

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

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

The Twenty First meeting of the Reconstituted Expert Appraisal Committee for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during **August 29-30, 2017**. The list of participants is annexed.

After welcoming the Committee Members, discussion on each of the Agenda Items was taken up ad-seriatim.

1. Circulation of the Minutes of the 20thEAC Meeting:

The Minutes of the 20th Meeting of EAC held during July 24th, 2017 were circulated.

(2.1) Enhancement of capacity of Mainpat Bauxite Mine of M/s Bharat Aluminium Company Ltd. from 0.75 Million TPA to 2.25 Million TPA in M.L. Area of 639.169 Ha. located at Village: Kesra, Kudhardih & Sapnadar, Post: Kamleshwarpur, Taluka: Mainpat District: Surguja (Ambikapur), Chhattisgarh – reconsideration of environmental clearance regarding [No.J-11015/166/2016-IA-II(M)].

The proposal of M/s Bharat Aluminum Company Ltd. is for expansion of production for Mainpat Bauxite Mine with capacity enhancement from existing 0.75 Million TPA to 2.25 Million TPA. The mine lease area is located at Village: Kesra, Kudhardih & Sapnadar, Post: Kamleshwarpur, Taluka: Mainpat District: Surguja (Ambikapur), Chhattisgarh over an area of 639.169 Ha. The mining lease is divided in to 4 blocks and falls between 22°46'03.79"N to 22°52'7.36"N latitudes and 83°14'26.50"E to 83°18'17.83"E longitudes on Survey of India Topo-sheet No. F44L1, F44L2, F44L5, F44L6. The location detail of mine lease area was checked during the earlier EAC meeting held during June 28, 2017 using KML/SHP files on Google Earth/DSS.

The application for Environmental Clearance was submitted to MoEF&CC, New

Delhi, on 20.06.2016. The proposal was considered in 8th meeting of the EAC (Non-Coal Mining), held on 21.07.2016 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TOR was issued by MoEF&CC vide letter No. J-11015/166/2016-IA.II (M) dated 17.08.2016. The EIA/EMP Report was submitted online to Ministry for seeking environment clearance on 27.05.2017. The location details of mine lease area were checked using KML/SHP files on Google Earth/ DSS. The mine lease area is 639.169 ha comprising of 376.924 ha forest land, 40.107 ha government land and 222.138 ha private agricultural land. The Forest Clearance for diversion of 376.924 Ha of Revenue Forest land was issued by MoEFCC, New Delhi vide letter No. 8-31/97-FC dated 24.05.2000. The forest clearance validity was extended up to 08.07.2042 i.e. co-terminus with lease period, vide letter No F-5-62/2008/10-2 dated 03.09.2016 by the Office of Principal Chief Conservator of Forests, Chhattisgarh.

The proposal was earlier placed in EAC meeting held on June 28, 2017 wherein the PP made submissions that the Mining lease over an area of 639.169 hectares was initially granted to BALCO vide order no. 3/74/89/12307 dated 27.03.1992 by Govt. of Madhya Pradesh for a period of 20 years from 09.07.1992 to 08.07.2012. The mining operations commenced from year 1993. The mining lease period was extended up to 08.07.2042 under provision of 8(A) 5 of the MMDR Amendment Act, 2015 and supplementary lease agreement between Govt. of Chhattisgarh & BALCO has been signed dated 30.07.2015. The Modified mining plan with progressive mine closure plan for 2.25 Million TPA has been approved by the IBM, Raipur, vide letter No. Sarguja/Baux/Khani/ 46/2016-Raipur/507 dated 26.09.2016. The Committee noted that as per the approved mine plan, the maximum excavated load is 78,93,497 Tonnes for 2018-19 and suggested that EC be issued on total excavation basis. As per the past production details, the mine is operating since 1993. The PP obtained 'Consent to Operate' under Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 for mine operation on 04.12.1993 for 4.5 lakh TPA. Bauxite, being a major mineral, was covered under the provisions of EIA Notification, 1994. However, the mine has continuously and progressively expanded till it obtained EC on 17.09.2008 even after commencement of EIA Notification, 1994. As per Ministry's O.M. dated 28.10.2004, *if the annual production of any year from 1994-95 onwards exceeds the annual production of 1993-94 or its preceding years (even if approved by IBM); it would constitute expansion*, hence, the instant project is a case of expansion without prior EC. The project has also violated the SPCB consented production capacity of 4.5 Lakh TPA from 2002-03 to 2005-06. The Chhattisgarh Environment Conservation Board had filed a case against M/s BALCO in the Court of Chief Judicial Magistrate, Sitapur, Surguja, Chhattisgarh bearing no. 399/2008 for allegedly producing mineral in excess of the consented capacity from 2002-03 to 2005-06 (i.e. 4 consecutive years) under the provisions of Environment (Protection) Act, 1986. The case is sub judice as of now. The earlier EC was granted to the project on 17.09.2008 for 0.75 Million TPA and as per the past production records, the PP has not exceeded the 0.75 Million TPA limit after grant of EC.

The PP vide its letter dated 10.07.2017 had submitted its reply to the Ministry which is placed before the Committee. The information was sought w.r.t. the following issues:

- i. Authenticated past production details from State Government
- ii. Relevant details of Wildlife Conservation Plan along with budgetary allocation.
- iii. Detailed plan of activities proposed under Enterprise Social Commitment (ESC) with budgetary break-up
- iv. Submit status report on the compliance of earlier EC conditions and an undertaking mentioning the timeline to achieve full compliance

i. Information on past production details:

As per the information submitted by PP, the production has not exceeded the EC granted capacity of 0.75 Million TPA of bauxite after 17.09.2008. However, the observations on earlier production achieved by the PP prior to grant of EC on 17.09.2008 are mentioned at preceding paragraphs.

ii. Details of Wildlife Conservation Plan

PP has provided proof of submission of Wildlife Conservation plan for the instant proposal in respect of Indian Monitor Lizard, Indian Peafowl, Elephant Moving Herds and Sloth Bear with a budget provision of ₹50 lakhs for coming 5 years i.e. from 2017-18 to 2021-22. It is submitted that for earlier EC proposal which was granted in 17.09.2008, the PP spent a budget of ₹2.1933 Crore for Wildlife Habitat Improvement Plan from 2008-09 to 2010-11 (3 years).

iii. Detailed plan of activities proposed under Enterprise Social Commitment (ESC)

PP submitted that BALCO is a Company incorporated under the Companies Act, 2013. However, the responsibilities regarding CSR in terms of Section 135 (1) of the Companies Act are currently not applicable on BALCO since it is making losses for last three financial years. However, as a part of this commitment, a social need assessment was carried out in and around Mainpat mine last year. Based on this assessment, a detailed plan of activities under our Enterprise Social Commitment (ESC), duly augmented based on Public Hearing was conceived. The activities proposed under Enterprise Social Commitment have been earmarked a budget of ₹676.15 Lakhs for next 5 years which are further grouped into ₹631.55 Lakhs (based on need assessment) and ₹44.6 Lakhs (proposed after public consultation). Earlier, the PP proposed a budget of ₹ 568.5 Lakhs under the CSR budget for next five years up to Financial year 2022 for addressing various issues like health, education, infrastructure,

livelihood and Women empowerment.

iv. Status report on the compliance of earlier EC conditions and an undertaking mentioning the timeline to achieve full compliance

PP submitted the latest status of compliance of the earlier EC conditions and about the issues raised in earlier inspection report, submitted an undertaking that even if some conditions are observed to be not complied by the authorities, the same shall be complied within 6 months and compliance report shall be submitted.

The Committee noted the submissions made by the PP and made detailed deliberations on the proposal. The Committee asked the PP to increase the budgetary provision of Wildlife Conservation Plan considering the faunal diversity of the area to ₹ 1 Crore. The PP agreed to the suggestions of the Committee to increase the budget. Accordingly, **the proposal was recommended for grant of EC** with following specific conditions:-

- i. PP shall implement Wildlife Conservation Plan of ₹ 1 Crores in next 5 years from 2017-18 to 2021-22 in consultation with State Forest Department and submit the status in half-yearly compliance reports to the concerned R.O. of the Ministry.
- ii. PP shall implement the ESC plan having budgetary allocation of ₹676.15 Lakhs in next 5 years from 2017-18 to 2021-22 and ensure that an expenditure of 2.5% of the instant project cost shall be incurred under the overall ESC plan including the above expenditure. Expenditure under ESC is exclusive of expenditure under overall CSR budget.
- iii. The EC is subject to satisfactory compliance of earlier EC conditions stipulated in EC letter dated 17.09.2008 as well as conditions mentioned in instant letter and a report on status of compliance shall be furnished to the concerned R.O. of the Ministry within 6 months from the issue of this letter.

(2.2) Expansion in production of Dhaneshwar Sandstone Mine of M/s Kanhaiyalal Rameshwar Das from 80,000 TPA (ROM) to 2,50,000 TPA (ROM) located at village- Dhaneshwar & Sutara, Tehsil & District-Bundi, Rajasthan (M.L. area 490.5509 Ha.) – Reconsideration of Environmental Clearance regarding [File No. J-11015/154/2015-IA.II(M)].

The proposal of M/s Kanhaiya Lal Rameshwar Das, Bundi, Rajasthan is for Mining of Sandstone (Minor Mineral) with enhancement of production capacity from 80,000 TPA to 2,50,000 TPA (ROM). The mine lease area is located at Village(s)– Dhaneshwar and Sutara of Tehsil and District–Bundi, Rajasthan in the mine lease area of 490.5509 Ha. The geographical coordinates of the site are between latitudes of 25°04'19.87"N to 25°02'53.11"N and longitudes of 75°32'28.41"E to 75°35'59.18"E

and is covered by Survey of India Topo-sheet No. 45O/12. The location details of mine lease area were checked during the earlier EAC meeting held during June 28, 2017 using KML/SHP files on Google Earth/ DSS.

The proposal of TOR was considered by the EAC in its meeting held on 15.05.2015 and ToR was granted to proponent for undertaking detailed EIA study for the purpose of obtaining Environment Clearance vide Letter No. J-11015/ 154/ 2015 – IA.II (M) dated 11.06.2015. The proposal was considered before the EAC for grant of EC in its meeting held during July 21-22, 2016 wherein the Committee noted that the Jawahar Sagar Wildlife Sanctuary is adjacent to the mine site and this mining project cannot be considered as per the Order of Hon'ble Supreme Court in Writ Petition (C) No. 202 of 1995 in the matter of T.N. Godhavaraman Thirumulpad Vs. Union of India and Ors. which, inter-alia, states that no mining activity can be allowed within 1 km of distance of protected areas. The proposal can be considered only after surrender of lease area towards the protected site in 1km. The proposal was again placed in EAC meeting held during November 23-25, 2016 wherein PP informed that 104.8836 Ha area is surrendered and now the retained area is 516.13 Ha. The KML/SHP files on Decision Support System(DSS), however, indicated that Jawahar Sagar Wildlife Sanctuary is 0.28 Km from the mine lease area, accordingly, PP was again requested to surrender the M.L. area to maintain minimum 1 km distance from the boundary of National Park. The PP has again surrendered residual area from the mine lease to maintain 1 km minimum distance from protected area and the resultant M.L. area was 490.5509 Ha, the supplementary lease deed was executed on 27.05.2017. The mining plan for the 490.5509 Ha lease area was approved by SME, Kota vide letter no. SME/Kota/CC/MP/2017/2014 dated 13.06.2017. A certificate has been furnished by the Office of Mining Engineer, Division – I, Bundi (Raj.) stating that the lease does not fall in "Aravali Range" vide letter no. 58 dated 26.02.2016.

The PP submitted that the lease area comprises of Govt. land (161.2109 Ha), Pvt. Khatedari land (150 Ha), Diversified Forest Land (104.34 Ha) and Grazing land (75.0 Ha). **The Forest diversion for the 104.34 ha. land has been obtained vide letter No. 8-8/78–FC dated 24.02.2000.** The PP had reported that mining is proposed to be carried out by Open Cast Semi-Mechanized method. The height and width of the bench shall be maintained at 6.0 m. The Top soil of 0.5 – 3.0m is scrapped through excavator and stacked at designated places. The Committee noted PP's submissions and mentioned that the EC granted by MoEFCC contains certain set of general and specific conditions related to mine working which needs to be adhered to.

The Committee noted that detailed discussions on the proposal have already been made during earlier EAC meetings. In view of the earlier submissions made by the PP and deliberations, the PP was asked to submit information w.r.t. District Survey Report (DSR) for Sandstone, Silica exposure monitoring study, Specific budget details on PH related issues, Occupational Health budget etc. The PP vide its letter dated

10.07.2017 and 20.07.2017 had submitted its reply to the Ministry which are placed before the Committee as follows:-

Information sought by EAC	PP's Reply dated 10.07.2017 & 20.07.2017
w.r.t. submission of District Survey Report (DSR)	DSR for Bundi district is submitted by the PP.
w.r.t. submission of Silica study report and conducting the study through National Institute of Miners Health	Mine is closed since September, 2015. Personal dust sampling and ambient air monitoring shall be done every three month and result would be submitted to MoEFCC after resumption of mining activity.
w.r.t. submission of budgetary details on PH related issues	Following Activities are planned under CSR:- Capital cost – ₹11.362 Lakhs Recurring Cost – ₹3.638 Lakhs Budget of ₹40,95,000 proposed for Occupational Health (including capital equipments)
w.r.t. ascertaining violation of Wildlife (Protection) Act, 1972	The proposal does not attract violation under Wildlife (Protection) Act, 1972 and application for NBWL clearance for the instant proposal is already made on 04.04.2016.

The Committee noted the submissions made by the PP and made detailed deliberations on the proposal. The Committee also noted the submissions made by the Member Secretary (EAC-Non Coal) that Ministry has already initiated action under applicable provisions of Environment (Protection) Act, 1986 on the aspect of operation of mine till September, 2015 without requisite clearance in respect of area covered within 1 km of the protected areas under the Environment (Protection) Act, 1986 as the same was examined as violation of Supreme Court's Order. The Committee further asked the PP to get the Silica exposure monitoring from National Institute of Miners Health/ any other institute of equivalent repute, in the mine lease after 6 months of the restart of mining operations. The report is required to be submitted to Ministry's concerned Regional Office and DGMS. To make a comparative assessment, the Committee recommended that baseline may be collected and compared with post-working monitoring results. Further, the restart of mining operations shall be done only after obtaining formal NBWL clearance letter from the MoEFCC. The PP agreed with the observation of the Committee.

In view of the above, **the proposal was recommended for grant of EC** with following specific conditions:-

- i. PP shall get the Silica exposure monitoring conducted from National Institute of Miners Health/ any other accredited institute, in the mine lease after 6 months of the restart of mining operations and submit a comparative assessment report to Ministry's concerned Regional Office and DGMS.
- ii. PP shall undertake mining operations only after obtaining formal NBWL clearance letter from the Ministry. Hence, the EC shall not be operational till NBWL clearance is obtained.
- iii. PP shall implement Wildlife Conservation Plan with budgetary allocation of ₹22.5 Lacs (₹1.0 Lac for Peafowl, ₹2.0 Lac for Mongoose, ₹12.25 Lac for Leopard and ₹7.25 Lac for Sloth Bear) for the conservation of Schedule-I species.

(2.3) Environmental clearance for Ball Clay Mine of M/s Krishna Gopal, M.L. Area 80.94 ha, with production capacity 0.10 Million TPA situated near village; Motawatan, Tehsil: Kolayat, District: Bikaner (Rajasthan) – Re-Consideration of Environmental Clearance regarding
File No. J-11015/211/2015-IA.II(M)

The proposal of M/s Krishna Gopal is for Motawatan Ball Clay Mine (M.L. No. 20/2003) with production capacity of 0.1 Million TPA (ROM) in the Mine Lease Area of 80.94 ha. The mine is located at village Motawatan, Tehsil –Kolayat, District - Bikaner, Rajasthan. The geographical extent of mining lease area are: Latitudes - 27°55'49"N to 27°56'11.44"N, Longitudes 72°56'53.67"E to 72°57'38.21"E on the Survey of India Toposheet No. 44 D/16, 44H/4, 45A/13 & 45E/1. The proposal of TOR was earlier considered by the EAC in its meetings held during July 29-30, 2015 (proposal deferred) and February 23, 2016 respectively. The Committee recommended the proposal in EAC meeting held in February, 2016. The ToR was issued vide Letter No. J-11015/211/2015-IA.II (M) dated 15th March, 2016.

The proposal for grant of EC was considered in EAC meeting during March 20-21, 2017 wherein the Committee recommended the proposal and also asked the PP to revamp its plantation programme by including plants with broad leaf, Pipal and fodder species in the plantation list and re-submit occupational health plan with practical budgetary aspects.

The PP has submitted the information to the Ministry vide its letter dated 13.04.2017 and the same was placed for the consideration of the EAC in its meeting held on June 28, 2017 being a technical issue involving budgetary aspects. The Committee also noted the submission of Member Secretary that District Survey Report is mandatory in respect of proposals pertaining to minor minerals as per S.O.141(E) dated 15.01.2016 along with the fact that in view of the intervention of Hon'ble Supreme Court on the issue of Silicosis in the State of Rajasthan, PPs have to assume greater responsibility towards addressing Occupational Health related issues.

The proposal was accordingly deferred and PP was asked to submit the following:-

- District Survey Report for Ball Clay mineral as per the requirements of S.O.141(E) dated 15.01.2016.
- Silica exposure monitoring on workers engaged in mining operations through reputed institution like National Institute of Miners Health (NIMH).

The PP vide its letter dated 31.07.2017 had uploaded the information on the portal of the Ministry wherein DSR is uploaded for the district of Bikaner and communication from National Institute Miners Health regarding conducting study on Silica exposure. The Committee noted the submissions of the PP and deliberated on the same. The Committee asked the PP to get the Silica exposure monitoring from National Institute of Miners Health/ any other institute of equivalent repute, in the mine lease after 6 months of the restart of mining operations. The report is required to be submitted to Ministry's concerned Regional Office and DGMS. To make a comparative assessment, the Committee recommended that baseline may be collected and compared with post-working monitoring results. **Further, the restart of mining operations shall be done only after obtaining formal NBWL clearance letter from the MoEFCC.** The PP agreed with the observation of the Committee. After detailed deliberations, the **Committee recommended the proposal** for grant of EC with specific condition that – PP shall get the Silica exposure monitoring conducted from National Institute of Miners Health/ any other accredited institute, in the mine lease after 6 months of the restart of mining operations and submit a comparative assessment report to Ministry's concerned Regional Office and DGMS.

(2.4) Mining of Millstone and Masonary Stone (minor mineral) including Khanda, Gitti and Boulders occurring as overburden and inter-burden with enhancement of production capacity from 1093 TPA to 15 million TPA (ROM) by M/s A Milnstone Pvt. Ltd., located at village (s) Kandoli, Ghata, Bokoli, Mahalpur, Kachhi, Baroli, Dahina, Ranpur, Jatrol, Lakhanpur, Rajpura, Ranpura, Daha Tehsil- Rupbas, District-Bharatpur, Rajasthan (MLA: 964.94 ha & ML no. 39/1990) (IA/RJ/MIN/29619/2014) – Reconsideration of EC regarding
File no. J-11015/98/2014-IA-II(M)

The proposal of M/s A Milnstone Pvt. Ltd. is for mining of Millstone and Masonry stone (minor mineral) including Khanda, Gitti and Boulders occurring as overburden and inter- burden with enhancement of production capacity from 1093 TPA to 15 million TPA (ROM) in the mine lease area of 964.94 ha. The lease area is located at village (s) Kandoli, Ghata, Bokoli, Mahalpur, Kachhi, Baroli, Dahina, Ranpur, Jatrol, Lakhanpur, Rajpura, Ranpura, Daha Tehsil- Rupbas, District-Bharatpur, Rajasthan. The proposal was earlier considered by EAC in the meeting held during October 25th, 2016; November 23-25, 2016; December 15-16, 2016; January 30-31, 2017, March 20-21, 2017, April 24-24, 2017 and July 24, 2017. The Committee during January 30-

31, 2017 meeting noted that only about 1% millstone is to be mined out from the total ROM and rest is overburden such as Khanda, Gitti and Boulders etc. The fact that overburden can also be sold in the market and generates revenue is only incidental to the stated purpose of mining millstone from the area. The Committee took the view that considering the extremely low mineral density (millstone) in the lease area, mineral (millstone) not being rare or/and critically important and the impact on ecology and environment during mining activities spread over 964 ha affecting many villages, the environmental impacts far outweigh the incidental revenue benefits and rejected the proposal.

The PP, however, again represented before the Ministry for consideration of his proposal on the ground that it possesses all the necessary permissions from State Government and consequently, the proposal was considered before the EAC in its meeting held on March 20-21, 2017 after approval of Competent Authority wherein PP was asked to make a comprehensive presentation. The Committee observed that the PP now possesses Lol bearing no. Dir/P-2(H-1)Roop/K.P.39/90/293 dated 02.06.2017 incorporating Masonry stone along with Mill Stone, which is a minor mineral. The PP has submitted the District Survey Report (DSR) of minerals for Bharatpur district. The Committee noted that the Mining plan is approved by State Department of Mines & Geology vide letter no. SME/BPR/M.Plan/Roopeas/2017/1367 dated 04.07.2017.

The PP vide its letter dated 24.07.2017 and 29.07.2017 has mentioned that it may be granted permission for 9 million TPA of production capacity in 788.0718 Ha M.L. area as against the proposal of 15 million TPA in 964.94 Ha M.L. area considering the aspects raised by the EAC in its earlier meeting held on July 24, 2017. Thus, a total of 176.8688 Ha area within the M.L. shall not be touched considering 300m safety zone around habitation.

The Committee made detailed deliberations on the proposal and noted that the mine lease area is spread over 964 Ha covering many villages and considering the impact on ecology, environment and nearest habitation from mining activities, **the mining operation is recommended to be restricted to already broken up areas of 455.3356 Ha with production capacity of 7.5 Million TPA** in the mine lease. PP shall have to ensure that no new area will be broken during mining operations. The Committee further asked the PP to employ latest blasting technology considering its vicinity to habitated areas. PP agreed to the observations of the Committee. The Committee also observed that the requirement of DSR is fulfilled by the PP. In view of the above, the Committee **recommended the proposal** for grant of EC for production capacity of 7.5 Million TPA from 455.3356 Ha already broken up area within the mine lease subject to submission of a map from State Department of Mines & Geology clearly demarcating the broken-up area of 455.3356 Ha within the total mine lease area of 964 Ha.

(2.5) Enhancement of production from 3.17 Million TPA to 5.50 Million TPA (ROM) in respect of Limestone mines of M/s. Emami Cement Limited in M.L. Area of 395.05 Ha located at Villages - Kukurdih & Risda, Tehsil - Balodabazar, District – Balodabazar – Bhatapara, Chhattisgarh (IA/CG/MIN/27402/2015) – Consideration of Environmental Clearance regarding[File No. J-11015/135/2015-IA.II(M)]

The proposal of M/s. Emami Cement Limited is for enhancement of production capacity from 3.17 Million TPA to 5.50 Million TPA from limestone Mine in 395.05 Ha M.L. Area. The mine located at Villages - Kukurdih & Risda, Tehsil - Balodabazar, District – Balodabazar – Bhatapara, Chhattisgarh. The mining lease area falls between 21°38'0.072"N to 21°39'48.105"N latitudes and 82°06'12.855"E to 82°07'30.230"E longitudes and on the Survey of India topo-sheet No. 64 K/2. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

The proposal of ToR was earlier considered by the EAC in its meeting held during May 15, 2015 wherein the Committee recommended for grant of ToR to the PP. The Ministry issued ToR vide letter no. J-11015/135/2015-IA.II (M) dated June 09, 2015. The earlier EC was issued for production capacity of 3.17 Million TPA of limestone along with 2.5 Million TPA Cement production capacity and 40 MW of Captive Power Plant vide letter no. J-11015/372/2007-IA.II(I) dated 31.10.2011. PP reported that there is no National Park, Wildlife Sanctuary, Biosphere Reserve, Wildlife corridors, Tiger/Elephant Reserves within 10 km radius of the mine site. There are 3 Reserved Forests falling within 10 km radius of the mine site. A letter was issued by DFO with no. MACHI/ RA/ 3766 dated 15.09.2009 indicating no forest land and protected area. The authenticated list has been obtained from the office of DFO, Balodabazaar vide letter no. Tech.Officer/Mineral/ 503 dated 23.03.2016 and no Schedule-I species have been found in the core as well as buffer zone.

PP reported that Mining lease over an area of 395.05 Ha was granted in favor of M/s. Emami Cement Ltd. by Department of Mineral Resources, Govt. of Chhattisgarh on 08.09.2009. Later, Mining lease period was extended till date 6.9.2059 as per MMDR Amendment Act, 2015 for which lease deed was executed on 11.01.2017. The mining operations were commenced in 2016 and instant proposal for expansion in limestone production capacity is also sought for the same. The total lease area is 395.05 Ha comprising of non-forest private land (359.649 ha) and Govt. land (35.401 ha). The Mining Plan with mine closure plan was approved by IBM vide letter no. Raipur/Chup/MP- 988/Nagpur/2015/38–Raipur dated 05.08.2016. *The Committee asked the PP to submit the authenticated year wise production details from Department of Mines and Geology.*

The PP has reported that fully mechanized mining is carried out by open-cast

method adopting a system of benches. Hydraulic excavators are deployed for progressing benches & for handling ore/ waste material. Dumpers will be deployed for hauling ore to the crushing plant or mineral stock and waste material to dump yard. Limestone produced will be sized in the crushing/ screening plant which is located within the mining lease. The limestone after crushing shall be transported by closed conveyor system to the cement plant. PP further informed that at conceptual stage, a total of 12.12 million tonne of top soil and 21.60 million tonne of solid waste will be generated. The present top soil and solid waste generation is 0.987 million tonne and 0.543 million tonne respectively. The waste generated at present and till the end of plan period will be dumped in earmarked area. In subsequent Schemes of mining, backfilling of the waste shall be planned in mined out pits. Stage wise dumping is proposed in the lease area and at conceptual stage, some waste will be backfilled in the mined out pits and remaining waste will be dumped in the dump area. Plantation will be done on the dump area and backfilled area. The Committee noted that a Crusher is already installed within the mine lease. However, the earlier EC does not mention the capacity of the same. Hence, PP is required to include the same in EC.

PP has reported that Total water requirement after proposed enhancement will be 240 KLD. The water requirement for dust suppression is 125 KLD, green belt development & plantation is 100 KLD, domestic use, drinking & office toilets 5 KLD and mine workshop 10 KLD. The water requirement for drinking purpose will be fulfilled from the ground water which will be taken from plant after water treatment. NOC for withdrawal of ground water from Plant was obtained from Central Ground Water Authority vide letter no. 21-4(22)/NCCR/CGWA/2008-402 dated 24.03.2014.

The primary baseline data for site specific micro meteorology data, ambient air quality, water quality, noise level, soil and flora & fauna has been collected during Post monsoon Season i.e. from October – December, 2015. The monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and no major divergence was observed with respect to concentration values of various parameters between collected samples. The soil quality was observed to be alkaline in nature. The general ground water level is 253 AMSL and water table level 6 m to 17 m below ground level (Pre monsoon season) and 4 m to 9 m below ground level (Post monsoon season). As per the mining details, mining operations will encounter water table and permission for intersecting the ground water table has been obtained from Central Ground Water Authority vide letter no. 21- 4(22)/NCCR/CGWA/2008-402 dated 24.03.2014. PP has reported that there are 2 seasonal nallahs within the lease area for which a safety zone of 50 meters has been left on either side of the nallah as a statutory barrier. The nallah will not be disturbed at any stage of mining. *It was further noted by the Committee through KML file that an earthen bund of Kukurdih dam is near to the mine lease boundary and PP has reportedly left a safety barrier zone along the Kukurdih dam. However, the Committee noted that PP is required to submit a clarification from State Mining Department about the impact of mining operations on the*

Kukurdih dam as the project is operating since 2011.

PP reported that there is no court case/ litigation pending against the project. The Committee took note of the Compliance Report of MoEFCC R.O. Lucknow dated 17.08.2017 and noted that many of the conditions are mentioned as partially complied by the PP even after grant of EC vide letter no.J-11015/372/2007-IA.II(M) dated 31.10.2011. Observations were made with respect to Enterprise Social Commitment, status of green development, status of construction of catch drains, status of measures taken for control of pollution etc. which were noted by the Committee. However, the Committee was not satisfied with the explanation given by the PP and accordingly, *PP was asked to present detailed point-wise compliance status of Enterprise Social Commitment, status of green belt development, status of construction of catch drains, status of measures taken for control of pollution etc. which are stated as 'partially complied in the Monitoring Report'.*

Public hearing for the project was conducted on 01.04.2017 at New Constructed Govt. Boys Pre Sec. School at village – Risda, District- Balodabazar (CG) under the chairmanship of Upper Collector, Balodabazar – Bhatapara and in presence of Regional Officer, Chhattisgarh Environment Conservation Board. During the public hearing, the major issues raised by the local people were related to noise pollution by mining operations and cement plants, fall in groundwater table of the area due to mining, suspected illegal blasting, one employment per family for the youth, open storage of clinker and coal by PP, impact of mining on Kukurdih dam, opening of hospital in the area, adverse impact of mining on agriculture, non-payment of govt. rate to engaged laborers, installation of bio-gas plant for rural villages, alleged excess production by cement plant, non-payment of compensation till date and other local development related issues. PP submitted that an action plan is formulated to address and implement various issues related to health, sanitation, education, water supply and demands raised by local villagers. However, the Committee noted that the action plan is for the integrated complex of Cement plant, Mines and Captive Power plant with budgetary allocation of Rs.45.76 Crores for a time span of 10 years i.e. from 2016-2026. *The Committee noted the action plan submitted by the PP and observed that the PP first need to show the status of its earlier commitments under ESC and based on the same further deliberations can only be made. The Committee also asked the PP to make separate plans for Greenbelt development along the boundary and afforestation/ plantation within mine lease. The PP was also asked to present an overview of its mining operations through plan and sectional diagrams to get an understanding of the mine working and its location within the lease.*

The Committee made detailed deliberations on the proposal & presentation, and **deferred the proposal for want of additional information** in respect of the following:

- Clarification from State Mining Department in respect of the impact of mining and blasting operations on the Kukurdih dam and its infrastructure including ground

water table

- Detailed point-wise compliance status of Enterprise Social Commitment, status of green belt development, status of construction of catch drains, status of measures taken for control of pollution and other issues which are stated as 'partially complied'/ 'not complied' in the Monitoring Report dated 17.08.2017.
- Preparation of separate plans for Greenbelt development along boundary and Afforestation/ plantation within mine lease.

(2.6) Proposal of M/s Special Limestone Pvt. Ltd for mining of limestone (minor mineral) with production capacity of 0.45 Million TPA in M.L. area of 93.04 Ha located at Village- Kaswa Ki Dhani, Tehsil-Merta & District-Nagaur(Rajasthan) (IA/RJ/MIN/65145/2017) – Consideration of ToR regarding

The proposal of M/s Special Limestone Pvt. Ltd. is for Kaswa Ki Dhani Limestone Mine & Beneficiation Project having capacity of capacity of 0.45 Million TPA in mine lease area of 93.04 Ha. The mine is located at Village- Kaswa Ki Dhani, Tehsil – Merta, District-Nagaur(Rajasthan). The mine falls under the Survey of India topo sheet No. 45 F/14. The PP presented the KML/Shape file during the presentation to indicate the location of mine lease on Google Earth/ DSS. The Committee noted that the proposal shall be considered on **0.45 Million TPA (ROM)** basis, if approved.

The mining lease was granted in favor of Mr. Sampat Lal Modi by the Govt. of Rajasthan which was later on transferred to M/s Special Limestone Pvt. Ltd. The first renewal was granted vide letter no. P.8 (12)Khan/Gr.-2/92 dated 14.05.1993. The renewal lease period was started from 09.11.1992 for a term of twenty years. The renewal period was extended further for a period of 10 years and accordingly, the mining lease period is valid till 08.11.2022. The PP has reported that the mine lease area is Government land and agricultural land. PP further reported that there is no National Park/ Sanctuary and National Monument within 10 km radius of the lease area and the M.L. does not involve forest land. PP submitted that proposed method of mining is semi-mechanized opencast with drilling and blasting. Benching will be done for the systematic working of opencast mines with height of bench not to be more than 6.0m. The reported excavated area would be 58.25 Ha during conceptual phase of mine.

PP reported that total water requirement is about 30 KLD. Drinking water will be made available through nearby tube-well. Water for dust suppression and plantation will be arranged from nearby villages. The Committee asked the PP to specifically mention about the sources of water and obtain required approvals. Water table in the area is 260-250m (60m - 70m bgl) whereas ultimate depth will be 278m AMSL. The water table expected to be intersected during mining operations. The project cost is Rs. 235 lakhs and expected manpower required is 62 for the project. As per the Form-I and PFR

submitted by the PP, the installation of crusher is not envisaged in the project.

Considering the grant of lease in 1982 and as per the information submitted by the PP in PFR, the area comprises of existing mining pits which is indicative of earlier mining activity, however, the PP has mentioned the instant proposal as a new project. The Committee based on the past production details and other information submitted by the PP (while making presentation) concluded that the mine was operating since 1992 and the same was operational till May/ June, 2016; however, as per the notification dated 15.01.2016, EC was mandatory prior to its operation after 15.01.2016, hence, it is a violation case and PP may apply under violation category to get ToRs for the project. The Committee deliberated on the proposal and **deferred the proposal**.

(2.7) Proposal of M/s India Cements Limited for mining of 1 Million TPA of Limekankar & 0.2 Million TPA Clay (others) (minor mineral) in M.L. area of 479.195 Ha located at Village- Kallurani, Muthuramalingapuram and Narttampatti Villages, Taluk – Aruppukottai, District - Virudhunagar, Tamil Nadu (IA/TN/MIN/66148/2017) – Consideration of ToR regarding

The proposal submitted by M/s India Cements Ltd. is for seeking ToR for conducting EIA studies for mining of 1 Million TPA of Limekankar & 0.2 Million TPA Clay (others) (minor mineral) in M.L. area of 479.195 Ha. The mine is located at village- Kallurani, Muthuramalingapuram and Narttampatti Villages, Taluk – Aruppukottai, District - Virudhunagar, Tamil Nadu. The area falls in Survey of India Toposheet No. 58 K/3 located between latitudes from 9°25'32.9"N to 9°27'10.7"N and longitudes from 78°07'55.5"E to 78°09'28.7"E. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

The Lol for mine lease was granted by Principal Secretary to Government, Industries (MMC.2) Department, Tamil Nadu vide letter no.16025/MMC.2/2016-1 dated 23.05.2017 asking PP to submit required documents within 3 months. The PP has applied before the Ministry for seeking ToR in the month of July, 2017 i.e. within the 3 month's period. PP reported that the Mining plan for the lease area recommended for quarrying is already prepared and submitted to State Government for approval. The entire Limekankar and 20% of Clay proposed to be produced from this quarrying lease shall be used for captive use in its Sankarnagar Cement plant located in Tirunelveli, Tamil Nadu. The 10km study area is reportedly devoid of ecologically sensitive features like national parks, biosphere reserves, Wildlife sanctuaries, etc. No forest land is involved in the lease area. The area does not come under CRZ category. No perennial river or streams is reported to be passing through the lease area and no natural water course will be disturbed or diverted due to quarrying operation. Total water requirement for quarrying operations will be 25.0 KLD among which 2.0 KLD for domestic use, 5.0 KLD for water sprinkling of haul roads and 18.0 KLD for green belt. It is proposed to

procure water from outside agency. As the maximum depth of mining operations is 2.5m only, there will not be any ground water table intersection or water seepage.

PP reported that Mechanised open cast mining method is proposed in the area and mineral can be excavated by using hydraulic excavator and there will not be any drilling and blasting involved in the mining operation. The mined out pit are proposed to be backfilled with side casted clay and screened fines. The expected life of mine is 10 years. At the end of life of the mine, about 376.779 Ha of area will be undermine pit, 0.314 Ha of area will be for infrastructural facilities and an area of 102.102Ha will be unutilized which is blocked up as safety distance area. PP mentioned that as it is proposed to carryout mining and backfilling simultaneously, there will not any area left out as pit after mining and entire 376.779 Ha of quarry area will be backfilled and merged with adjoining surface topography. Green belt/plantation will be carried out in the entire backfilled mined out areas. The expected project cost is ₹18.54 Crores. The mine is expected to provide employment directly to around 30 and indirectly to more than 100 persons.

The Committee made detailed deliberations on the PP's proposal and noted that the lease area comprises of small isolated fragments/ patches which are not included in the lease area and accordingly, PP is required to give right of way to such land holders which raises issues related to workability of mine. Hence, active mining areas are required to be identified and mining be restricted to those areas only. Further, the total excavation as per the approved mine plan is also required for fixing up the production capacity in respect of instant proposal.

In view of the above, the Committee asked the PP to present a plan showing right of way to be provided for all the patches falling within mine lease area and total excavation quantity (per annum) as per approved mine plan to arrive at the production capacity. **The proposal is accordingly deferred.**

(2.8) Expansion Proposal of Balaji Iron Ore Mines of M/s Anil Khirwa from 74,000 TPA to 3 Lakh TPA in M.L. area of 19.331 Ha located at Village Balijore, Taluka Noamundi, Bandhburu Noamundi, District – Singhbhum (W), State- Jharkhand (IA/JH/MIN/64012/2017) – Consideration of ToR regarding [File No. J-11015/142/2007-IA.II(M)]

The proposal of M/s Anil Khirwa is for seeking ToR for conducting EIA studies for expansion of Balaji Iron Ore Mines from 74,000 TPA to 3 Lakh TPA in M.L. area of 19.331 Ha. The mine is located at village Balijore, Taluka Noamundi, Bandhburu Noamundi, District – Singhbhum (W), State- Jharkhand. The lease area is bounded between latitudes of 22°09'19.145"N to 22°9'42.756"N and longitudes of 85°29'2.273"E to 80°29'26.624"E. The area falls in the Survey of India Topo-sheet no. 73 F/8 & 73F/12. The PP also presented the KML file during the presentation to indicate the

location of mine lease on Google Earth/ DSS.

PP reported that the State Government granted the mining lease over an area 22.662 Ha in favour of Sardar Fauza Singh for a period of 30 years i.e. from 01.05.1972 to 30.04.2002. During the validity of the lease period, this mining lease was transferred in favour of Mr. Anil Khirwa on 09.08.1983. Since then the mining activity is being undertaken by Mr. Anil Khirwa. First term of lease expired on 30.04.2002. An area of 3.331 hectares was surrendered by the lessee and consequently, the lease area reduced to 19.331 Ha. The renewal of mining lease was applied in 18.04.2001 for further 20 years. As per the amendment in Rule 8A(3) of MMDR (Amendment) Act, 2015 the lease validity has automatically extended up to 30.04.2022 for which Supplementary Lease Deed was executed and registered on 03.03.2017. Entire Mine lease area of 19.331 ha is in part of Bandhburu Naomundi Protected Forest, out of which approval for diversion of 8.242Ha area has been obtained from State Forest Department vide letter no. 12(21)5/2002-FCE dated 3rd August, 2009. The mining is presently being carried out in 8.242 Ha area only. Application has been submitted for diversion of balance land of 11.089 Ha to forest department. PP reported that the lease area falls in Elephant corridor, hence, exemption for elephant corridor has been taken from Forest Department on 15.03.2013.

PP also informed that the first mining plan for existing mine was approved by IBM under Rule 11 of MCDR 1988 vide letter no. CAL/SB/Fe/MP-249 on 06.08.1993. First Scheme of Mining (SoM) was approved for a period of 2004-05 to 2008-09 vide letter no. CAL/SB/Fe/MP-249 dated 25.10.2004. Second SoM was approved for 2009-10 to 2013-14 vide letter no. 314(3)/2009-MCCM(CZ)/MS-34 dated 16.04.2010 by the Controller of Mines, Nagpur. The present Modified Mining Plan has been approved vide letter no.KOL/SB(W)/Fe/MP-249 Vol-III dated 19.12.2016 for 2014-15 to 2018-19. The geological reserve is estimated at 1487139.60 Tons while mineable reserve is 1327100.6 Tons as on dated 31.03.2017 within the broken area. The life of mine is about 5 years. The method of mining proposed to be adopted is mechanized open cast mining with drilling and blasting. During the mine life total 79857.78 m³ OB/ reject will be generated which will be backfilled in the mined out area. Entire mined out area is proposed to be reclaimed by afforestation.

PP informed that raw materials required for working includes water and diesel. The daily consumption of diesel in the mine will be around 210 liters per day. About 22 KLD water will be required per day at peak demand. The maximum strength of direct workers will be 64 majorities after expansion which will be hired locally. Besides there will be indirect employment on account of transportation, canteen, repair shop, security etc. Since there is no habitation in the lease area, therefore, no resettlement will be necessary. The project cost is about Rs. 1.65 Crore. PP informed that there is an existing crushing plant of 35 TPH within the mine lease.

The Member Secretary, EAC (Non-Coal) informed the Committee that a Carrying Capacity Study in Saranda Forest division in State of Jharkhand is coordinated by FC Division based on the 1st Report on illegal mining of iron and manganese ore by Justice M.B. Shah. The instant mine lease area also falls in Saranda Forest area. Further, MoEFCC in a meeting held on 03.07.2014 in the chamber of the then Secretary (EF&CC) wherein DGF, ADGF(FC), JS(AT), IGF(FC), Director (HC), AIG(TC) and Director (VPU) were present, had taken the following decisions:-

- (i) EC and FC (both Stage-I and Stage-II) to new mines for which mining lease has not been executed and consequently the mining activities have not started, so far, will not be accorded till completion of the carrying capacity study.
- (ii) Grant of Stage-II FC for diversion of forest land located within the mining leases in which mining activities are already being carried out, and grant of EC for expansion of production capacity in such mining leases will be considered without waiting for outcome of the carrying capacity study, provided Stage-I FC for diversion of forest land involved has already been accorded.
- (iii) Till completion of the carrying capacity study, Stage-I FC and EC (if required) for renewal of mining lease will be considered only for the already broken up forest area.
- (iv) For cases involving violation, necessary action would be taken as per the existing guidelines and further processing of these cases in line with (ii) and (iii) above would be subject to the outcome of action taken on such violations. Prior to issue of Stage-II FC by FC Division, the status of EC will be checked up from IA Division in the context of violations.

The Committee made detailed deliberations on the proposal and observed that the PP has not given authenticated past production details to ascertain violation; hence, the same may be submitted. Also, as per PP's submissions, the lease area falls in core zone of Singhbhum Elephant Reserve; however, NBWL clearance is not applicable. The Committee suggested that Ministry may seek clarification in this regard from Wildlife Division/ Project Elephant Scheme. In view of the above, the **proposal was deferred**.

(2.9) Proposal of M/s RMG Superconductors Ltd. with limestone production capacity of 2.5 Million TPA in M.L. area of 740.35 Ha located at Villages Jamuwani Kalan, Khirwa & Durjanpur, Tehsil - Vijayraghavad, District-Katni, Madhya Pradesh (IA/MP/MIN/65784/2017) – Consideration of ToR regarding [File No. J-11015/62/2017-IA.II(M)]

The proposal of M/s RMG Superconductors Ltd. is for seeking ToR for conducting EIA studies for limestone mines with production capacity of 2.5 Million TPA in M.L. area of 740.35 Ha. The mine is located at villages Jamuwani Kalan, Khirwa & Durjanpur, Tehsil - Vijayraghavad, District - Katni, Madhya Pradesh. The lease area is

bounded between latitudes and longitude coordinates of 24°02'8.3"N to 24°07'4.6"N and 80°39'50.9"E to 80°44'1.4"E respectively. The area is located on Survey of India Topo-sheet no. 64D/12. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

PP reported that the mining lease area covers 740.35 Ha consisting of 734.54 Ha Private Land and 05.81 Ha Government Land. The entire lease area is sub divided into 3 blocks as Block 1- Jamuwanikalan area- 264.22 Ha, Block 2- Khirwa area-142.32 Ha., Block 3- Durjanpur area- 333.81 Ha. The State Govt. of M.P. vide letter no. F 3-22/2010/12/2, Bhopal dated- 16.09.2010 has recommended 740.35 Ha. of area for mining of Limestone and Laterite. The lease deed is executed on 31.01.2012 and the Mining Plan with Progressive Mine Closure Plan has been approved by Indian Bureau of Mines vide letter no 314(3)/2011- MCCM(CZ)/MP/MS/PMCP-6 dated 01.08.2011. The Committee noted that since five years have already been passed, the PP is required to furnish the details of valid approved mining plan in the EIA/ EMP Report. The PP has reported to develop an opencast mechanized mine. The net geological reserves are estimated to be about 59.30 Million tonnes and the mineable reserves are estimated to be 45.96 Million tonnes. The groundwater is not likely to be encountered during the mining as water table is 25-30 m below ground level and maximum mining depth will be only 15m during the mining plan period. The Block I (Jamuawanikalan) and Block II (Khirwa) is separated by a perennial nallah bordering both the blocks. Beside this, few small seasonal nalas on the boundary are also available. One non-perennial nala flows within the Block-III (Durjanpur) lease area. The method of mining is proposed to be open-cast using drilling Machine along with compressor for drilling and subsequent blasting and Excavator/ shovels/ dumper combination for extraction, loading, sizing by crusher and transportation of limestone. PP reported that there will be no generation of waste, sub-grade limestone and reject material.

PP reported that the expected project cost is ₹7100 Lakhs and employment generation is 211 persons. The water requirement is estimated to be 300 m³/day out of which 250 m³/day of the water is required for dust suppression (within the lease and outside the lease in nearby villages), plantation and vehicle washing and 50 m³/day is required for drinking purposes. The water requirement is proposed to be met from groundwater and rainwater collected in mining pit. The Committee asked the PP to obtain necessary permissions for water drawl. There is no National Park, Wildlife sanctuary, defense installation or sensitive area located within 15 km radius of the proposed mine. There is no historical monument or public building near the area and within 10 kms radius except a few temples.

The Committee deliberated on the proposal and noted from the KML file that the blocks covered under the mine lease are scattered. The KML also revealed that there are villages, schools and other public infrastructural places which are either coming within lease area or adjacent to it. It was also learnt that the PP proposes to install

crusher within the mine lease; however, its details could not be made readily available before the Committee. The Committee, accordingly, asked the PP to furnish the details of the Project Affected Households (PAH and broad contours of the R&R plan along with plan and sections of the proposed mining operations clearly delineating the active mining area. In view of the above, the proposal **was deferred** for grant of ToR.

(2.10) Proposal of M/s Ambuja Cement Ltd. for expansion in production capacity of RAS-I Limestone Mine (M.L. No. 10/94) from 0.279 Million TPA to 2.80 Million TPA in mine lease area of 183.53 Ha located at villages Kotadiya, Sewariya, Bhaktawarpura and Dhaneriya, Tehsil-Jaitaran, District- Pali, (Rajasthan) (IA/RJ/MIN/66058/2017) – Consideration of ToR regarding [File No. J-11011/54/2010-IA.II (I)]

The proposal of M/s Ambuja Cement Ltd. is for seeking ToR for conducting EIA studies for expansion in production capacity of RAS-I Limestone Mine (M.L. No. 10/94) from 0.279 Million TPA to 2.80 Million TPA in mine lease area of 183.53 Ha. The mine is located at villages Kotadiya, Sewariya, Bhaktawarpura and Dhaneriya, Tehsil-Jaitaran, District- Pali (Rajasthan). The lease area is bounded between latitudes and longitude coordinates of 26°23'12.75" N to 26°24'16.61"N and 74°13'26.32" E to 74°14'35.49"E respectively. The area is located on Survey of India Topo-sheet no. 45 J/3. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

PP reported that the mining lease over an area of 183.53 Ha was granted in favour of DLF Cements Ltd vide letter no. F-3(28)/Khan/Group-2/92 dated 24.04.1997 and was registered on 13.06.1997 for a period of 20 years. The Mining Lease was transferred to Gujarat Ambuja Cements Ltd. (GACL) on 02.01.2006 and the Unit was named as Ambuja Cement Rajasthan Ltd (ACRL). Later on, ACRL was merged with GACL and GACL was rechristened as Ambuja Cements Ltd (ACL). Mining Lease has been extended upto 24.11.2047 under Section 8A (5) of M.M.D.R. Amendment Act 2015, by the Office of Mining Engineer, Department of Mines and Geology, Sojat, Rajasthan vide letter no. KA/Sojat/Pradhan/ML/10/1994/2055 dated 24.02.2015. The Committee asked the PP to submit its valid lease to the Ministry indicating validity as 24.11.2047. The earlier EC for 0.279 million TPA limestone production was obtained vide letter no. J-11011/54/2010-IA-II (I) dated 29.03.2012 and mining operations commenced from 01.05.2012. 'Consent to Operate'(CTO) under section 21(4) Air (Prevention & Control of Pollution) Act, 1981 and under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 was obtained from Rajasthan State Pollution Control Board (RSPCB) vide their letter no. F(Mines)/ Pali(Jaitaran) /82(1)/ 2016-2017/811-816 dated 03.05.2016 valid upto 31.07.2018. The total Mining lease area of 183.53 Ha reportedly comprises of 180.43 Ha Govt waste land and 3.10 Ha Private Land. As per the authenticated past production details furnished by the PP, the mine has not exceeded the earlier EC granted capacity of 0.279 Million TPA since

2012-13.

PP also informed that its existing Integrated Cement Plant with Clinker Production Capacity (2.4 Million TPA), Captive Power Plant (33 MW) is operational at village- Rabriyawas, Tehsil- Jaitaran, District-Pali (Rajasthan) and if the same is operated at full capacity, then it will require limestone up to 3.6 million TPA. As of today, limestone requirement for clinkerization is met from RAS-II limestone mine with an approved capacity of 3.6 million tons of limestone and RAS-I mine with an approved capacity of 0.279 million tons of limestone. The RAS-I limestone is of better grade with less inter banding and the same is being used for blending with low grade material of RAS-II (being of highly mixed nature, with intricately inter-woven waste bands of pegmatites, schists, calc-granulites etc). To achieve the desired limestone quality, about 5 to 8% sweetener limestone is mixed to meet the set point of raw meal for clinkerisation. Hence, to address the quality issues, reduce consumption of sweetener limestone and to optimally utilize RAS-II, the expansion for the instant mines is proposed. The Mining Plan with Progressive Mine Closure Plan has been approved by Indian Bureau of Mines vide letter no 584(4)(1664)/2016-RCM-AJM dated 03.11.2016. The method of mining is proposed to be open-cast using drilling Machine along with compressor for drilling and subsequent blasting and Excavator/ shovels/ dumper combination for extraction, loading, sizing by crusher and transportation of limestone. **The Committee, during the presentation, noted that proposal also involves installation of a crusher of 800TPH along with screening plant.**

PP reported that the expected project cost is ₹700 Lakhs and expected employment generation is 70 persons. The water requirement is estimated to be 120 m³/day. The water requirement is proposed to be met from groundwater. The Committee asked the PP to obtain necessary permissions for water drawl. There is reportedly no National Park, Wildlife sanctuary, defense installation or sensitive area located within 10 km radius of the proposed mine. The Committee deliberated on the proposal and **recommended the proposal** for grant of ToR for Mining as well as Mineral beneficiation (for crusher of 800 TPH).

(2.11) Pagara-Jhiriya Limestone Deposit Mine of M/s Dalmia Cement (Bharat) Ltd. for 2.41 Million TPA (ROM) capacity located near village - Pagra, Jhiriya Kothar, Jhiriya Bajpain & Jhiriya Koparihan, Tehsil- Amarpatan, District- Satna (Madhya Pradesh) in M.L. area of 395.965 Ha. – Re- Consideration of ToR regarding [File No.J-11015/58/2017-IA.II(M) / Proposal no. IA/MP/MIN/64735/2017]

The proposal submitted by M/s Dalmia Cement (Bharat) Ltd. is for seeking ToR for conducting EIA studies for Pagara-Jhiriya Limestone Deposit Mine of 2.41 Million TPA (ROM) in mine lease area of 395.965 Ha. The mine is located near village –

Pagra, Jhiriya Kothar, Jhiriya Bajpain & Jhiriya Koparihan, Tehsil- Amarpatan, District- Satna (Madhya Pradesh). The lease area falls between latitudes of 24°26'41.5"N to 24°28'18.30"N and longitudes of 81°09'42.60"E to 81°12'27.60"E and is located on Survey of India Topo-sheet no. 63H/3. The PP also presented the KML file during the presentation to indicate the location of mine lease on Google Earth/ DSS.

The proposal was earlier considered for grant of ToR in EAC meeting held during June 28, 2017 wherein the Committee, based on the submissions of PP, noted that the project lease comprises of more than 90% agricultural land on which the population from nearby villages is dependent for their livelihood. The mining lease area includes 3 villages, over 350 houses and about 1500 population. The operation of mine in such an area shall not only involve loss of livelihood for villagers but shall also be hazardous for day-to-day life of villagers due to blasting, mechanized mining operations, transportation of mineral, generation of pollution etc. *The Committee concluded that the adverse social and environmental aspects of the project outweigh the economic benefits from the project. Hence, the Committee, after careful deliberations, rejected the proposal for grant of ToR.*

The PP vide its letter dated 18.08.2017 and 21.08.2017 represented before the Competent Authority in the Ministry mentioning that it has already incurred significant expenditure on the project and many projects of similar nature have been granted ToR in the recent past. Further, Ministry vide its O.M. dated 29.08.2014 had prescribed specific mitigation measures to deal cases involving habitation related issues. Hence, one more opportunity may be given to explain the issues to EAC in light of the O.M. dated 29.08.2014. During the meeting, the PP submitted that it will adhere to all the conditions, as may be prescribed by EAC, for implementation of required environmental safeguards for protection of environment as well as safety of the inhabitants of the area. It also submitted that the project will not only help in the economic development of the area but also provide improved basic facilities related to sanitation, healthcare, infrastructure etc. The Committee noted that the proposal also includes installation of Crusher within the lease area whereas the details of the same are not furnished by the PP in the Form-1 as well as PFR.

The Committee deliberated on the submissions made by the PP w.r.t. mining in the area and observed that before considering mining proposal in such an area as per the provisions of the O.M. dated 29.08.2014, the PP is required to provide the following information:

- i. Plan and Sections (drawing) showing clear demarcation of the active mining area;
- ii. Provision of safety zone/ barriers from human habitation as per the provisions of the O.M. dated 29.08.2014;
- iii. Details of latest blasting techniques for mining operations,
- iv. Revised Mining plan showing active mining area and modified production

- capacity;
- v. Plan (drawing) of providing access to inhabitants of villages covered in M.L. area;
 - vi. Broad contours of R&R plan proposed by the PP clearly stating number of families in habitated areas, compensation proposal, alternative land arrangements for the affected households etc.
 - vii. Details of the Crusher proposed in the mine lease.

In view of the above, the **proposal is deferred** for grant of ToR pending above information from the PP.

2.12 Proposal of Golari Fire Clay, China Clay, Yellow and Red Ochre Mining Project of M/s Sundar Lal Daga with production capacity of 30,000 TPA in mine lease area of 64.75 Ha located at village Golari, Tehsil Kolayat, District Bikaner, Rajasthan (IA/RJ/MIN/65264/2007) – Amendment of EC regarding [File No. J-11015/300/2005-IA-II (M)]

The proposal submitted by M/s Sundar Lal Daga is for seeking amendment of earlier EC granted by the MoEFCC vide letter No. J-11015/300/2005-IA.II (M) dated 27.04.2007 w.r.t. extension in validity of EC. The capacity of the Mines is 30,000 TPA in mine lease area of 64.75 Ha. The project is located at village Golari, Tehsil Kolayat, District Bikaner, Rajasthan.

The PP submitted that the earlier EC indicated the life of mine as 11 years; however, as per the latest approved mine plan, the total mineable reserves are 16,93,755 Tons and accordingly, based on the production capacity of 30000 TPA, the life of mines comes out as 56.45 years. Accordingly, the proposal applied for seeking extension of EC. The mine plan is approved by the Superintending Mining Engineer, Bikaner vide letter no. SME/BKN/CC.III/M.S/M.L.8/01-741 dated 03.03.2017.

The Committee deliberated on the proposal and noted that the 'Life of Mine' is dependent on factors like (i) Total Reserves identified and established as per the norms framed by Indian Bureau of Mines/ Geological Survey of India; (ii) Rate of production desired from the Mines; (iii) Incremental Addition of Reserves from ongoing exploration activities leading to increase in Total Reserves; and (iv) Market Demand of mineral/ ore. Hence, validity of EC may be linked with valid lease period or 30 years from the grant of initial EC, whichever is lesser. In view of the above, the Committee **recommended the proposal** for grant of amendment of EC such that validity of EC may be linked with valid lease period or 30 years (from the date of original grant of EC), whichever is lesser.

2.13 Proposal of Ball Clay, Fire Clay & Yellow Ochre Mining Project of M/s Sundar Lal Daga with production capacity of 60,000 TPA in mine lease

area of 64 Ha located at village Nal Chooti, Tehsil & District Bikaner, Rajasthan (IA/RJ/MIN/65265/2007) – Amendment of EC regarding
[File No. J-11015/279/2005-IA-II (M)]

The proposal submitted by M/s Sundar Lal Daga is for seeking amendment of earlier EC granted by the MoEFCC vide letter no. J-11015/279/2005-IA.II (M) dated 26.03.2007 w.r.t. extension in validity of EC. The capacity of the Mines is 60,000 TPA in mine lease area of 64 Ha. The project is located at village Nal Chooti, Tehsil & District Bikaner, Rajasthan.

The PP submitted that the earlier EC indicated the life of mine as 15 years; however, as per the latest approved mine plan, the total mineable reserves are 36,83,484 Tons and based on the production capacity of 60,000 TPA, the life of mines comes out as 61.45 years now. Accordingly, the proposal is applied for seeking extension of EC. The mine plan is approved by the Superintending Mining Engineer, Bikaner vide letter no. SME/BKN/CC.III/M.S/M.L.9/98-751 dated 03.03.2017.

The Committee deliberated on the proposal and noted that the 'Life of Mine' is dependent on factors like (i) Total Reserves identified and established as per the norms framed by Indian Bureau of Mines/ Geological Survey of India; (ii) Rate of production desired from the Mines; (iii) Incremental Addition of Reserves from ongoing exploration activities leading to increase in Total Reserves; and (iv) Market Demand of mineral/ ore. Hence, validity of EC may be linked with valid lease period or 30 years from the grant of initial EC, whichever is lesser. In view of the above, the Committee **recommended the proposal** for grant of amendment of EC such that validity of EC may be linked with valid lease period or 30 years (from the date of original grant of EC), whichever is lesser.

2.14 Proposal of Limestone mining project of M/s Shree Cement Ltd. with production capacity of 8.6 Million TPA in mine lease area of 531.126 Ha located at Villages- Semaradih and Bharuwadih, Tehsil-Balodabazar, District- Balodabazar- Bhatapara, Chhattisgarh (IA/CG/MIN/23180/2007) – Amendment of EC regarding
File No. J-11015/159/2014-IA-II (M)

The proposal submitted by M/s Shree Cement Ltd is for seeking amendment of earlier EC granted by the MoEFCC vide letter no. J-11015/159/2014-IA.II(M) dated 30.03.2017 with respect to change in General Condition no. (21) & (23). The capacity of the Mines is 8.6 Million TPA in mine lease area of 531.126 Ha. The project is located at Villages- Semaradih and Bharuwadih, Tehsil- Balodabazar, District- Balodabazar- Bhatapara, Chhattisgarh. The details of the condition for which amendment is sought are as below:-

S.No.	Description	PP's submission
1	<p><i>General Condition No. 21</i></p> <p>The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. The overburden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8m and width 20 m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.</p>	<p>1. As per the approved modified mining plan the maximum height of dump shall be 20 meter as mentioned at para 7c</p> <p>2. Hence, request to amend the maximum height of dump shall not exceed 20 meter accordingly.</p> <hr/> <p>1. As per the approved mining plan, total excavated area will be 387.1 ha out of which 110 ha will be backfilled and 277.1 ha will be developed as water reservoir.</p> <p>2. The same is mentioned in Para 4 of EC as well as in table no.15 of para 5(f) of approved Mining Plan.</p>
2	<p><i>General condition No. 23</i></p> <p>Plantation shall be raised in 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/ Agriculture Department and as per</p>	<p>1. The green belt development during 5 years plan period is 33% of the area used for mining activities of the approved mining plan and this green belt area of 5 years period does not cover all along the mining area as per approved mining plan.</p> <p>2. Request to amend the condition to achieve 33% green belt plantation as per the approved mining plan.</p>

	CPCB Guidelines. The density of trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.	
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The Committee deliberated on the proposal and made the following recommendations:

- Amendment requested in **General Condition (21) is partially accepted** with regard to amending the land use of mine as per the approved Mining plan for backfilling and reclaiming the area. The Committee noted that the 'End of life' land use of Mine lease area is governed by the Approved Mine plan wherein provisions relating backfilling of area, plantation, development of water reservoir, undisturbed area, waste dump etc. have been made. However, prior clearances as required under various statutes like Forest (Conservation) Act, 1980; MMDR Act, 1952 etc. are a pre-requisite for the same. With regard to height of dumps, the Committee noted that similar amendments were requested by other PP's (who operate limestone mines) in the past which were not accepted by the Committee considering the stability of dumps, management of runoff generated from dump and other vital conditions having environmental impacts. **However, PP's may request IBM to examine the technical aspects and related environmental impacts of increasing the dump heights and send a consolidated report on the same to the Ministry for further consideration.**
- Amendment requested in **General Condition (23) is not accepted** with regard to allowing only 33% of area for greenbelt development in first 5 years (*as per approved Mining Plan*). The Committee clarified that the purpose of the development of safety zone by developing 7.5m green belt along the boundary is to contain/ arrest the pollution emanating from mining operations lease area and minimizing the adverse impacts of the same in the surrounding areas. The development of 7.5m safety zone across the lease boundary ensures that nearby areas and surroundings are not adversely impacted by mining operations to the extent possible. Hence, PPs are required to develop safety zone greenbelt on priority as per the conditions mentioned in the EC.

(2.15) Amendment of EC granted for Kodingamali Bauxite Mining Project of M/s Odisha Mining Corporation Limited located in Kodingamali, Tahasil Koraput, District Koraput, Odisha (MLA: 447.25Ha. production of 3.0 MTPA Bauxite ore) [File No. J-11015/439/2007-IA-II(M)]

The proposal submitted by M/s Odisha Mining Corporation is for seeking amendment in EC granted by the MoEFCC vide letter No. J-11015/439/2007-IA-II(M) dated 28.05.2008. The project is for mining of Bauxite with production capacity of 3.0

million TPA in Kodingamali Bauxite Mining Project located at Kodingamali, Tehsil Koraput, District Koraput, Odisha in mining lease area of 447.25 Ha. The amendments are sought with respect to (1) Inclusion of Road as mode of transportation; (2) Proposed Land use plan in line with the Stage - I Forest clearance granted by MoEF&CC. The proposal was earlier considered in 18th EAC Meeting held during May 29-30, 2017 and 20th EAC Meeting held during July 24, 2017 wherein the Committee asked the PP to collect data from a representative road/ highway and use the same as input for deriving incremental concentrations through modeling and predict Ground Level Concentrations (GLCs). Similar observations were made w.r.t. Noise quality, Soil quality monitoring and anticipating Heavy Metal concentration in soil due to truck movement.

As a follow-up, PP submitted and presented the information before the Committee and observations have been made by the Committee as below:-

- *Environmental Impact Assessment Study to Evaluate the Impact of Ore Transportation by Road from Kodingamali Bauxite Mining Project* – The Committee deliberated on the PP's study and observed that the anticipated incremental concentration of air quality parameters have been calculated based on a similar/ representative transport route viz. Sambalpur – Sundargarh – Rourkela. The modeling carried out for anticipating impact due to ore transportation indicates that the cumulative concentrations of air quality parameters are within the NAAQS 2009. Similarly, the observations have been presented w.r.t. Noise quality and Soil quality monitoring. The Committee noted that the concentration of heavy metals in soil samples along the Sambalpur – Sundargarh – Rourkela route are higher due to vehicular movement which clearly indicates the projected trajectory of soil contamination in the instant case. However, the Committee asked the PP to ensure that the proposed transportation route be metalled/ concretized before being used for full capacity i.e. 3.6 Million TPA. The Committee also noted the anticipated noise levels and asked the PP to take required measures for containing noise pollution in consultation with State Pollution Control Board.
- *Carrying Capacity Study for assessing adequacy of existing transport infrastructure to handle traffic load* – The Committee deliberated on the study presented by the PP and noted that the existing infrastructure can carry 1.26 Million TPA, after minor modifications which may require 2-3 months. It was also noted that further strengthening of carriageway to 7m width and 2.5m shoulder width may increase the carriage capacity to 3.7 Million TPA. The PP submitted that all the necessary modifications shall be carried out by State PWD department/ National Highways and the PP is already coordinating with them.

The PP, during earlier EAC meetings, had submitted that 18.94 ha of forest area of the M.L. was surrendered by OMC being non-mineral bearing and the land use

plan was modified accordingly. The forest diversion proposal was revised to 434.395 Ha including 6.86 ha of approach road connecting the ML area and submitted on 13.06.2016 under section 2 (ii) of FC Act, 1980. The Committee noted that the PP possesses approval under Section 2 (iii) of the Forest (Conservation) Act, 1980 for 428.075 Ha area vide F.No.8-62/2016-FC dated 06.01.2017. As per PP's submissions, the Stage-1 FC was granted on 17.04.2017; however, the Stage-1 FC was not uploaded by the PP on the portal.

In view of the above, the Committee **recommended** for the following:-

- Amendment may be considered for transportation of 1.26 Million TPA of ore by road *in the interim* subject to required strengthening of carriageway.
- For increasing the transportation of ore by road from 1.26 Million TPA to 3.7 Million TPA, a prior confirmation from the State PWD Department regarding preparedness of the 7 meter wide carriageway, may be sought.
- Amendment for change in land use plan, in line with the Stage - I Forest clearance, may be considered subject to submission of Stage-1 FC by PP.

2.16 Ochre, White Earth and Laterite Mine with production capacity of 1,00,000 TPA by M/s Shiv Kumar Agarwal located in Village-Kama Khuia, Tehsil - Birsinghpur, District- Satna State -Madhya Pradesh (M.L. area - 16.19 Ha) – Amendment of ToR regarding [File No. J-11015/278/2015-IA-II (M)]

The proposal submitted by M/s Shiv Kumar Agarwal is for seeking amendment of ToR with respect to increase in mining capacity from 1,00,000 TPA to 2,50,000 TPA of Ochre, White Earth and Laterite. The mine is located at Village-Kama Khuia, Tehsil-Birsinghpur, District- Satna, State -Madhya Pradesh. The TOR to the proposal was issued vide letter no. J-11015/278/2015-IA.II (M) dated 24.09.2015. Project Proponent requested the increase in mining capacity of the proposal from 1, 00,000 TPA (ROM) to 2, 50,000 (ROM).

The proposal was earlier considered in EAC meeting held during May 28-29, 2017 wherein the Committee deferred the proposal for want of past production details. The PP presented the past production details mentioning that the production capacity achieved in 1993 is 25165 and after that the production is not expanded. The mine was reportedly closed since August, 2015 as per the State Department of Mines and Geology. The Committee noted that laterite was a major mineral when the PP started mining operations, however, in February, 2015 the Ministry of Mines notified it as a minor mineral. Hence, PP was not required to obtain prior EC until the production of 1993-94 was exceeded.

In view of the above, the Committee **recommended** the proposal for amendment of ToR granted by MoEFCC vide letter no. J-11015/278/2015-IA.II (M)

dated 24.09.2015.

2.17 Hatgacha (JL No. 1) – Jethia (JL No. -4) Black Stone Mine with proposed production capacity 0.8 Million TPA (ROM) by M/s West Bengal Mineral Development and Trading Corporation Ltd., located at village; Hatgachia, P.s.- Mohammad Bazar, Mouza-Jethia, District-Birbhum, West Bengal (MLA 71.20 ha). (Consultant: Centre for Envotech and Management Consultancy Pvt. Ltd.)- Consideration for EC regarding. [J-11015/379/2015-IA.II (M)]

The proposal of M/s West Bengal Mineral Development and Trading Corporation Ltd. is for the mining of the Blackstone with proposed production capacity of 0.8 Million TPA (ROM) at Hatgachia, P.S.-Mohammad Bazar, Mouza-Jethia, District-Birbhum, West Bengal. The proponent submitted that the Mining lease was granted in favor of M/s West Bengal Mineral Development & Trading Corporation on 16.12.2010; vide letter no. 1021- CI/O/MM-42/10/Mines for a period of 20 years. The proponent informed that the lease area is mostly flat, involving no forest land. The lease area lies between Latitude: 240 06' 54.55" to 240 07'16.78" N and Longitude: 870 35' 20.00" to 870 36' 0.85" E. The project was considered during the 38th meeting of the Reconstituted Expert Appraisal Committee held on 22 – 24 September, 2015 for grant of the ToR. The Terms of Reference (ToR) was granted vide Letter No: J-11015/379/2015- IA.II (M) on 30th November, 2015.

The proponent mentioned that the mining plan was approved by the Office of the Chief Mining Officer, Asansol, Dist. Burdwan, West Bengal vide Memo. dated 28th July, 2014 and as such, mining plan of Hatgacha Jethia mines is prepared with an envisaged production of 0.8 million tonnes per year. However, the proponent did not submit the copy of the approved mine plan. Opencast method of mining will be adopted with drilling & blasting, on single shift basis with the deployment of 2.5m³ excavator. ROM produced from the mine will be fed into 200 TPH crushing unit for sizing and sized black stone will be loaded manually for dispatch to the consumers.

The proponent submitted that the public hearing was conducted on 09.09.2016 at 11.30 AM in the premises of Bharkata G.P. Office, Dist. – Birbhum, West Bengal and was presided over by Dr. Uma Sankar S, IAS, ADM, Birbhum. The proponent submitted that the total project cost is estimated to be Rs. 14.32 crores and there is budgetary provision of Rs. 150 lakhs towards environmental protection measures. There is no National Park, Biosphere Reserve or Eco-sensitive Zones, within 10 km radius of the lease area.

The project proposal was considered in the EAC meeting held during 20-21 March 2017 for consideration of EC. The Committee deferred the proposal for want of additional information. The proponent submitted the additional information online and the proposal was reconsidered in the EAC meeting held on 29-30 August, 2017.

The proponent submitted that the entire mine operation, except Blasting and Mine Supervision would be on contract and M/s West Bengal Mineral Development and Trading Corporation Ltd (WBMDTCL) will comply with and ensure that contractor will also comply with, all the statutory requirements as per law. The committee also noted that the quantum of reject from the crusher is on higher side. Based on the discussion committee **deferred the proposal** and was of the opinion that the proposal can be reconsidered after the proponent submits the following:-

1. Mitigation Plan to reduce the amount of dust to be generated from the crusher.
2. Need based survey of the project affected families.

3. Occupational Health and Safety Plan
4. Hazard Identification and Risk Assessment Plan
5. Mineralogical Study of Blackstone to determine the concentration of free Silica/Crystalline Silica
6. A letter from the State Mines and Geology department revalidating the Lol.

2.18 M/s Cement Corporation of India Limited at situated at Khasra No- 68,70 & 92 Village Kankurthy, Tehsil Kodangal District- Mahabubnagar, Telangana, having mining Lease Area of 17.821 Ha with production capacity 50,000 TPA (ROM)- Consideration of ToR regarding.[J-11015/72/2017-IA-II (M)]

The proposal of the M/s Cement Corporation of India Limited situated at Khasra No- 68,70 & 92 Village Kankurthy, Tehsil Kodangal, District:- Mahabubnagar, Telangana, over an area of 17.821 hectares is for the production of 50,000 TPA (ROM) of Laterite Mining. The mine lease area falls in the Survey of India Topo-Sheet No. 56 G/5. The latitudes and longitudes of the Mine lease fall between Latitude:- N 16° 54' 41.43" to N 16° 54' 37.20" and Longitude:- E 77° 27' 45.02" to E 77° 27' 33.09".

2. The proponent submitted that the mining lease over an area of 17.821 hectares falling in Khasra Nos 68,70 & 92 in village Kankurthy, Tehsil Kodangal, District: Mahabubnagar, Telangana was granted for a period of 20 years and was valid till 08.07.2001. Application of renewal of mining lease was submitted to State Govt. of Andhra Pradesh vide letter no. KKO/KAN/RML/06/2000 dated 31.07.2000. Letter No. 27909/R2-1/2002 dated 28.05.2002 from Director, Mines and Geology, Hyderabad indicates receipt of application of renewal mining lease by the State Govt. Order no. 1/2/2015-M.VI dated 06.02.2015 issued by the Ministry of Mines, Govt. of India provides that the mining lease of corporations shall be extended up to 31.03.2020. **The mining lease is 0.16 Km from Karnataka and Telangana State Boundary.** The State Highway-16 is 0.14 Km from Mine lease. There is no Reserve Forest, Wildlife Sanctuary, National Park, Eco Sensitive zone and water body within 10 km of the lease area.

3. The proponent mentioned that the mining operations will be carried out by open cast semi-mechanized method, which includes drilling, blasting, loading, transport and dispatch. The mineable reserve is 0.576 million tonnes. The anticipated life of the mine is 11 years at a rated capacity of 0.05 million tonnes per annum. The project cost is Rs.4.00 Cr and shall give direct employment to 15 persons. The Project proponent mentioned that the total quantity of water requirement is 10 KLD (8 KLD for dust suppression & green belt and 2 KLD for Domestic purpose).

4. The proponent mentioned that no over-burden is anticipated during the life of the mine. The liquid waste of less than 1.5 KLD shall be generated and will be disposed off to soak pit via septic tank.

5. The proponent submitted that the application for grant of ToR is submitted to MoEF&CC as the mining lease is 0.16 Km from Karnataka and Telangana State Boundary.

6. The project proposal was considered during the EAC meeting held during 29-30 August 2017 for consideration of the ToR. Based on the information furnished and discussion held, the Committee **deferred the proposal** and recommended the case for transferring to State Government as SEIAA is functional at Telangana and this is a case of Minor Mineral less than 25 Ha and the General Condition is not applicable for the mine lease area up to 25 Ha of minor minerals, as per the schedule 1(a) of S.O. 141(E) 15.01.2016.

2.19 Hatgachha Blackstone Mine of M/s West Bengal Mineral Development and Trading Corporation Limited located at Gram Panchayat: Bharkata, Village: Bharka, Block: Mohammad Bazar Hatgachha, District: Birbhum, West Bengal, having mine lease area of 43.94 Ha with production capacity 0.90 Million TPA - Consideration of ToR regarding [J-11015/73/2017-IA-II (M)]

The proposal of M/s West Bengal Mineral Development and Trading Corporation Limited situated at Gram Panchayat: Bharkata, Village: Bharka, Block: Mohammad Bazar Hatgachha, District: Birbhum, West Bengal. The mine lease area falls in the Survey of India Topo-Sheet No. G45V12 (72/ P/12). The latitudes and longitudes of the Mine lease fall between Latitude: - N 24° 06' 54.59" to N 24° 7' 16.82" and Longitude: - E 87° 35' 20.33" to E 87° 35' 52.31".

2. The proponent submitted that the mining lease over an area of 43.94 ha hectares falling in Plot Nos. 146 (p), 225, 226, 228 to 229, 231 to 234, 288 to 319, 946 to 959, 1050 to 1069, 1072, 1073, 1252 to 1257, 230, 316/5206 to 316/5210, 1915/5546 in Gram Panchayat: Bharkata, Village: Bharka, Block: Mohammad Bazar Hatgachha, District: Birbhum, West Bengal, was granted on 25.02.2011 for a period of 20 years vide Memo no. 169-CI/O/MN-4/010/Mines dated 25.02.2011. The Mining lease (ML) area of 43.94 Ha comprises of 16.89 ha agricultural land, 13.74 ha waste land, 1.09 ha road, 0.78 ha water bodies, 0.61 Ha lateritic upland, 0.08 under habitation and 10.75 Ha other lands. No forest land is involved in the Mine lease area.

3. The proponent mentioned that the mining shall be carried out adopting a semi-mechanized open-cast method on a single shift basis. The material will be extracted by using drilling and deep whole blasting. A crushing plant of 200 TPH is also proposed to set up in leasehold. The mineable reserve is 18.19 million tonnes and extractable reserve is 17.26 million tonnes. The anticipated life of the mine is 20 years at a rated capacity of 0.90 million tonnes per annum. The project cost is Rs. 14.32 Cr and shall give direct employment to 60 persons.

4. The Project proponent mentioned that the total quantity of water requirement is 15 KLD (10 KLD for dust suppression, 3 KLD for green belt and 2 KLD for drinking purpose).

5. The proponent mentioned that the overburden will be removed in advance by excavator only and no drilling and blasting shall be used. Total 0.20 million m³ of Top Soil, 0.97 million m³ of overburden and 0.93 million m³ of Blackstone reject shall be

generated till conceptual stage.

6. The proponent also submitted that there is no residential facility within the Mine Lease area except site office and the domestic waste generated from the sewage system will be disposed off to soak pit via septic tank. No workshop is proposed within the ML. So, no liquid waste is likely to be generated from the mining activity.

7. The project proposal was considered during the EAC meeting held during 29-30th August 2017 for consideration of the ToR. Based on the information furnished and discussion held, the Committee **recommended the proposal** and prescribed the Standard ToR for undertaking detailed EIA study as per Annexure-I with an additional condition that the PP will conduct mineralogical study of the Balckstone to determine the concentration of Free Silica/Crystalline Silica and need based survey of the project affected families. In addition the Occupational Health & Safety Plan and Hazard Identification and Risk Assessment Plan needs to be submitted.

2.20 Gumgaon, Khodegaon and Tegai Manganese Mine of M/S MoIL Ltd located in Gumgaon, Khodegaon and Tegai Village, Saoner Tehsil, Nagpur District, Maharashtra, having mining Lease Area of 126.84 Ha with production capacity up to 1,02,000 TPA (ROM) of Manganese Ore - Consideration of ToR [J-11015/74/2017-IA-II (M)]

The proposal of the M/s MOIL Limited is for underground mining of Manganese ore with production capacity of 1,02,000 TPA in an area of 126.48 Hectares. The project is located at at village Gumgaon, Khodegaon and Tegai, Tehsil: Saoner, District: Nagpur, Maharashtra. The mine lease area falls in the Survey of India Topo-Sheet No. 55 K/15 and 55 O/3. The latitudes and longitudes of the Mine lease fall between Latitude:- N 21° 24' 24.33" to N 21° 23' 46.88" and Longitude:- E 78° 57' 32.02" to E 78° 59' 40.99".

2. The proponent submitted that the mining lease over an area of 126.84 hectares falling in Khasra Nos of village Gumgaon- 8, 157, 158, 166/1, 166/2 167, 168, 169, 170, 171, 172, 173, 176, 177, 178, 179, 188, 189, 190, 192 193, 194, village Tegai- 1, 2, 3 ,4 ,10, 12 ,13 ,14 ,15a ,15b ,15k/1, 15k/2, 16, 17, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72/1, 72/2, 73/3, 73/1, 73/2, 73/3 142/1, 142/2, 142/3, 142/4, 143, 144, 145, 146, 148, village Kodegaon- 94 ,95 ,96, 97, 122-123/1, 122-123/2, 126, 132, 133, 134, 135, 136, 137, 138-278, 139, 140, 141, 142, 143/1, 143/2 in village Gumgaon, Kodegaon and Tegai, Tehsil: Saoner, District: Nagpur, Maharashtra. The Letter of Intent (LOI) for Mining Lease has been issued to M/S MOIL Ltd by Government of Maharashtra vide letter number MMN-0216/L. No. 20/Industry-9, Mumbai dated 06.04.2016.

3. The proponent mentioned that the Mine Plan and Progressive Mine Closure Plan (PMCP) in respect of Manganese ore deposit of Moil Ltd. were approved vide letter no. NGP/MN/MPLN-1174/NGP-2016 on dated 03.10.2016. The proponent mentioned that the total Geological Reserve is 854086 Tonnes, Mineable Reserve is 640464 Tonnes and Extractable Reserve is 640464 Tonnes. The life of mine is 38 Years as per approved Mine Plan and PMCP. The method of Mining is Underground mechanized mines.

4. The Proponent mentioned that the mode of Entry to the Mine is through vertical shaft. The total water requirement for various purposes is 710 KLD. The total project cost is 100 Crores and manpower requirement is 456 workers.

5. The project proposal was considered during the EAC meeting held during 29-30 August 2017 for consideration of the ToR. Based on the information provided by the project proponent and the analysis of the KML file the committee noted that the mine lease area is in two parts separate from each other and the proponent do not have surface rights over the area between the two parts of the lease. The committee noted that only one ventilation/winding shaft is proposed in the existing mining lease area and the second shaft is proposed in the other mining lease of M/S MOIL Ltd. As the lease boundary of the other Mine lease and location of second shaft were not demarcated on the KML file the committee after due deliberation **deferred** the proposal for the grant of Terms of Reference (ToR) and requested the proponent to submit the following documents before the proposal can be reconsidered. (i). A letter from the State Mines and Geology department revalidating the Lol. (ii). Surface Plan and KML file clearly demarcating the lease boundaries and location of the shafts. (iii) Proposed Ventilation Plan (iv) Need based survey of the number of families going to be affected by the project.

2.21 Amalgamation of EC in respect of Patgowari Dolomite Mine by M/s Maharashtra State Mining Corporation Ltd. Patgowari Dolomite Mine Part-I & Part II over 45.76 ha. (EC obtained for 0.05 MTPA) & 14.24 Ha. (EC obtained for 0.04 MTPA) area respectively, situated at Village: Patgowari, Taluka: Ramtek, District: Nagpur, Maharashtra.[J-11015/708A/2017-IA-II (M)]

The proposal of M/s Maharashtra State Mining Corporation Ltd is for amalgamation of the Environmental Clearance granted for Patgowari Dolomite Mine Part-I over an area of 45.76 Ha having production capacity up to 0.05 MTPA vide Ministry's letter No. J-11015/708A/2007-IA.II (M) dated 18th February, 2008 and Patgowari Dolomite Mine Part-II over an area of 14.24 Ha having production capacity up to 0.04 MTPA vide Ministry's letter No. J-11015/708B/2007-IA.II (M) dated 26th February, 2008.

2. The committee **deferred** the proposal as proponent did not appear for the EAC meeting. The committee also suggested that the concerned Division may ascertain the nature of the project as per Ministry's O.M No J-11013/41/226-IA.II (M) and process the case accordingly.

2.22 Mining of Boulder, Gravel and Sand Minor Minerals at Rattewali Block/PKL B 10 by M/s Tirupati Roadways. ML Area- 45.00 ha. & 19,00,000 TPA located at Village- Rattewali, Tehsil- Barwala District- Panchkula, Haryana. [IA/HR/MIN/66257/2017] [J-11015/75/2017-IA-II (M)]

The proposal of M/s Tirupati Roadways situated at Village- Rattewali, Tehsil- Barwala District- Panchkula and Haryana. The mine lease area falls in the Survey of India Topo-Sheet No. H43K14 & H43L2. The latitudes and longitudes of the Mine lease fall between Latitude: - N 30° 38' 33" to N 30° 39' 24.6 " and Longitude: - E 76° 59' 17.50" to E 76° 50' 00.00".

2. The proponent mentioned that the LOI over an area of 45.00 ha of Mining lease

has been granted by The Director General, Department of Mines & Geology, Haryana vide memo no.- DMG/ HY/ Cont/ Rattewali Block/ PKL B 10/ 2017/ 2658 dated 16.06.2017 for a period of 7 years. The lease area lies on riverbed of Dudgarh in District Panchkula (Haryana). The proponent submitted that mining project falls under Category "A" Project due to Khol Hai Raitan Wildlife Sanctuary lies at the distance of 1.98 Km in North direction.

3. The proponent mentioned that the mining activity will be carried out by open cast semi-mechanized method without drilling and blasting. Light weight excavators will be used for digging and loading of mineral in tippers. No OB/ waste material will be produced. The total water requirement will be 40 KLD (Domestic: 5 KLD, Dust Suppression: 20 KLD and Plantation: 15 KLD). The total cost of the project is 7.0 Cr and shall give direct employment to 90 persons.

4. The project proposal was considered during the EAC meeting held during 29-30th August 2017 for consideration of the ToR. Based on the information furnished and discussion held, the Committee **recommended** the proposal for the grant of Terms of Reference (ToR) subject to the following conditions to be submitted at the time of appraisal for EC:

- i) Replenishment Study of the River Dudgarh
- ii) District Survey Report for sand for Panchkula district.

2.23 Environment Clearance for the proposal Sand (Minor Mineral) Mining Project at "Nagla Rangran Block/ YNR B 14" over an area of 89.48 ha. & 39,00,000 TPA at Village- Nagla Rangran, Tehsil-Radaur, District- Yamuna Nagar, Haryana by M/s Tirupati Earth & Project Works Pvt. Ltd.[J-11015/76/2017-IA-II (M)]

The proposal of M/s Tirupati Roadways situated at Village- Nagla Rangran, Tehsil-Radaur, District- Yamuna Nagar, Haryana. The mine lease area falls in the Survey of India Topo-Sheet No. H43R1, H43R5, H43L4, H43L8. The latitudes and longitudes of the Mine lease fall between Latitude: - N 29° 58' 10.0 " to N 29° 59' 0.0 " and Longitude: - E 77° 13' 32.0" to E 77° 14' 19.00".

2. The proponent mentioned that the LOI over an area of 89.48 ha of Mining lease has been granted by the Director General, Department of Mines & Geology, Haryana vide memo no.- DMG/ HY/ Cont/ Nagla Rangran Block/ YNR B 14/ 2017/ 2654 dated 16.06.2017 for a period of 9 years. The lease area lies on riverbed of Yamuna River in District- Yamuna Nagar (Haryana). The Member Secretary apprised the committee that a Court Case related to sand mining is going on in Yamuna Nagar area.

3. The proponent mentioned that the mining activity will be carried out by open cast semi-mechanized method without drilling and blasting. Light weight excavators will be used for digging and loading of mineral in tippers. No OB/ waste material will be produced. The total water requirement will be 70 KLD (Domestic: 10 KLD, Dust Suppression: 40 KLD and Plantation: 20 KLD). The total cost of the project is Rs. 9.5 Cr and shall give direct employment to 115 persons.

4. The project proposal was considered during the EAC meeting held during 29-30th August 2017 for consideration of ToR. Based on the information furnished and discussion held, the Committee **recommended** the proposal and prescribed the Standard ToR for undertaking detailed EIA study as per Annexure-I. PP was directed to furnish the details of upstream mining of sand in EIA study report.

2.24 ToR for enhancement in the production capacity of Limestone from 0.272 MTPA to 1.0 MTPA of an Area of 93.1407 ha from Morasa Vavdi Limestone Mines of M/s Gujarat Sidhee Cement Limited at Village Morasa Vavdi, Taluka Sutrapada, District Gir Somnath, Gujarat [J-11015/115/2007-IA.II(M)]

The proposal of **M/s Gujarat Sidhee Cement Limited** situated at Morsa & Vavdi Village, Sutrapada Taluka, Gir Somnath District, Gujarat. The mine lease area falls in the Survey of India Topo-Sheet No. F42 W5& W1, F42W9 & W10,F42Q8 & F42Q12. The latitudes and longitudes of the Mine lease fall between Latitude: - N 20° 50' 0.0" to N 20° 52' 30" and Longitude: - E 70° 30' 0.0" to E 70° 32' 30".

2. The proponent submitted that the Mining lease deed signed between State Govt. and M/s Gujarat Siddhee Cement Ltd. and registered/ executed on 09.01.2015. The period of mining lease has been started from 09.01.2015 to to 08.01.2035 for 20 years. As per MMDR (Amendment) Act, 2015, the mining lease period deemed to be increased to 50 years from the date of lease execution. The lessee has already applied for the same and the matter is under consideration at the level of State Govt.

3. The proponent mentioned that the mining operations is proposed to be carried out by opencast fully mechanized method by making benches 6m high and working bench width 12-15m and maintaining working bench slope of 70°. Surface Miner is proposed to be used for winning of mineral limestone. No blasting is proposed. The entire ROM material is proposed to be fed to the crusher directly located outside mine lease area. The Gross Mineral Resource is 19.29 million tonne and the anticipated life of the mine is 12 years at a rated capacity of 1.00 million tonnes per annum. The project cost is Rs.17.28 Cr and shall give direct employment to 43 persons. The Project proponent mentioned that the total quantity of water requirement is 83 KLD.

4. The proponent mentioned that the Environmental Clearance for 0.272 mtpa was issued vide MoEF&CC letter no. 11015/115/2007-IA.II(M) dated 29th July 2008 for mineral Limestone imposing condition using surface miner & without blasting.

5. The project proposal was considered during the EAC meeting held during 29-30th August 2017 for consideration of ToR. Based on the information furnished and discussion held, the Committee **recommended** the proposal and prescribed the Standard ToR for undertaking detailed EIA study as per Annexure-I.

2.25. J-11015/79/2017-IA-II (M) M/s Bagalkot Cement & Industries Ltd, located at Village Kaladagi Village, Bagalkot Taluk, Bagalkot District, Karnataka, (Area 67.32 Ha) IA/KA/MIN/67156/2017

The proposal was not considered by the EAC as the project proponent did not attend

the meeting.

The meeting ended with vote of thanks to the Chair.

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 bufferzone).
- 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 EIA Report.
- 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) Airqualitymodelingshouldbecarriedoutforpredictionofimpactoftheprojectonthe 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.
- 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 brought out.
 - 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.

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Standardization of EC conditions in Non-coal mining sector

A. Specific conditions

To be suggested by the EAC w.r.t. project.

B. Standard conditions

- 1). Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
- 2). This Environmental Clearance is subject to obtaining requisite NBWL Clearance from the Standing Committee of National Board for Wildlife, if any, as applicable for this Mining project.
- 3). The Project Proponent shall obtain Consent to Operate from the concerned State Pollution Control Board and effectively implement all the conditions stipulated therein.
- 4). Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall complete all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing.
- 5). The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water) for the project.
- 6). Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- 7). A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forest and Climate Change 5 years in advance of final mine closure for approval.
- 8). No change in mining technology and scope of working should be made without

prior approval of the Ministry of Environment, Forest and Climate Change.

- 9). No change in the calendar plan including excavation, quantum of mineral and waste should be made.
- 10). Mining shall be carried out as per the provisions outlined in mining plan approved by Indian Bureau of Mines (IBM)/State Mines and Geology Department as well as by abiding to the guidelines of Directorate General Mines Safety (DGMS).
- 11). The lands which are not owned by Proponent, mining will be carried out only after obtaining the consents from all the concerned land owners as per the provisions of the Mineral Concession Rules, 1960 and MMDR Act, 1957.
- 12). Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment, Forest and Climate Change its Regional Office.
- 13). Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of anti- snake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- 14). The critical parameters as per the Notification 2009 such as PM₁₀, PM_{2.5}, NO_x, and Sox etc. in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- 15). The Proponent shall install online Ambient Air Quality Monitoring System and there should be system for display of digital AAQ data within 03 months at

least at three locations as per wind direction. Online provisions of pH and turbidity meters at discharge points of STP and ETP and also at water storage ponds in the mining area may be made. Project Proponent should display the result digitally in front of the main Gate of the minesite.

- 16). Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as haulroad, loading and unloading point and transfer points. Fugitive dust emissions from all the sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board.
- 17). Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. The monitoring shall be carried out four times in a year pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected 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.
- 18). Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre- mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground watertable.
- 19). Regular monitoring of water quality upstream and downstream of water bodies shall be carried out and record of monitoring data should be maintained and submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.

- 20). 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 'PUC' certificate for all the vehicles from authorized pollution testing centres.
- 21). Transportation of the minerals by road passing through the village shall not be allowed. A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The project proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.
- 22). 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 light/nighthours.
- 23). Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers. Crusher and material transfer points should invariably be provided with Bag filters and or dry fogging system. Belt-conveyors should be fully covered to avoid air bornedust.
- 24). Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers. The material transfer points should invariably be provided with Bag filters and or dry fogging system. In case of Belt-conveyors facilities the system should be fully covered to avoid air borne dust; Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall beensured.
- 25). Sufficient number of Gullies to be provided for better management of water. Regular Monitoring of pH shall be included in the monitoring plan and report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthlybasis.
- 26). There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis and implementation of conservation

measures to augment ground water resources in the area in consultation with Central Ground WaterBoard.

- 27). The Project Proponent has to take care of gullies formed on slopes. Dump mass should be consolidated with proper filling/leveling with the help of dozer/compactors.
- 28). The reclamation at waste dump sites shall be ecologically sustainable. Scientific reclamation shall be followed. The local species may be encouraged and species are so chosen that the slope, bottom of the dumps and top of the dumps are able to sustain these species. The aspect of the dump is also a factor which regulates some climatic parameters and allows only species adapted to that microclimate.
- 29). The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8m and width 20 m and overall slope of the dumps shall be maintained to 45⁰. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.
- 30). Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. The drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dumps to prevent run off of water and flow of sediments directly into the river and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at

regular intervals.

- 31). Plantation shall be raised in a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department and as per CPCB Guidelines. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.
- 32). Project Proponent shall follow the mitigation measures provided in 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".
- 33). The Project Proponent shall make necessary alternative arrangements, where required, in consultation with the State Government to provide alternate areas for livestock grazing, if any. In this context, Project Proponent should implement the directions of the Hon'ble Supreme Court with regard to acquiring grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded against felling and plantation of such trees should be promoted.
- 34). The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.
- 35). As per the Company Act, the CSR cost should be 2 % of average net profit of last three years. Hence CSR expenses should be as per the Company Act/Rule for the Socio Economic Development of the neighborhood Habitats which could be planned and executed by the Project Proponent more systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. The report shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis.
- 36). Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The

housing may be in the form of temporary structures to be removed after the completion of the project.

- 37). 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.
- 38). Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.
- 39). 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.
- 40). A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- 41). The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office.
- 42). 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.
- 43). The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest and Climate Change, its Regional Office, Central Pollution Control Board and State Pollution Control Board.
- 44). The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- 45). A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.

- 46). State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.
- 47). The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment, Forest and Climate Change at www.environmentclearance.nic.in and a copy of the same should be forwarded to the Regional Office.

Standard TOR for mineral beneficiation project

- 1) The alternate sites considered, the relative merits and demerits and the reasons for selecting the proposed site.
- 2) Details of the technology and process involved in the project.
- 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.
- 4) Treatment of run of from the fines/waste dump.
- 5) Estimation of the fines going into the washings and its management.
- 6) Details of the equipment, settling pond etc.
- 7) Detailed material balance to be provided.
- 8) Source of raw material and its transportation. Steps proposed to be taken to protect the ore from getting air borne.
- 9) Management and disposal of tailings and closure plan of the tailing pond, if any, after the project is over.
- 10) The water requirement for the project, its availability and source to 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) Does the company have 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.
- 18) Railway siding and its location with handling capacity and safety measures.
- 19) Option to provide only silo for storage of minerals instead to open stacking to avoid fugitive dust.
- 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, 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.
- 28) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
- 29) Proximity to Areas declared as 'Critically Polluted' shall also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB/CPCB shall be secured and furnished to the effect that the proposed activities could be considered.
- 30) Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL. HTL, CRZ area, location of the unit w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- 31) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted

- accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village located in the lease area will be shifted or not. The issues relating to shifting of Village including their R&R and socio-economic aspects should be discussed in the report.
- 32) One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season) ; December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the unit in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
 - 33) Air quality modelling 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.
 - 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 provided.
 - 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 may 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 clearly be spelt out.
- 48) Provide a brief background of the project, financial position, group companies and legal issues etc.; past and current important litigations.
- 49) Benefits of the project if the project is implemented. The benefits of the projects shall clearly indicate environmental, social, economic, employment potential, etc.

7. 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.

LIST OF EXPERT APPRAISAL COMMITTEE (MINING - Non Coal Mining Sector)

Name and address	Designation	Sine 29-8-17	Sine 30-8-17
Dr. Ajai Kumar B-1302, BestechParkView Spa, Sector-47, Gurgaon, Haryana	Chairman	<i>Aj Kumar</i>	<i>Aj Kumar</i>
Shri B Ramesh Kumar H-No. 6-1-134/6, Balram Compound, Padmarao Nagar, Secundrabad- 500025, Andhra Pradesh	Member		
Prof. Dr. K.S. Rana Maharana Manzil, 18, Dholpur House, (D.M. Compound), M.G. Road, Agra-1, Uttar Pradesh - 282001	Member	<i>K.S. Rana</i>	<i>K.S. Rana</i>
Prof. A. K. Bhatnagar, JA/4B, Ashok Vihar-I, Delhi - 110052	Member	<i>A. K. Bhatnagar</i>	
Dr. N. C. Karmakar Department of Mining Engineering, Indian Institute of Technology (BHU), Varanasi - 221 005, Uttar Pradesh	Member		
Dr. Hemant S. Sahasrabudhe "Utkarsha", LB-53, Housing Board Colony, Laxminagar, Nagpur-440022	Member		
Prof. S. Ramakrishna Rao 50-120-9/1, Tulasi Mani Regency North Extension, Seethammadhara, Visakhapatnam - 530013 Andhra Pradesh.	Member	<i>S. Ramakrishna Rao</i> 29/8/17	
Dr. Himanshu Pathak, Professor, Center for Environment Science and Climate Resilient Agriculture, Indian Agricultural Research Institute, New Delhi 110 012	Member		
Dr. AL. Ramanathan Professor, School of Environmental Sciences, Jawaharlal Nehru University. New Mehrauli Road, New Delhi- 110067	Member		
Dr. Tushar Kant Joshi, Laxmikant Niwas, Salan Gaon, Bhagwantpur, Dehradun-248009, Uttarakhand.	Member	<i>Tushar Joshi</i>	<i>Tushar Joshi</i>
Shri Santosh Gupta, Flat No. 405, Block -B, Gaur Green Vista, Nyaykhand -1, Indrapuram, Ghaziabad-201014	Member	<i>Santosh Gupta</i>	<i>Santosh Gupta</i>
Representative of Ministry of Mines Shri. Pushpender Gaur, Joint Controller of Mines, Ministry of Mines, Shastri Bhawan New Delhi-110001.	Member	<i>Pushpender Gaur</i> 29/08/17	<i>Pushpender Gaur</i> 30/08/17
Representative of Indian Meteorological Dr. V.K. Soni, Scientist "E", (Meteorology/Air Pollution), 609, SatMet Building, Indraprastha, Indian Meteorological Department, Lodhi Road, New Delhi-110003	Member	<i>V.K. Soni</i>	
Representative of Wildlife Institute of India, Dr. (Ms.) Asha Rajvanshi, Wildlife Institute of India, Chandrabani, Dehradun-248001	Member		
Director -Division (Non Coal Mining) Room No. 305, Indira Paryavaran Bhawan, Ministry of Environment, Forests & CC, Jorbagh Road, Lodhi Road, New Delhi-110003	Member Secretary	<i>[Signature]</i> 29/8/17	<i>[Signature]</i> 30/8/17

Agenda for 21ST EAC Meeting to be held during on 29TH AUGUST - 30TH AUGUST, 2017