministry’s Notification S.O. 1530(E) dated 6.04.2018 wherein it has mentioned that “the Hon“ble Supreme Court vide judgment dated the 7th February, 2018 in Special Leave to Appeal (Civil) No. 32138 of 2015 in the matter of Goa Foundation versus M/s Sesa Sterlite Ltd., &Ors. has reiterated that the validity of the environmental clearance for mining projects granted under the EIA Notification, 1994 shall be five years” and “whereas, all mining projects mentioned in clause (b) of fourth paragraph above are required to obtain environmental clearance under the EIA Notification, 2006, in pursuance of the aforesaid judgments of the Hon“ble Supreme Court”. The clause (b) of the notification is “mining projects, which were granted environmental clearance under the EIA Notification, 1994, and but not obtained environmental clearance for expansion / modernization / amendment under the EIA Notification, 2006.” In the instant case the PP has obtained the EC under EIA Notification 1994 for 1.5 MTPA and now applied for EC for Limestone Production Capacity of 1.5 Million TPA and waste / topsoil 11.25 Lakhs CuM per annum (Maximum) with existing Wobbler & screening plant of 400 TPH. As per the notification the PP shall make application within six months (i.e. up to 5.10.2018) from the date of issue of this notification in Form-1 as given in Appendix-II of the EIA. Notification, 2006, for grant of environmental clearance under the provisions of the EIA Notification, 2006, and all such applications shall be considered by the concerned Expert Appraisal Committee or the State Level Expert Appraisal Committee, as the case may be, who shall decide on the due diligence necessary including preparation of Environmental Impact Assessment Report and public consultation and the application shall be appraised accordingly for grant of environmental clearance.

PP has applied vide **Proposal No. IA/RJ/MIN/81291/2018 dated 04.10.2018** in compliance of MoEFCC notification date d06.04.2018 for revalidation of EC dated 26.12.2005 under EIA Notification, 2006.

4. The PP submitted that total mining lease area is – 1516.88 Hectare (Forest-409.88 Ha, Non-Forest 1107 Ha) and the said lease was originally granted by State Govt. in 1913 for a period of 30 years for limestone. First Renewal was granted on 28.07.1943 for 30 Years w.e.f. 01.08.1943 for Limestone Second renewal was for 20 years w.e.f. 01.08.1973 and after 01.08.1993 it was under deemed renewal upto 31.07.2013. As per Section 8A (5) of MMDR (Amendment) 2015, Lease period of Mining leases used for captive purpose has been extended up to 31.03.2030.

5. The PP submitted that out of 1516.88-hectare area 1107 hectare is Non-forest and 409.88 ha is Forest land. Out of 409.88-hectare forest land, 108 hectares is diverted vide letter No. 8-2/97-FC dated 03.04.1998 and 100 hectare is diverted vide letter No. 8-26/2003-FC dated 13.11.2006. For the balance 201.88-hectare area, PP has applied for the diversion in the year of 2012. Further renewal of diversion of 208 ha of forest land has been obtained vide letter No. 8-26/2003-FC (Pt.II) dated 18.12.2013. There are 2 nos of Sanctuaries, one is “Ramgarh Sanctuary” which is 2.65 Km away and another is “National Ghariyal sanctuary” which is 2.5 Km away. (for ESZ, permission has been granted by MoEF&CC in its 31st standing committee on 12th/13th August 2014). PP submitted that Forest area of 409.88 ha falls under buffer zone of RTR (Ranthambore Tiger Reserve) for which NBWL approved de-notification in its 45th standing committee meeting on 04.09.2017.

6. The PP submitted that it is a captive limestone mine and has large capacity for limestone production, hence the mining is carried out by conventional scientific open cast mechanized method, which includes drilling, and blasting, loading, Hauling & transport by dumpers to crusher. There is no major source of emissions except emission from combustion of fuels in the Transportation Vehicle & Material Handling. Besides, to further control the emissions regular preventive maintenance of Equipment/ Transportation Vehicles is being/ will be carried out which also helps in Drilling machines are being equipped with wet drilling arrangements. Controlled adopted and optimum use of explosive energy helps in reducing the air pollution. The main sources of noise are operation of HEMMs etc. Proper maintenance of HEMMs helps in reducing generation of noise. PPEs like helmets, safety shoes ear plugs & ear muffs are being /will be provided to the working professionals. There is no overburden or waste generated Septic tanks & Soak pits are being/ will be provided for the disposal of waste water generated from Wastewater generated from workshop is being passed through oil & water separator and after treatment is being used for dust suppression.

7. PP has submitted that Green belt development & Plantation will be carried out in & around mining lease area as per the approved mining plan. 40.6 % area w.r.t mining and allied activities under greenbelt development. At conceptual stage out of total excavated area part area will be backfilled and reclaimed by plantation and remaining area will be converted into water reservoir. Greenbelt will be developed on 7.5 m statutory barrier all along the lease boundary. Native species will be planted in consultation with State Forest Department.

8. The PP submitted that the MEZ River is passing through the lease area, Chambal River (~3.5 km in East direction) and KuranNadi (~4.5 km in SW direction). The total water requirement for mining is 94 KLD. Water required for Green Belt Development is 30 KLD, Dust Suppression 40 KLD, Mine operation (HEMM washing, workshops) 10 KLD and Domestic Purpose is 14 KLD which is sourced from the excavated harvested rain water in the mine pit. PP reported that they have already applied for permission for ground water/harvested rain water from CGWA.

9. The Cost of Environment Protection for this Project shall be Rs 2.0 Crore (Capital) and Rs 65 Lakh (Recurring).

10. PP has submitted that since this is an existing Mining project hence there is no requirement of rehabilitation and resettlement.

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

12. The PP submitted that the Capital Cost of the Project will be Rs 61.90 Crores /- as on Yr 2017. PP reported that the total Manpower employed in the existing mining operation is 51.

13. **The proposal was placed in 38th EAC meeting held during November 15-16, 2018** and the Committee noted that as per the above notification S.O. 1530(E) dated 06.04.2018 the Project Proponent has applied for ToR on 4th October 2018 i.e. before the due date for application under this notification and submitted the Form-1 and Pre-Feasibility Report. Based on the discussion held and documents submitted the Committee was of the view that PP has not submitted the complete information with respect to past production details for examining the matter in light of Common Cause Order dated 2.08.2017 and S.O. 804(E) dated 14.03.2017. The Committee thus, of the view that PP should submit all the requisite information viz. a) documents required as per annexure-III of agenda for examining the matter in light of common cause order dated 02.08.2017 and S.O. 804(E) dated 14.03.2017; comparative of all the figures (mineral, waste, OB, top-soil, land use, water requirement, etc.) mentioned in the previous EC and what is proposed now, details of any modification / expansion / amendment / change of scope of work/method of mining etc. if any carried out after grant of EC. The Committee also asked the Ministry to examine the matter for requirement of NBWL Clearance, Forest Clearance, violation of SC Order dated 2.08.2017 and S.O. 141(E) dated 14.03.2017. The Committee, therefore, **deferred** the proposal.

14. **The Ministry informed the same to PP vide letter dated 09.01.2019** requested to submit the requisite information. **PP vide its letter Ref. No. LK/ENV/MINES/ dated 25.02.2020** has submitted the following information/clarification:

1. Past production details for examination the matter in light of Common Cause order dated 02.08.2017 and S. O. 804 (E) dated 14.03.2017

Submission of PP: PP has submitted the past production details for the period from 1987-88 to 2017-2018 authenticated by DMG, Rajasthan vide letter No. खअ/को/अधि.नि./ 2016-17/2537 dated 13.11.2018. PP has also submitted the past production details for the period from April, 2018 to December, 2019 authenticated by DMG, Rajasthan vide letter No. खअ/को/अधि.नि./ 2016-17/4781 dated 08.01.2020.

2. Documents required as per annexure III of agenda for examination the matter in light of Common Cause order dated 02.08.2017 and S. O. 804 (E) dated 14.03.2017.

Submission of PP: PP has submitted Annexure-III.

3. Comparative of all the figures (mineral, waste, OB, Top Soil, land use, water requirement etc) mentioned in the previous EC and what is proposed now.

Submission of PP: PP has submitted the following details:

S. No	Particulars	Details as per EC	Details as per present proposal (As per present Mining Plan)
1.	Limestone (Million TPA)	1.5	1.5
2.	Overburden (Lacs M3/Annum)	10.08	11.25 (max)
3.	Total Excavation (Million TPA)	3.4152	3.673 (max)
4.	Wobbler & Screening plant (TPA)	400	400
5.	Water Requirement (KLD)	94	94

Comparison of land use at conceptual stage as per EC and as per present proposal is given below:

S. No	Land Use Category	Details as per EC (As on 26/12/2005) (In Ha)	Details as per present proposal (As per present Mining plan) (In Ha)
1.	Area to be excavated /Area under Excavation	405	252.37
2.	Storage of Top Soil	0	0
3.	Waste dump sites	60.48	60.4
4.	Mineral Storage	2.1	2.1
5.	Infrastructure, Workshop, Administrative Building, Townships, plant inclusive of Rails and Roads	102.33	101.64
6.	Green Belt	133.44	85

7.	Effluent Treatment Plant	0.5	0
8.	Mineral Separation Plant	37.31	0
9.	Undisturbed Area	775.72	1015.37
	Total	1516.88	1516.88

4. Details of any modification/ expansion/ amendment/change of scope of work/ method of mining etc. if any carried out after grant of EC.

Submission of PP: PP has submitted the following details:

S. No	Particulars	Details as per EC	Details as per present proposal (As per present Mining plan)
1.	Method of mining	Fully Mechanized opencast Method	Fully Mechanized opencast Method
2.	Total Geological Reserves / resources (Lacs tonnes)	295.11	115.27 (Reserves may be increased after detailed exploration)
3.	Total Mineable reserves (Lacs tonnes)	184.03	104.20 (Reserves may be increased after detailed exploration)
4.	Life of Mine (years)	18	Additional 9 years based on current mining plan (Life of mine will be increased after further exploration)
5.	Bench Height (m)	6-9	6-9
6.	Working Bench Width (m)	15-20	15-20
7.	Ultimate Pit Slope (°)	45	45
8.	Elevation Range (m AMSL)	235-332	235-332
9.	General Ground Water Level (m bgl)	10-24	25
10.	Ultimate Working Depth (m Bgl)	18	18
11.	Number of Working Days	330	330
12.	Number of shifts per day	2	2

5. Details of clearance obtained NBWL and forest Clearance.

Details of Wildlife Clearance:

PP has submitted that there are 2 nos of Sanctuaries, one is “Ramgarh Sanctuary” which is 2.65 Km away and another is “National Ghariyal sanctuary” which is 2.5 Km away. (for ESZ, permission has been granted by MoEF&CC in its 31st standing committee on 12th/13th August 2014). Annexure IV. Forest area of 409.88 ha falls under buffer zone of RTR (Ranthambore Tiger Reserve) for which NBWL approved de-notification in its 45th standing committee meeting on 04.09.2017. PP has enclosed Minutes of 45th Meeting of the Standing Committee of NBWL held on 4th September 2017.

Details of Forest clearance:

PP has submitted that Out of 409.88 ha Forest area, Forest Clearance for 108 ha is obtained on 07-04-1998. Out of the 409.88 ha of forest area, FC obtained on 13-11-2006 for another 100 ha. Renewal of 208 ha forest land has been done on 18.12.2013. Application for FC for balance of 201.88 ha submitted in 2012. According to the current statutory requirement, the ACC paid the NPV for the entire forest area of 409.88 ha.

6. The committee after detailed deliberations during the EAC meeting held on 19-21 August, 2020 and **deferred the proposal**, as the forest area of 409.88 ha falls under buffer zone of Ranthambore Tiger Reserve (RTR) for which NBWL has approved de-notification in its 45th standing committee meeting on 04.09.2017. However, de notification not published/issued by the Ministry. Therefore, the comments may be sought from WL division and NTCA for issuance of the ToR, keeping the sensitivity involved, as the proposal is within the bufferzone of the Ranthambore Tiger Reserve.

2.20 Expansion of Sanu-II Limestone Mining Project of M/s Rajasthan State Mines and Minerals Limited located in Village Joga, Tehsil Ramgarh, District Jaisalmer, Rajasthan (998.4 ha) [Proposal No: IA/RJ/MIN/151874/2020; File No: J11015/43/2006-IA.II (M)] - Corrigendum w.r.t. production Capacity of steel grade limestone 1.25 MTPA with ROM limestone 3.1 MTPA.

The proposal of M/s Rajasthan State Mines and Minerals Limited is for Corrigendum w.r.t. production Capacity of steel grade limestone 1.25 MTPA with ROM limestone 3.1 MTPA in the EC granted vide Letter No.J-11015/43/2006-IA.II (M) dated 06.08.2007 for Expansion of Sanu-II Limestone Mining Project of M/s Rajasthan State Mines and Minerals Limited located in Village Joga, Tehsil Ramgarh, District Jaisalmer, Rajasthan (998.4 ha).

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

3. PP has submitted that Environmental Clearance was granted by the Ministry vide Letter No.J-11015/43/2006-IA.II (M) dated 06.08.2007 for Expansion of Sanu-II Limestone Mining Project of M/s Rajasthan State Mines

and Minerals Limited located in Village Joga, Tehsil Ramgarh, District Jaisalmer, Rajasthan (998.4 ha).

PP vide its **Proposal No. IA/RJ/MIN/151874/2020 dated 09.06.2020** has applied for Corrigendum w.r.t. production Capacity of steel grade limestone 1.25 MTPA with ROM limestone 3.1 MTPA in the EC granted vide Letter No.J-11015/43/2006-IA.II (M) dated 06.08.2007

4. **PP in its letter No. F.19 (5) 3/14/2020-21/ dated 09.06.2020** has submitted that they have requested for inclusion of Run of Mine (RoM) quantity in the Environment Clearance granted for Sanu-I & Sanu-II Limestone Mines in District Jaisalmer in year 2007. PP has further submitted the following in this regard:

Project Name	PP's original application (questionnaire) submitted as ENVIRONMENTAL APPRAISAL during grant of EC in 2006-07	MOEF - EC Granted with following note Questionnaire	Request for corrigendum
Sanu-II Limestone Mines [File No. J11015/43/2006-IA.II (M)]	Para 12 (iii) Projected production for the next year-5 years from year 2006 to year 2010 in million Tonne PP's comments: 1.0 2006 with RO excavation 2.39 1.25 with RO excavation 3.1 onwards	Targeted production capacity of the mine is 12.5 Lakh TPA (1.25 million TPA) of steel grade limestone	Total limestone excavation (ROM) 3.1 lakh MT/annum with steel grade Limestone (30-80 mm): 12.50 lakh MT/annum & Sub Grade Limestone 18.50 lakh MT/annum

5. PP has submitted that Review of Mining Plan along with PMCP has been approved by IBM vide letter no. 584(4)(3)(1709)/2017-छेखानि - अजम/2294 dated 01/08.12.2017.

6. The committee after detailed deliberations during the EAC meeting held on 19-21 August, 2020 is of the view that the proposal is not as per the EIA, 2006. The project proponent should apply a fresh proposal to the Ministry for change in ROM. Therefore, the committee **returned the proposal in the present form.**

Standard Terms of Reference (TOR) for Mining Project

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Annexure-II

Standard Tor Beneficiation

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Annexure-III

Standard EC Conditions: (As Ministry's O.M No 22-34/2018-IA.III dated 8.01.2019 and Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 and modified to make monitorable and relevant to the sector)

I. Statutory compliance

- 1) This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- 2) The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
- 3) The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
- 4) The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- 5) A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- 6) State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- 7) The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
- 8) The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or

mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

II. Air quality monitoring and preservation

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

10) Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.

III. Water quality monitoring and preservation

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

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

13) The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.

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

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

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

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

IV. Noise and vibration monitoring and prevention

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

19) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.

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

V. Mining plan

21) The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden & dump management, O.B& dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).

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

VI. Land reclamation

23) The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.

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

areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.

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

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

VII. Transportation

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

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

VIII. Green Belt

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

30) The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.

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

IX. Public hearing and human health issues

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

X. Corporate Environment Responsibility (CER)

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

infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.

XI. Miscellaneous

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

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

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

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

38) The concerned Regional Office of the MoEFCC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEFCC officer(s) by furnishing the requisite data / information / monitoring reports.

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

Annexure-IV

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

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

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

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

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

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

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

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

of additional railway network/conveyor belt/ pipelines etc. shall be submitted periodically to Regional office of the MoEF&CC.

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

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

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

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

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

13) The mining activity in Joda-Koira sector is expected to continue for another 100 years, therefore, it will be desirable to develop proper rail network in the region. Rail transport shall not only be pollution free mode but also will be much economical option for iron ore transport. The rail network and/or conveyor belt system upto public railway siding needs to be created. The total length of the conveyor belt system/ rail network to be developed from mines to nearest railway sidings by 11 mines in Joda region is estimated to be about 64 km. Similarly, in Koira region, total length of rail network/ conveyor system for 8 mines (under SOTM 1 & 2) is estimated to be around 95 km. Further, it is suggested to develop a rail network connecting Banspani (Joda

region) and Roxy railway sidings in Koiraregion. Responsibility: Dept. of Steel & Mines, Govt. of Odisha and Concerned Mines along with Indian Railways. Time Period: Maximum 7 years (by 2025). The Department of Steel & Mines, Govt. of Odisha should follow-up with the concerned Departments and railways so that proposed proper rail network is in place by 2025.

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

15) Mining Operations/Process Related: Project Proponent shall implement the following mitigation measures: (i) Appropriate mining process and machinery (viz. right capacity, fuel efficient) should be selected to carry out various mining operations that generate minimal dust/air pollution, noise, wastewater and solid waste. e.g. drills should either be operated with dust extractors or equipped with water injection system. (ii) After commencement of mining operation, a study should be conducted to assess and quantify emission load generation (in terms of air pollution, noise, waste water and solid waste) from each of the mining activity (including transportation) on annual basis. Efforts should be made to further eliminate/ minimize generation of air pollution/dust, noise, wastewater, solid waste generation in successive years through use of better technology. This shall be ensured by the respective mine lease holders. (iii) Various machineries/equipment selected (viz. dumpers, excavators, crushers, screen plants etc.) and transport means should have optimum fuel/power consumption, and their fuel/power consumption should be recorded on monthly basis. Further, inspection and maintenance of all the machineries/ equipment/ transport vehicles should be followed as per manufacturer's instructions/ recommended time schedule and record should be maintained by the respective mine lease holders. (iv) Digital processing of the entire lease area using remote sensing technique should be carried out regularly once in 3 years for monitoring land use pattern and mining activity taken place. Further, the extent of pit area excavated should also be demarcated based on remote sensing analysis. This should be done by ORSAC (Odisha Space Applications Centre, Bhubaneswar) or an agency of national repute or if done by a private agency, the report shall be vetted/ authenticated by ORSAC, Bhubaneswar. Expenses towards the same shall be borne by the respective mine lease holders. Responsibility: Individual Mine Lease Holders.

16) Air Environment Related: Project Proponent shall implement the following mitigation measures: (i) Fugitive dust emissions from all the sources should be controlled regularly on daily basis. Water spraying arrangement on haul roads, loading and unloading and at other transfer points should be provided and properly maintained. Further, it will be desirable to use waterfogging system to minimize water consumption. It should be ensured that the ambient air quality parameters conform to the norms prescribed by the CPCB in this

regard. (ii) The core zone of mining activity should be monitored on daily basis. Minimum four ambient air quality monitoring stations should be established in the core zone for SPM, PM10, PM2.5, SO₂, NO_x and CO monitoring. Location of air quality monitoring stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board (based on Emission Load Assessment Study). The number of monitoring locations may be more for larger capacity mines and working in larger area. Out of four stations, one should be online monitoring station in the mines having more than 3 MTPA EC Capacity. (iii) Monitoring in buffer zone should be carried out by SPCB or through NABET accredited agency. In addition, air quality parameters (SPM, PM10, PM2.5, SO₂, NO_x and CO) shall be regularly monitored at locations of nearest human habitation including schools and other public amenities located nearest to source of the dust generation as applicable. (iv) Emissions from vehicles as well as heavy machinery should be kept under control and regularly monitored. Measures should be taken for regular maintenance of vehicles used in mining operations and in transportation of mineral. (v) The vehicles shall be covered with a tarpaulin and should not be overloaded. Further, possibility of closed container trucks should be explored for direct to destination movement of iron ore. Air quality monitoring at one location should also be carried out along the transport route within the mine (periodically, near truck entry and exit gate), Responsibility: Individual Mine Lease Holders and SPCB.

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

18) Water/Wastewater Related: Project Proponent shall implement the following mitigation measures: (i) In general, the mining operations should be restricted to above ground water table and it should not intersect groundwater table. However, if enough resources are estimated below the ground water table, the same may be explored after conducting detailed geological studies by GSI and hydro- geological studies by CGWB or NIH or institute of national repute, and ensuring that no damage to the land stability/ water aquifer

system shall happen. The details/ outcome of such study may be reflected/incorporated in the EIA/EMP report of the mine appropriately. (ii) Natural watercourse and/or water resources should not be obstructed due to any mining operations. Regular monitoring of the flow rate of the springs and perennial nallas should be carried out and records should be maintained. Further, regular monitoring of water quality of nallas and river passing thorough the mine lease area (upstream and downstream locations) should be carried out on monthly basis. (iii) Regular monitoring of ground water level and its quality should be carried out within the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring should be carried out on monthly basis. (iv) In order to optimize water requirement, suitable conservation measures to augment ground water resources in the area should be undertaken in consultation with Central Ground Water Board (CGWB). (v) Suitable rainwater harvesting measures on long term basis should be planned and implemented in consultation with CGWB, to recharge the ground water source. Further, CGWB can prepare a comprehensive plan for the whole region. (vi) Appropriate mitigation measures (viz. ETP, STP, garland drains, retaining walls, collection of runoff etc.) should be taken to prevent pollution of nearby river/other water bodies. Water quality monitoring study should be conducted by State Pollution Control Board to ensure quality of surface and ground water sources on regular basis. The study can be conducted through NABL/ NABET approved water testing laboratory. However, the report should be vetted by SPCB. (vii) Industrial wastewater (workshop and wastewater from the mine) should be properly collected, treated in ETP so as to conform to the discharge standards applicable. (viii) Oil and grease trap should be installed before discharge of workshop effluents. Further, sewage treatment plant should be installed for the employees/colony, wherever applicable. (ix) Mine lease holder should ensure that no silt originating due to mining activity is transported in the surface water course or any other water body. Appropriate measures for prevention and control of soil erosion and management of silt should be undertaken. Quantity of silt/soil generated should be measured on regular basis for its better utilization. (x) Erosion from dumps site should be protected by providing geo-textile matting or other suitable material, and thick plantation of native trees and shrubs should be carried out at the dump slopes. Further, dumps should be protected by retaining walls. (xi) Trenches / garland drain should be constructed at the foot of dumps to arrest silt from being carried to water bodies. Adequate number of check dams should be constructed across seasonal/perennial nallas (if any) flowing through the mine lease areas and silt be arrested. De-silting at regular intervals should be carried out and quantity should be recorded for its better utilization, after proper soil quality analysis. (xii) Thewater so collected in the reservoir within the mine should be utilized for the sprinkling on hauls roads, green belt development etc. (xiii) There should be zero waste water discharge from the mine. Based on actual water withdrawal and consumption/ utilization in different activities, water balance diagram should be prepared on monthly basis, and efforts should be made to optimize consumption of water per ton of ore production in successive years. Responsibility: Individual Mine Lease Holders, SPCB and CGWB.

19) Land/ Soil/ Overburden Related: Project Proponent shall implement the following mitigation measures: (i) The top soil should temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long (not more than 3 years or as per provisions mentioned in the mine plan/ scheme). The topsoil should be used for land reclamation and plantation appropriately. (ii) Fodder plots should be developed in the non-mineralised area in lieu of use of grazing land, if any. (iii) Over burden/ low grade ore should be stacked at earmarked dump site (s) only and should not be kept active for long period. The dump height should be decided on case to case basis, depending on the size of mine and quantity of waste material generated. However, slope stability study should be conducted for larger heights, as per IBM approved mine plan and DGMS guidelines. The OB dump should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles should be undertaken for stabilization of the dump. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Proper records should be maintained regarding species, their growth, area coverage etc. (iv) Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from mine operation, soil, OB and mineral dumps. The water so collected can be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly de-silted, particularly after monsoon and should be maintained properly. Appropriate documents should be maintained. Garland drain of appropriate size, gradient and length should be constructed for mine pit, soil, OB and mineral dumps and sump capacity should be designed with appropriate safety margin based on long term rainfall data. Sump capacity should be provided for adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and de-silted at regular intervals. (v) Backfilling should be done as per approved mining plan/scheme. There should be no OB dumps outside the mine lease area. The backfilled area should be afforested, aiming to restore the normal ground level. Monitoring and management of rehabilitated areas should continue till the vegetation is established and becomes self-generating. (vi) Hazardous waste such as, waste oil, lubricants, resin, and coal tar etc. should be disposed off as per provisions of Hazardous Waste Management Rules, 2016, as amended from time to time. Responsibility: Individual Mine Lease Holders.

20) Ecology/Biodiversity (Flora-Fauna) Related: Project Proponent shall implement the following mitigation measures: (i) All precautionary measures should be taken during mining operation for conservation and protection of endangered fauna namely elephant, sloth bear etc. spotted in the study area. Action plan for conservation of flora and fauna should be prepared and implemented in consultation with the State Forest and Wildlife Department within the mine lease area, whereas outside the mine lease area, the same should be maintained by State Forest Department. (ii) Afforestation is to be done by using local and mixed species saplings within and outside the mining lease area. The reclamation and afforestation is to be done in such a manner like exploring the growth of fruit bearing trees which will attract the fauna and thus maintaining the biodiversity of the area. As afforestation done so far

is very less, forest department needs to identify adequate land and do afforestation by involving local people in a time bound manner. (iii) Green belt development carried out by mines should be monitored regularly in every season and parameters like area under vegetation/plantation, type of plantation, type of tree species /grass species/scrubs etc., distance between the plants and survival rate should be recorded. (iv) Green belt is an important sink of air pollutants including noise. Development of green cover in mining area will not only help reducing air and noise pollution but also will improve the ecological conditions and prevent soil erosion to a greater extent. Further, selection of tree species for green belt should constitute dust removal/dust capturing plants since plants can act as efficient biological filters removing significant amounts of particulate pollution. Thus, the identified native trees in the mine area may be encouraged for plantation. Tree species having small leaf area, dense hair on leaf surface (rough surface), deep channels on leaves should be included for plantation. (v) Vetiver plantation on inactive dumps may be encouraged as the grass species has high strength of anchoring besides medicinal value. (vi) Details of compensatory afforestation done should be recorded and documented by respective forest divisions, and State Forest Department should present mine-wise annual status, along with expenditure details. Responsibility: Individual Mine Lease Holders and State Forest & Wildlife Department.

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

22) Road Transport Related: Project Proponent shall implement the following mitigation measures: (i) All the mine lease holders should follow the suggested ore transport mode (SOTM), based on its EC capacity within next 5 years. (ii) The mine lease holders should ensure construction of cement road of appropriate width from and to the entry and exit gate of the mine. Further,

maintenance of all the roads should be carried out as per the requirement to ensure dust free road transport. (iii) Transportation of ore should be done by covering the trucks with tarpaulin or other suitable mechanism so that no spillage of ore/dust takes place. Further, air quality in terms of dust, PM10 should be monitored near the roads towards entry & exit gate on regular basis, and be maintained within the acceptable limits. Responsibility: Individual Mine Lease Holders and Dept. of Steel & Mines.

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

Annexure-V

Standard EC conditions for Mineral Beneficiation Plants:

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

List of member of Expert Appraisal Committee Participated through VC

S.No	Member Name	Member Address	Designation	19th AUG	20th AUG	21st AUG
1	Dr. S.R. Wate	Add. 148/149, Nagar Vikas Society, Narendra Nagar, Nagpur-440015, Maharashtra	Chairman	Yes	Yes	Yes
2	Shri.Sharath Kumar Pallerla	3rd Floor, Vayu Block, Indira ParyawaranBhawan, MoEF&CC, Jorbhag, New Delhi-11003	Member Secretary	Yes	Yes	Yes
3	Shri B Ramesh Kumar	H-No. 6-1-134/6, Balram Compound, Padmarao Nagar, Secundrabad- 500025,Andhra Pradesh	Member	Yes	Yes	Yes
4	Prof. S. Ramakrishna Rao	50-120-9/1, Tulasi Mani Regency North Extension, Seethammadhara, Visakhapatnam - 530013 Andhra Pradesh.	Member	Yes	Yes	Yes
5	Shri Santosh Gupta	Flat No. 405, Block –B, Gaur Green Vista, NyayKhand -1, Indrapuram, Ghaziabad-201014	Member	Yes	Yes	Yes
6	Dr. (Ms.) Asha Rajvanshi	Wildlife Institute of Inida, Chandrabani, Dehradun-248001	Member	No	No	No
7	Dr. Ajay Deshpande	Building A-26, Flat-403, Happy Valley Homes, Manpada, Ghodbunder Road, Thane (West) - 400610, Maharashtra	Member	Yes	Yes	Yes
8	Shri G.P. Kundargi	Plot No. 32, MOIL Vatika, Chicholi Road, Fetri, Nagpur 441501, Maharashtra	Member	No	No	No
9	Dr. A.K. Malhotra	C-6, SubhavnaNiketan, Road No. 41, Pitampura, Delhi-110034	Member	Yes	Yes	Yes
10	Dr. Gurdeep Singh	Centre of Mining Environment, Department of Environmental Science &Engg. Indian Institute of Technology (Indian School of Mines), Dhanbad-826004	Member	Yes	Yes	Yes

11	Dr. Parimal Chandra Bhattacharjee	A/3 Asiyana Housing Complex Maligaon, Guwahati-781011, Assam	Member	No	No	No
12	Prof. MukeshKhare	Department of Civil Engineering, IIT, Delhi	Member	Yes	Yes	Yes
13	Mr. V. K. Soni	Government of India, Ministry of Earth Sciences, India Meteorological Department, MausamBhawan, Lodi Road, New Delhi – 110003	Member	Yes	Yes	Yes
14	Sh. Pankaj Kulakshethra	Regional Controller of Mines, IBM Block D, Second Floor, Indira Bhavan, Civil Lines, Nagpur - 440001	Member	Yes	Yes	Yes
15	Sh. Aftab Ahmend	Representative of DGMS, DMS, Room No. 201-203, II Floor, B-Block, CGO-II,, Hapur Rd, Kamla Nehru Nagar, Ghaziabad, Uttar Pradesh 201002	Member	No	No	No
16	Sh. B.K. Soda	ADM, Jaipur, Representative of State Government of Rajasthan	Special invitee	Yes	No	No

Email**sharath.kr@gov.in**

Re: Draft MoM in respect of 20th EAC meeting held during 19-21st August, 2020 - Regarding

From : satishwate@gmail.com

Sun, Aug 30, 2020 05:00 PM

Subject : Re: Draft MoM in respect of 20th EAC meeting held during 19-21st August, 2020 - Regarding**To :** Sharath Kumar Pallerla <sharath.kr@gov.in>

Dear Dr. Sharath ,

Minutes of the 20 th EAC meeting for Non Coal are approved . You can upload

Regards

Satish Wate
Chairman
EAC Non Coal

Sent from my iPhone

On Aug 30, 2020, at 3:55 PM, Sharath Kumar Pallerla <sharath.kr@gov.in> wrote:

Respected sir,

It is to inform that the agreement on draft minutes were communicated by Dr. AK Malhotra, Prof. Gurdeep Sing, Prof. Ramakrishna Rao. No comments received from other members. The changes in respect of 2.13 has been made along following correction related to spelling. Final version has been attached. If agreed, the minutes will be uploaded on the website.

Proposal No 2.1:

1. Apprised (Pg. No: 5)
2. Mining depth be maintained (Pg. No: 6)
3. Apprised (Pg. No: 7)
4. Mining depth be maintained (Pg. No: 8)
5. Compliance to point no 3 is missing (Pg. No: 21)
6. Mining depth be maintained (Pg. No: 27)
7. And (Pg. No: 29)
8. Sapling (Pg. No: 29)
9. Has (Pg. No: 30)
10. Was (Pg. No: 30)
11. Minable (Pg. No: 40)

Proposal No 2.2:

1. Accordingly (Pg. No: 43)
2. Apprised (Pg. No: 44)
3. Mining depth be maintained (Pg. No: 46)
4. Apprised (Pg. No: 46)
5. Mining depth be maintained (Pg. No: 47)
6. Has (Pg. No: 68)
7. Minable (Pg. No: 78)

Proposal No 2.3:

1. Apprised (Pg. No: 82)
2. Mining depth be maintained (Pg. No: 83)

3. Apprised (Pg. No: 84)
4. Mining depth be maintained (Pg. No: 85)
5. Letter No format is mismatching (Pg. No: 94)

Proposal No 2.4:

1. \$ sign is there (Pg. No: 105)
2. Are (Pg. No: 106)

Proposal No 2.5:

1. NAASQ (Pg. No: 117)
2. Has (Pg. No: 119)
3. Of (Pg. No: 129)

Proposal No 2.7:

1. NoC (Pg. No: 160)

Proposal No 2.8:

2. Submitted industries (Pg. No: 167)

From: satishwate@gmail.com

To: "Sharath Kumar Pallerla" <sharath.kr@gov.in>

Sent: Sunday, August 30, 2020 9:30:10 AM

Subject: Re: Draft MoM in respect of 20th EAC meeting held during 19-21st August, 2020 - Regarding

Dear Dr. Sharath,
Minutes Approved after inclusion of Public Hearing in item 2.13 Tata steel Joda Mine. Others have not sent any comments

Regards
Satish Wate
Chairman

Sent from my iPhone

On Aug 29, 2020, at 7:15 PM, Satishwate <satishwate@gmail.com> wrote:

In the minutes at 2.23 if Joda mines if Tata steel, we have mentioned standard ToR and specific ToR but not mentioned Public hearing any where. It should be mentioned in the minutes.

Rest of the items are perfect.

Satish Wate

Sent from my iPhone

On Aug 29, 2020, at 6:00 PM, Sharath Kumar Pallerla <sharath.kr@gov.in> wrote:

Yes, it is required

From: satishwate@gmail.com

To: "Sharath Kumar Pallerla" <sharath.kr@gov.in>

Sent: Saturday, August 29, 2020 4:33:56 PM

Subject: Re: Draft MoM in respect of 20th EAC meeting held during 19-21st August, 2020 - Regarding

Excellent! Minutes are ok. In case of Tata steel ToR, do they need to go through PH. Just check and revert.

S.R.Wate

Sent from my iPhone

On Aug 29, 2020, at 3:57 PM, Sharath Kumar Pallerla <sharath.kr@gov.in> wrote:

Respected Chairman and Members,

Please find attached herewith draft MoM of 20th EAC (Non-coal mining) held during 19-21st August, 2020 for kind perusal and approval by tomorrow please.

Regards,
Member Secretary, NCM



<Draft MoM_20th EAC meeting.docx>



<Final MoM_20thEAC-NCM.pdf>