

**MINISTRY OF ENVIRONMENT & FORESTS  
(IA DIVISION)**

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**SUMMARY RECORD OF 8<sup>th</sup> MEETING OF THE RECONSTITUTED COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.**

The 8<sup>th</sup> Meeting of the Reconstituted Expert Appraisal Committee for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment and Forests was held during June 26<sup>th</sup>-28<sup>th</sup>, 2013. The list of participants is annexed.

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

**Item No. 1:**

**1.1 Confirmation of the minutes of the 7<sup>th</sup> Meeting.**

The Minutes of the 7<sup>th</sup> Meeting of EAC held during May 15<sup>th</sup>-17<sup>th</sup>, 2013 were confirmed as circulated.

**Agenda Item No. 2:**

**2.1: Proposed lime stone mine (602 ha) production capacity (2.6 MPTA) of M/s Lafarge India Pvt. Ltd. located at near village Sita Ram Ji Ka Khera, Tehsil Nimbahera, District Chittorgarh, Rajasthan (Consultants: J M Environment Pvt. Ltd., Gurgaon)-EC.**

The proposal is for opening a new Limestone Mine (602 Ha) with proposed production capacity of 2.6 MTPA located near village Sita Ram Ji Ka Khera, Tehsil-Nimbahera, District- Chittorgarh Rajasthan. The Latitude & Longitude of the site is 24°42'45.1" N to 24°44'00.0" N and 74°42'21.6"E to 74°40'31.6" E.

The proposal was considered by the Expert Appraisal Committee (EAC) in its meeting held during 25<sup>th</sup>-27<sup>th</sup> July, 2012 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/268/2012-IA.II (M) dated 11<sup>th</sup> October, 2012 to M/s Lafarge India Pvt. Ltd. An Application request letter for amendments in ToR was received, which was placed before EAC on 17<sup>th</sup> May, 2013. The project proponent had requested to amend the following conditions prescribed in the TOR (i) TOR condition no. 1: Year-wise production details since 1994 onwards should be

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 coming into force w.r.t. the highest production achieved prior to 1994, TOR 10. Issues relating to mine safety based on subsidence study should be detailed (ii) TOR condition no. 10: The proposed safeguard measure in this regard should be provided. (iii) TOR condition no. 17: Status of the 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). A copy of forestry clearance should also be furnished. (iv) TOR condition no. 21: A study shall be got done to ascertain the impact of the mining project on wildlife of the area including on the elephant population and details furnished. The Committee agreed to the request made by the PP. The proponent submitted its Application to the Ministry for seeking environmental clearance after conducting Public Hearing.

The Mine Lease Area is 602 ha which includes, 331.07 ha Govt Barren Land and 270.93 ha Private Agricultural land. The Mining plan is approved by IBM vide Letter No. 682(23)(803)/2012-MNNM (N)-Udai dated 12<sup>th</sup> February, 2013. It is reported by the Project Proponent (PP) that the mine working will be carried out using mechanized Opencast Mining method. The process will involve Drilling & Blasting, loading and transportation of the excavated material. The drilling of blast holes will be done by DTH (down the hole) drill machine of 115 mm diameter operated by compressed air. The average rate of drilling will be about 6 m/hr. The blasting will be done by using ANFO as column charge with 15-20% slurry high explosive as booster. The firing of holes will be done with milli second delay detonators and cordtex fuse or with NONEL system. Hydraulic Rock breaker will be used in place of secondary blasting to break big boulders produced during mining. The transportation of blasted limestone will be done by 35 tonnes capacity dumpers from mine faces to crusher site and crushed limestone will be transported to cement plant by covered conveyor belt. The total mineable reserves are 83.584 million tonnes. Life of mine is approximately 33 years. It was reported by the PP that the interburden waste generation will be 2.03 million m<sup>3</sup> at the end of the life of the mine. At the conceptual stage, waste will be dumped at one place i.e. between Block A and Block B over 35 ha of area. The same will be reclaimed by plantation.

It was reported by the PP that the total water requirement for the proposed mining project will be 82 KLD which will be sourced from ground water and mine sump water as and when developed. CGWA has granted permission for abstraction of water vide letter No. 21 4(443)/WR/CGWA/2010-813 dated 14<sup>th</sup> May 2010.

It was reported by the PP that the mine working may intersect ground water table at later stages of mine life. The Committee was of the view that in such a case, Hydrogeology study needs to be conducted through a reputed

institution. Further, the PP is required to inform the Ministry and the same would be discussed in the EAC.

It was reported by the PP that there is no Wild Life Sanctuary/Tiger Reserve/National Park within 10 km radius area of the mining boundary. There are five Schedule I Species namely *Canis lupas pallipes* (Indian Wolf), *Panther pardus* (Leopard), *Crocodylus palustris* (Mugger Crocodile) *Phython molurus* (Indian Phython) and *Pavo cristatus* (Indian peafowl) reported within 10 km radius of the mine. Conservation Plan for the same has been prepared and approval of the same is under process with the concerned State Govt Department.

Baseline studies were carried out during Post Monsoon Season, 2012 (October-December 2012). All the parameters for water and air quality were within permissible limits. The Public Hearing for the Proposed Project was conducted Near Proposed Mine, Village Sitaram Ji Ka Khera, Panchayat Samiti, Nimbahera, Chittorgarh (Raj.) on 18<sup>th</sup> March, 2013 at 11:00 am. The Public Hearing was chaired by Mr. NK Kothari (ADM). The issues raised during public hearing were also considered and discussed during the meeting which inter-alia, included that royalty or some part of the profit need to be given to the villagers, Proper and equal compensation to be provided, employment to villagers, development work like arrangement of drinking water, plantation in village streets, marble flooring in hanuman temple, construction of community centre (Bhawan) should be done, Panchayat headquarter to be linked with CC road, construction of Goushala, establishment of engineering and ITI college, ambulance and health facility for villagers and protection of the environment due to mining activities to be done. As per villager's requirements, it was informed by the PP that they would take care of the compensation, employment, development work, health care facility to villagers and protection measures of Environment due to mining activities.

Total cost of the project is Rs. 55 crores. Capital and Recurring Cost for Environmental Protection Measures is Rs. 3.0 Crores and Rs. 30 Lacs per annum respectively. About Rs. 123.5 Lacs have been earmarked towards CSR activities in first year of mining operation. It was reported by the PP that there is no court case/litigation pending against the project and no violation.

Based on the discussion held, Committee was of the view that considering the scheduled-I sp. found in the study area, a conservation plan shall be submitted. The conservation plan should have the following components: species specific conservation action, budgetary provisions, implementing agencies and monitoring mechanism. Three villages/human settlements are located within the mine lease area. As informed by PP, the villages will be 400 meter away from the mining activity. The committee desired to know regarding the measures being proposed for protection of these villages. To this the PP informed that they

proposed to develop a green belt. The Committee was of the view that just green belt development will not be sufficient and additional dust, sound and vibration mitigation barricading measure(s) should be explored and provided for. The Green belt within the Lease area to shield the villages should consist of Stratified layers of trees of local species and of appropriate heights to serve the intended objective of protecting the adjacent villages/human settlements.

The Committee decided to **defer the proposal, to be brought back** to the Committee after the aforesaid information is submitted.

## **2.2: Lakhnauti Silica Sand Mine of M/s Chawla Silica Sand Trading Co., village Lakhnauti, Tehsil Bara, District Allahabad UP.- (Consultants: GRC India Training and Analytical Laboratory)-EC**

The proposal is for opening a new opencast silica sand Mine with proposed production of 166.66 TPD (50000 Tonnes /Annum ROM) by M/s Chawla Silica Sand Trading Company, located at village Lakhnauti, Bara Tehsil, Allahabad District, Uttar Pradesh. The Latitudes and Longitudes of the site are 25°14'38.1" N to 25°15'4" N and 81°33'28.1" E to 81°33'41.5" E.

The proposal was considered by the Expert Appraisal Committee in its meeting held during 20-22<sup>th</sup> July, 2011 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/116/2011-IA.II (M) dated 20<sup>th</sup> September, 2011.

The mine lease area is 16.75 ha, which is a government revenue land. M/s. Chawla Silica Sand Trading Co. has been sanctioned mining lease vide State Government of U.P. order No. 1644/86-2010-232/2008 dated 27.07.2010. It is Category 'A' project as it is located at interstate boundary of U.P. and M.P. The Mining plan is approved by IBM vide Letter No. UP/Allahabad/S.Sd/MPLN/G-01/10-11 dated 01.04.2011. Opencast method of mining has been proposed. All operations will be done manually by using hand tools like crowbars, spades, chisels and hammers. The deployment of excavator cum loader may be done in case of shortage of labour and to meet increased demand. The development / production have been proposed in the pits-1 & 4 near north western boundary and southern boundary from one end of the lease area. No. of benches in OB will be 1 and in ore will be 1 towards south in Pit 4 while 2 in North West in Pit 1. The overall pit slope will be 45°. The bench in OB will be of height and width up to 1.5m while in ore, it will be of height and width of 3.0m. The stripping ratio will range from 1: 0.36 to 1: 0.58.

The soil is sandy in nature in loose form mixed with grit and small pebbles. It is only found in patches above sand stone. The OB is in the form of unaltered sandstone and intercalated clay etc. This will be in loose form in the shape of chips and lumps. The OB will be stacked in 1.0 ha area, ear marked for this purpose, up to 6m height. The waste will be backfilled.

The water required is mainly for dust suppression, green belt development, drinking and other domestic purpose during mining operations as well as in Washing Plant and Crusher. The total water requirement will be 17 KLD. Sources of water will be Ground water from Dug Wells/ Bore Wells existing within the ML area and mine sump. The water Table is reported to be varying from 110m AMSL to 114m AMSL i.e. 11m to 15m bgl (125m AMSL) in the buffer zone. Maximum depth of working will be 8.5m, so ground water will not be intersected.

It was reported that there is no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves, within 10 km of the mine lease. Baseline studies were carried out during post monsoon season i.e. October to December 2011. All the parameters for water and air quality were reported to be within permissible limits. The Public Hearing for the Proposed Project was conducted at Lakhnauti Village on 15.12.2012. The PH was chaired by Shri Ram Niwas (Additional District Magistrate, Allahabad District). The issues raised during public hearing were also considered and discussed during the meeting, which inter-alia, included that fund should be allocated for socio-economic development of the village, blasting should be done in a proper way, migration of local people should be avoided, village development work should be carried out, mining operation should be started as early as possible.

The cost of the project is Rs 2 crores. Budget for environmental protection is Rs 15 Lacs and the budget for Socio-economic development is Rs 10 Lacs. It was reported by the PP that there is no court case/litigation pending against the project and no violation.

It is reported that Schedule I species *Pavo cristatus* (peafowl) is present in the study area, Committee was of the view that a species specific conservation plan shall be submitted. Additional information need to be submitted by the PP regarding action plan with budgetary provisions based on public hearing. The Questionnaire submitted was incomplete; therefore, a revised Questionnaire shall also be submitted.

The Committee decided to **defer the proposal to be brought back** to the Committee after the information, as above, is submitted.

**2.3: M/s Penna Cement Industries Ltd., Talaricheruvu village Tadipatri Mandal, District-Anantpur, A.P. (106.86 ha) (Consultant: B.S. Envitech, Hyderabad-EC.**

The proposal is for opening a new mine in the Mine Lease Area of 106.86 ha located at Talaricheruvu Village, Tadipatri Mandal, Anantapur District, A.P. As per EIA/EMP report, the mine area falls under the Survey of India Topo sheet No. 57 I/4 & 57 J/1 and is located between 14<sup>0</sup>58'55.55" to 15<sup>0</sup>0'7.62" N latitude and 78<sup>0</sup>03'24.90" to 78<sup>0</sup>05'9.11" E longitude. The altitude of the mine ranges from

300 – 340 m above MSL.

The proposal was considered for TOR by the Expert Appraisal Committee in its meeting held during 23-25<sup>th</sup> February, 2011. The TORs were issued by MoEF vide letter No. J-11015/ 391 /2010-IA.II (M) dated 28.03.2011. Request for extension of TOR was considered in EAC meeting held during 16-18<sup>th</sup> April 2013. TOR extension letter was issued on 22<sup>nd</sup> May, 2013.

The proponent submitted their Application for seeking environmental clearance after conducting public hearing to the Ministry on 18-04-2013. The mine covers an area of 106.86 ha (94.55 ha. area is Govt. waste land, 12.31 ha. area is Patta land owned by the Company). Mining will be carried out by opencast mechanized method with the help of drilling, blasting, loading and transporting equipment. The entire limestone is out cropping without any waste cover of soil or rock. Limestone mined from the mine is used for consumption in Cement Plant for the manufacture of Clinker. The mine is situated at a distance of 3.5 km from the cement plant.

There is no solid waste or top soil generation from the mine. The total water requirement of the mine is 65m<sup>3</sup>/day and this requirement will be met from supply system of the cement plant initially and later from the mine pit proposed to store the rain water. No ground water will be drawn. The water table in the area as per observations from nearby villages and other available information is at a depth of about 40m from surface during summer and about 35 m during rainy season. As far as the ground water is concerned the formations are not permeable. The permanent ground water table is struck at more than 40 meters depth. Since average depth of mining is not more than 15 meters, it is not likely to go below the ground water table. The mining will not intersect the ground water table. The deepest level to be reached will be 294 m RL and the ground water level around this place shall be 278 m RL i.e. a depth difference of about 16m.

It has been reported that there are no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves existing/proposed within 10 km of the mine lease. There were no Schedule – I species recorded in the study area.

Baseline studies were carried out during Winter season 2011-12 covering the months of December 2011-February 2012. The Public Hearing for the Project was conducted on 26.3.2013. The issues raised during public hearing were also considered and discussed during the meeting, which inter-alia, included, air pollution control measures need to be adopted, raising of plantation, sprinkling of water etc. As per the villager's requirements, it was informed by the PP that they would take care of local employment; health issues, providing education, and assistance in vocational training etc.

The estimated capital cost of the project is 10 cores. The capital cost for Environmental protection measures would be Rs 1.0 cores with annual recurring cost of Rs 10.5 lakhs. It was reported by the PP that there is no court case/litigation pending against the project and no violation.

It was observed by the Committee that co-ordinates of mine lease as mentioned in the mine plan and EIA report were not consistent. Therefore a clarification may be submitted by project proponent in this regard. In addition, following details may be submitted:

- (i) List of village(s) likely to be affected by mining activities and measures to control the impact.
- (ii) Addendum for land use and other discrepancies in EIA report as pointed out.
- (iii) Detailed baseline data of biodiversity of the study area.
- (iv) Emphasis for preventive measures for occupational health of the workers and surrounding habitation
- (v) Since during the public hearing, project was not supported, a detailed Action Plan with budgetary provisions and time frame for implementation shall be submitted.

The Committee decided to **defer the proposal, to be brought back** to the Committee after the information, as above, is submitted.

#### **2.4: Ampavalli Limestone Mine of M/s The Industrial Development Corporation of Orissa Ltd., Village Ampavalli, Tehsil Pttangi, District Koraput, Orissa (Consultant: Grass Roots Research & Creation India (P) Ltd)-EC**

The proposal is for existing Opencast Ampavalli Limestone Mining with proposed production of 3337 TPD (10,01,074 Tonnes /Annum ROM Limestone) by M/s The Industrial Development Corporation of Odisha Ltd., located at village Ampavalli, Pottangi Tehsil, Koraput District, Odisha. The Latitude and Longitude of the site is 18<sup>0</sup>23'18" to 18<sup>0</sup>24'37" N and 82<sup>0</sup>57'45" to 82<sup>0</sup>59'37" E.

The proposal was considered by the Expert Appraisal Committee in its meeting held during 28-30<sup>th</sup> November, 2011 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/224/2011-IA.II(M) dated 28<sup>th</sup> March, 2012.

The mine lease area is 285.429 ha, which is private patta land and Government revenue land. M/s The Industrial Development Corporation of Odisha Ltd. was sanctioned mining lease for a period of 20 years w.e.f. 18.08.1993 to

15.08.2013. The lessee has applied for renewal mine lease on dated 02.07.2012. The Mining Plan was approved by IBM, Bhubaneswar vide letter no. 314(4)/92 MCCM (CZ)/MP/Extn-CAL dated 17.05.1993. The Scheme of Mining was approved by IBM, Bhubaneswar vide letter no 314(3)/2005-MCCM(C)/S-28 dated 06.10.2006. The Second Scheme of Mining has been approved by IBM, Bhubaneswar vide their letter no MS/OTF.MECH/07-ORI/BHU/2010-11 dated 07.06.2010.

The technology to be adopted for mining operations would be Opencast other than fully mechanized (OTFM) method. Drilling in ore and OB shall be carried out by jack hammer drill as well as by 100 mm dia. DTH drill, loading of ore will be by 1.2 m<sup>3</sup> capacity excavators and 10 tonnes capacity truck/tippers. Mining operations will be carried out during day time only on single shift basis. There is practically no overburden, except soil layer at a few places. The ore will be blasted through DTH drilled holes. However, Jack hammer drilling will be done only for breaking big boulders of limestone and for toe drilling. Soil, wherever existing shall be removed separately and stacked separately for re-use for the purpose of plantation.

Overburden as well as Run of Mine (ROM) limestone, excavated from the quarry face is loaded by 1.2 m<sup>3</sup> capacity excavators into 10 tonnes capacity tippers. The ROM limestone of good quality is directly dispatched to the cement plant while ROM limestone of low quality (mixed type) or ROM limestone with calc-granulite is transported to the pit top where waste is separated from limestone manually by the help of spades, baskets, crowbars etc. After manual sorting the usable limestone as well as waste is loaded manually by head load/excavator in the tippers and transported to the plant and waste dump respectively.

Waste/rejects likely to be generated, is calc granulite and sub soil. Toxic elements from the said waste material are not expected. The lumpy material within OB/Waste will be utilized as building material and road metal. The rest will be backfilled during the PMCP period. At the end of life of the mine, waste generation will be of the order 20,27,627 m<sup>3</sup>. Likely generation of waste during the scheme period is 78,500 m<sup>3</sup> which will be dumped up to 8.5m height over the existing dump, which will be expanded towards north and west. Beyond the scheme period, waste generation will be 20,27,627 – 78,500 = 19, 49,127 m<sup>3</sup>. Out of these, 6,00,000 m<sup>3</sup> waste will be dumped over an area of 3 hectares at 20m average height while remaining 19,49,127–6,00,000 = 13,49,127 m<sup>3</sup> will be back-filled concurrently over an area of 5 hectares.

Retreat method of dumping will be carried in the lease area. The individual terrace-slopes will not exceed 37° while ultimate dump slope angle will be maintained at 20°-22°. The individual terrace height will be limited to 10m as each terrace will have inward slope with catch drains at the inward side of the terrace. The catch drains of the individual terrace will be connected to



the garland drain outside the periphery of the dump. These catch drains will preferably have half concrete open pipes followed by settling tanks to avoid wash-offs. Each terrace will also have a provision of berms at the outer end to reduce gully formations due to rain water wash-offs.

The water required is mainly for dust suppression, green belt development, drinking and other domestic purpose during mining operations. The total water requirement will be 55 KLD. Sources of water will be Ground water from Dug Wells/ Bore Wells existing within the ML area and mine sump. The water Table is reported to be varying from 46m to 50m bgl in the buffer zone. Maximum depth of working will be 40 m, so ground water will not be intersected.

There is no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves (existing as well as proposed), within 10 km of the mine lease. Schedule-I species such as *Melursus ursinus* (Sloth Bear), *Tragulus meminna* (Indian Mouse Deer), *Cynopterus sphinx* (Greater Short-Nosed Fruit Bat), *Manis crassicaudata* (Indian Pangolin) and *Pavo cristata* (Indian Peafowl) have been reported in the buffer zone for which Conservation and Management Plan shall be submitted.

Baseline studies were carried out during pre-monsoon season of March to May 2012. All the parameters for water were reported to be within permissible limits, but in the case of air environment, two monitoring stations e.g. AQ1 and AQ2 were beyond the limit of 100 µg/m<sup>3</sup> may be because of nearby industries. Exceeding of ambient air quality norms, may also be due to slash and burn cultivation, which has been extensively practiced in that particular area.

The Public Hearing for the Proposed Project was conducted at Tehsil office campus on 20.11.2012 at 11.00 A.M. The PH was chaired by Shri Pabitra Mandal O.A.S. (S) Additional District Magistrate, Koraput. The issues raised during public hearing were also considered and discussed during the meeting, which inter-alia included that local development, dust problem, local employment and compensation for crop damage.

The cost of the project is Rs 26 crores. Budget for environmental protection is Rs 15 Lacs whereas the budget for Socio-economic development is Rs 22 Lacs. It was reported by the PP that there is no court case/litigation pending against the project.

Based on the presentation made and discussion held Committee was of the view that a species specific conservation plan shall be submitted. Committee also suggested that for conservation of *Rauwolfia serpentina* nursery shall be maintained. The compliance of TOR point no. 33 on occupational health aspect was not addressed. The Committee decided to **defer the proposal to be brought back** to the Committee after the information is submitted.

**2.5: Expansion of Lohapatti Sand Ghat Project (Dhamodar) (from 0.28 million m<sup>3</sup> per annum to 0.886 m<sup>3</sup> per annum of M/s Bharat Coking coal Ltd. Distt. Dhanbad, Jharkhand (96.392 ha) Consultant : CMPDI, Dhanbad.-TOR**

The mine is located in village Lohapatti, Tehsil Bagmara, Mouza: Lohapatti (Plot No.1 & 3290) and Jamdiha (Plot No.1), District Dhanbad, Jharkhand. The mine lease is for an area of 96.392 ha. The proposal is for expansion of sand mining from 0.28 million m<sup>3</sup> per annum to 0.886 m<sup>3</sup> per annum. The Latitudes & Longitudes of mine Lease area are between 23°43'40" N to 23°45'30"N and 86°11'0" N to 86°11'30"E respectively. The sand collected/gathered from the leases along the rivers will be used for stowing (filling the voids) in underground coal mines. The mining will be semi-mechanized in which the river bed material is collected in its existing form. Excavation machines like Pay loader along with hand tools like shovel, pan, Sieve etc. will be used. Collection of sand will be carried out in all three shifts round the year except in monsoon season. No change in mining technology is proposed. There is no drilling and blasting involved. There is no rehabilitation & resettlement involved.

There are no mineral rejects of any kind produced during mining, therefore, no provision of stock yard is proposed. The entire mineral produced is useable. However pebbles and boulders, if any, are collected separately and used for pitching of the river banks. Sand is loaded on to trucks/dumpers of capacity 6m<sup>3</sup> and transported to the linked collieries through metalled roads.

It was observed that this is a **violation case** as mine was operating without obtaining environmental clearance after mine lease fell due for renewal in 1994. Based on the information furnished and presentation made by the project proponent and discussions held, the Committee prescribed the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways (loaded as well as unloaded trucks) and its impact on Environment (iii) cumulative impact due to sand mining, and (iv) Impact of mining on plankton.

**2.6: Guma Limestone Mine with Production Capacity of 3.2 MTPA of M/s Ultra Tech Cement Ltd. at village Guma, Distt. Raipur, Chhattisgarh (157.122 ha) (Consultant: J.M. environment Pvt. Ltd., Haryana)-TOR**

The Mine Lease area is located at Village-Guma, Tehsil-Palari, District-Balodabazar - Bhatapara (Chhattisgarh). The latitudes & Longitudes of the mine Lease area is 21° 34'30" N to 21°37'30" N and 82°03' 00" E to 82°06 '30" E respectively. The Project is located in seismic zone-II. In the proposed project, method of mining is opencast fully mechanized which involves drilling, blasting, crushing, loading/unloading and transportation. Letter of Intent was granted

initially in the name of Grasim Industries Ltd. by Mineral Resource Department of Chhattisgarh, Raipur vide their letter no. F 2 – 32/2003/12 (2) dated 17.11.2009. Revised Letter of Intent regarding the change of the name from Grasim Industries Ltd. to M/s. UltraTech Cement Ltd. by Mineral Resource Department of Chhattisgarh, Raipur vide their letter no. F 2 – 32/2003/12 (2) dated 29.12.2010. Mining Plan has been approved in the name of Ultra Tech Cement Ltd by Controller of Mines (Central Zone), Indian Bureau of Mines; vide letter no. 314(3)/2010 – MCCM(CZ)/MP/MS/PMCP-25 dated 14.02.2011. There is no court case/litigation pending against the project.

Earlier TORs were prescribed in the name of M/s Grasim Cements vide letter dated 06.04.2010, which expired on 05.04.2013. It was noted that baseline data was collected in December 2011- February 2012. The Committee was of the view that the baseline data collected during 2011-2012 may be considered for preparation of EIA/EMP report. Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I.

## **2.7: Black Granite Mine of M/s Sri Venkatasai Granites located at Village Pasumanda, Tehsil Gudipala, District Chittoor, Andhra Pradesh (5.364 ha) (Consultant: B.S. Envio-Tech (P) Ltd, Hyderabad)-ToR**

The proposal is for mining of Black Granite with proposed production of 2246 m<sup>3</sup>/Annum of M/s Venkatasai Granites at Pasumanda Village, Gudipala Mandal, Chittoor District of Andhra Pradesh with mine lease area of 5.364 ha with the proposed capacity of 2246 m<sup>3</sup>/Annum of Black Granite Production. The mine lease area is located at Pasumanda Village, Gudipala Mandal, Chittoor District of Andhra Pradesh State. The mine lease has been transferred by Government of Andhra Pradesh from M/s Karthik Raja Exports to M/s Venkatasai Granites vide Ref. No. 38445/R-5-1/2011 dated 14.03.2012 and is valid upto 16.09.2030. The mine area is a part of the Survey of India Toposheet No. 57/O/4. The site falls at 13<sup>o</sup> 04' 53.5" North Latitude and 79<sup>o</sup> 09' 45.1" East Longitude with an average altitude of 300 m above MSL. The project is in Seismic Zone-I.

There is no wildlife sanctuaries /sensitive areas reported within 10 km of the study area. The project is considered under Category A as it attracts General condition i.e., Interstate boundary between Andhra Pradesh and Tamil Nadu at a distance of 1.8 km in East direction from the mine site. The mining operations will be carried out by semi-mechanized open cast mining. Hydraulic excavator and compressor operated jack hammers will be used for cutting the rock. Close spaced drilling of 0.2m was adopted along a straight line and charged with low explosives to avoid feather cracks. The black granite produced from the mine will be transported by trucks to dispatching points (Rail head/Port). Waste generation from the mine is estimated to be about 6.7 lakh m<sup>3</sup> during the life of mine of 56 years. The waste generated will be stacked in the non-mineralized area of 0.5 ha

within the mining lease area as temporary waste dump yard which will be re-handled for backfilling of the mined-out area at conceptual stage.

The mine is operating since 1990. It was observed that this is a **violation case** as mine was operating without obtaining environmental clearance after mine lease fell due for renewal on 16.09.2010. Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional ToRs of (i) Study of cumulative impact of mining in the area and action plan if impact is substantive.

## **2.8: Sand Stone Mine of M/s Kanhaiya Lal Rameshwar Dass located at Village Dhaneshwar & Sutra, Distt. Bundi, Rajasthan (618.34 ha) (Consultant: Enkay Environ Services Pvt. Ltd., Jaipur)- ToR**

The Mine Lease area is located at Dhaneshwar & Sutura, Tehsil Bundi, District Bundi, Rajasthan. The Mine Lease area is at 25°102'53.10"N Latitude and 75°32'29.21"E Longitude. The Project is located in seismic zone- II. It is 'A' category project. In addition to this, the site is located within 10 Km radius of Jawahar Sagar Wildlife Sanctuary, which is adjacent to mine lease towards South. The proposal is for expansion of production capacity from 80,000 TPA to 1,50,000 TPA in mine lease area of 618.34 ha. Mining operations are by opencast semi-mechanized method. Topsoil of 0.5 – 3.0 m is stacked at designated sites. Below top soil there are layers of murram & hard rock of weathered sandstone of thickness 1.0 m to 3.0 m. Mining Plan with Progressive Mine Closure Plan has been approved vide letter no.SME/Kota/SMF/MP/12-13 /2581 dated 25.3.2013. Daily water demand will be 30.0 KLD. About 13 KLD will be used for domestic, 7.0 KLD for dust suppression and 10.0 KLD for plantation, which will be met from nearby village and existing water reservoir in the lease area.

It is reported by the project proponent that there is no court case/ litigation pending against the project. The estimated cost of the project is Rs. 8.0 Crores. Forest Clearance for 104.34 ha has been granted vide letter no.8-8/98-FC Dated 24.02.2000. Based on the information furnished and presentation made by the project proponent and discussions held, the Committee was of the view that since the site is located adjacent to Jawahar Sagar Wildlife Sanctuary (less than 1 km distance) therefore the proposal **cannot be considered** for prescribing TORs.

## **2.9: Janwa Silica Sand mine (Along with Washing Plant) of M/s Janwa (Savitri) Mine located at Village Janwa, Tehsil-Bara, Distt-Allahabad, Uttar Pradesh (14.57 ha) (Grass Roots Research & Creation India (P) Ltd., Noida, U.P.)**

It was noted that the proposal of Janwa Silica Sand mine of M/s Janwa (Savitri) located at Village Janwa, Tehsil-Bara, Distt-Allahabad, Uttar Pradesh

(14.57 ha) was inadvertently added in the Agenda. The proposal was placed in earlier meeting held in April 2013.

**2.10: Mewasa Bauxite Mine of M/s Saurashtra Calcine Bauxite and Allied Industries Ltd. located at Village Mewasa, Tehsil-Kalyanpur, Distt-Jamnagar, Gujarat (9.66 ha) (Consultant: Enkay Environ Services Pvt. Ltd., Jaipur)-ToR.**

The Mine Lease area (9.66ha) is located at Mewasa, Tehsil Kalyanpur, District Jamnagar, Gujarat. The proposed production capacity is 36,000 TPA of Bauxite. The Mine Lease area is at 22°14'5.8"N Latitude and 69°19'1.3"E Longitude. The Project is located in seismic zone- IV. It is 'A' category project as the site is located within 10 Km radius i.e. 4.5 km of Marine National Park (Gulf of Kutch). The proposed mining operation will be carried out manually by opencast method. Mineral will be excavated by forming two benches. The maximum height of each bench will be 1.5 m, while the width of bench will be kept at 2.0 m. The mining lease was originally granted in favour of M/s Saurashtra Calcined Bauxite and Allied Industries vide Govt. of Gujarat order no. MCR-1585 CHH-80550 dated 19.07.1986. The Scheme of Mining with Progressive Mine Closure Plan has been approved by IBM, Udaipur vide letter no. 682 (23) MS 630/ 2011 dated 25.10.2011. Daily water demand will be 6.5 KLD. About 3.5 KLD will be used for domestic, 3.0 KLD for dust suppression and plantation, which will be met by tanker supply from nearby village. During the first five years 6,706 m<sup>3</sup> waste will be generated. Generated Waste will be utilized for backfilling simultaneously. No dumping is proposed.

It is noted that this is a **violation** case as mine was operating without valid environment clearance. Committee proposed a site visit at an early date as the area is sensitive due to proximity of mangroves and mud flat/swamps. The Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional ToRs of (i) Action Plan for protection of mangroves and mud flat/swamps with budgetary allocation and (ii) Precautionary Measures in the Disaster management Plan in view of being in Seismic Zone-IV.

**2.11: Bathu Silica Boulders, Boulders, Sand & Bajri Mining of M/s Himachal Chemicals & Silicate Works located at Mauza Bathu, Tehsil-Haroli, Distt-Una H.P. (8.17ha) (Consultant: Grass Roots Research & Creation India (P) Ltd.)-ToR**

The Mine Lease area is located at Village Bathu, Tehsil Haroli, District Una, and Himachal Pradesh. The proposed rate of production is 32,800 TPA in lease area of 8.17 ha. The lease area lies on Jakhewal Khad a tributary of Gohar Nalla. The Mine Lease area is between 31°19'16.779"N to 31°19'22.504"N and 76°15'54.864"E to 76°15'31.397"E. The Project is located in seismic zone-IV. It is 'A' category project due to the presence of Inter-State boundary of Himachal Pradesh & Punjab within 10 km radius of the lease area. The proposed project is

an open-cast mining project, confined to extraction of silica boulders, boulders sand & bajri from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from silica boulders & *bajri* by sieving process. Excavation will be carried out up to a maximum depth of 1 meter. Extraction of silica boulders, sand & bajri material will be done only during the day time and completely stopped during the monsoon season. The lease deed has been renewed vide letter No. Udyog-Bhu(Khani-4) Major 143/2005-10439 dated 21-2-2009 for a period of 20 years with effect from 25-7-2005 to 24-7-2025.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions (i) Study of cumulative impact of mining in the area and Action Plan if impact is significant and (ii) Precautionary Measures in the Disaster management Plan in view of being in Seismic Zone-IV.

### **2.12: Mauza Bathu Silica Boulder, Boulder, Sand & Bajri Mining of M/s Himachal Chemicals & Silicate Works Located at Mauza Bathu Tehsil-Haroli, Distt- Una H.P (27.47 ha) (Consultant: Grass Roots Research & Creation India (P) Ltd., Noida)-TOR**

The Mine Lease area is located at Village Bathu, Tehsil Haroli, District Una, Himachal Pradesh. The proposed rate of production is 47,020 TPA in lease area of 27.47 ha. The lease area lies on Hum Khad a tributary of Soan river. The Mine Lease area is between Lat/Long 31°18'42.78"N to 31°19'19.40"N to 76°16' 14.89" E to 76°17' 16.12" E. The Project is located in seismic zone-IV. It is 'A' category project due to the presence of Inter-State boundary of Himachal Pradesh & Punjab, which lies within 10 km radius of the lease area.

The proposed project is an open-cast mining project, confined to extraction of silica boulder, boulder, sand & bajri from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from silica boulders & bajri by sieving process. Excavation will be carried out up to a maximum depth of 1 meter. Extraction of silica boulder, boulder, sand & bajri material will be done only during the day time and completely stopped during the monsoon season. The lease deed has been renewed vide letter No. Udyog-Bhu(Khani-4) Major 142/2005-10450 dated 21-2-2009 for a period of 20 years with effect from 27-7-2005 to 26-7-2025.

The total cost of project would be around Rs. 35,00,000. Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions (i) Study of cumulative impact of mining in the area and Action Plan if impact is significant

and (ii) Precautionary Measures in the Disaster management Plan in view of being in Seismic Zone-IV.

**2.13: Nandana-Pahadpur Stone Mine (Miner Mineral) of M/s East India Stone Quarry, Located at Village Nandana-Pahadpur, Tehsil Raneshwar, District Dumka, Jharkhand (6.831 ha) (Consultant: ANACON LAB, Nagpur)-ToR**

The proposed mine lease area is located at village - Nandana-Pahadpur; Post - Raneshwar, District- Dumka, Jharkhand (6.831 ha). The Mine Lease area falls under Survey of India Toposheet No. 72P/8 & is bounded by Longitude 87°28'04.69"E - 87°28'17.96"E & Latitude 24°02'39.44"N to 24°02'57.77"N. The Project is located in seismic zone-II. It is 'A' category project as the Mining site is located 2.5 Km from the West Bengal -Jharkhand interstate boundary.

This is an old working mine, Mining operation has been carried out since last three years. Mining area is a part of a hill. Stones are well exposed in old pits and cliff side of the hill in the form of highly weathered and jointed rocks. The area has old mine working pit and one large working pit present in all the directions of the area and up to 20m depth, stones is well exposed. Further 2-3 bore holes are proposed to be drilled in the area for knowing the exact depth continuity of the deposit. Drilling will be carried out by the DTH drilling. During this plan period the proposed average rate of production will be 0.216 MTPA. Anticipated life of the mine is about 6 years as per present data. Waste material will be dumped in the designated areas in 7.5m of the mining lease area. This will be dumped systematically in the yearly marked area. Mining method is a type of semi mechanized open- cast mining, by a system of benches. Wheel loader and dumpers etc. will be used in the operation.

It is noted that this is a **violation** case as mine was operating since 2011 without valid environment clearance. Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional ToRs of (i) Study of cumulative impact of mining in the area and Action Plan if impact is substantive.

**2.14: Siulibona Basalt Stone (Miner Mineral) Mine of M/s SNS Enterprises Located at Village Siulibona, Tehsil-Shikaripada, Distt-Dumka, Jharkhand (6.127 ha) (Consultant: ANACON LAB, Nagpur).-ToR**

The Proposal is for mining of Stone with proposed production capacity of 5,00,000 TPA of M/s S.N.S Enterprises Stone Quarry at village - Siulibona, Post - Banspahari, District- Dumka, Jharkhand (6.127 Ha). The Mine Lease area is located at village Siulibona, Post - Banspahari, District- Dumka, Jharkhand. The Mine Lease area falls under Survey of India Toposheet No. 72P/12 & is bounded by Longitude 87°34'16.51"E-87°34'29.98"E & Latitude 24°08'24.66"N to

24°08'37.66"N. The Project is located in seismic zone-II. It is 'A' category project as the Mining site is located 1.7 Km from the West Bengal –Jharkhand interstate boundary. The lease area is already a working mine and is partially covered by Black cotton soil. Average thickness of soil is about 0.5m. The estimated mineable reserve from this area is of the order of 2.596 million tonnes. The anticipated life of the mine is about 6 years as per present data. Mining method is a type of semi mechanized Open- cast mining, by a system of benches. The height of each bench will be maintained at 6m & width at 6m. Hydraulic excavators, Wheel loader and dumpers etc. will be used in the operation. Total water requirement for dust suppression, plantation & drinking is estimated to be 2 Kld which will be met through bore well.

It is noted that this is a **violation** case as mine was operating since 2011 without valid environment clearance. Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional ToRs of (i) Study of cumulative impact of mining in the area and action plan if impact is extreme.

**2.15:Putulipani Iron Ore Mine of M/s Gandhamardhan Sponge Industries (P) Ltd. Located at Vill-Urumunda & Upar Jagar, Distt- Keonjhar Sadar, Odisha (100.1632 ha) (Consultant: Envomin Consultant Pvt. Ltd., Bhubaneswar)-ToR**

The Proposal was **deferred** as the Project Proponent did not attend the meeting.

**2.16:Black Granite Mine of M/s Yak Granites Industries (P) Ltd. Located at Vill- Puttur Mandal, Distt- Chitoor, Andhra Pradesh (5.547 ha) (Consultant: Sri Sai Manasa Nature tech (P) Ltd., Hyderabad).**

The Proposal was **deferred** as the Project Proponent did not attend the meeting.

**2.17:Mining of Sand, Bajri and Boulders from River Yamuna Lot No. 23/2 of M/s Garhwal Mandal Vikas Nigam Ltd. Located at Vill-Dumet, Tehsil-Vikasnagar,Distt-Dehradun, Uttarakhand. (31.203 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-ToR.**

The Mine Lease area is located at Village Dumet, Tehsil Vikasnagar, District Dehradun, Uttarakhand. The proposed production capacity is 3 Lakh TPA. The lease area lies on River Yamuna. The Mine Lease area is between 30°30'41.09"N, 77°49'45.65"E to 30°30'20.50"N, 77°49'15.53"E. The Project is located in seismic zone-IV. It is 'A' category project due to the presence of Interstate Boundary



between Uttarakhand and Himachal Pradesh (100 m in W direction) & Doon Valley (lease area lies adjacent to the valley) within 10 Km radius of the lease area. The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meters. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been allocated as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-1-2013).

Total water requirement will be 3 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression. Silt/Clay (6-12% of sand excavated) will be generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The total cost of project would be around Rs. 17,70,000.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed the TORs** for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined out materials as per the Indian Road Congress for both the ways (loaded as well as unloaded trucks) load and its impact on Environment (iii) cumulative impact due to sand mining (iv) Proper Conservation plan for Scheduled –I and II fauna, and (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed (vii) Appropriate Disaster Management safeguards in view of the high seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC.

**2.18: Mining of Sand, Bajri and Boulders in River Tons Lot No. 3/12 of M/s Garhwal Mandal Vikas Nigam Ltd. Located at Vill-Jhajhara & East hope Town, Tehsil-Vikasnagar, Distt-Dehradun, Uttarakhand. (46.931 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The Mine Lease area is located at village Jhajhra and East hope town, Tehsil Vikasnagar, District Dehradun, Uttarakhand. The proposed production capacity is 3.2 Lakh TPA. The lease area lies on River Ganga. The Mine Lease area is having two blocks: **Block A:** Latitude: 30°20'20.26"N to 30°20'16.24"N, Longitude : 77°55'13.07"E to 77°55'52.13"E and **Block B:** Latitude: 30°20'25.45"N to 30°20'25.35"N, Longitude:77°53'59.61"E to 77°55'7.06"E. It is 'A' category

project due to the presence of Lease area lies within the Doon Valley, & Inter-state boundary of Uttar Pradesh & Uttarakhand (9 Km in S direction) within 10 Km radius of the lease area. The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-1-2013).

Total water requirement will be 3.2 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression. Silt/Clay (6-12% of sand excavated) will be generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The total cost of project would be around Rs. 18,25,000.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee prescribed the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) cumulative impact due to sand mining (iv) Proper conservation plan for Scheduled –I and II fauna, and (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed.(vii) Appropriate Disaster Management safeguards in view of the high seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC.

**2.19: Mining of Sand, Bajri and Boulder in River Tons Lot No. 14/11 of M/s Garhwal Mandal Vikas Nigam Ltd. Located at Vill-Dharmawala, Tehsil-Vikasnagar, Distt-Dehradun, Uttarakhand. (31.00 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The Mine Lease area is located at Village Dharmawala, Tehsil Vikasnagar, District Dehradun, Uttarakhand. The proposed production capacity is 2.9 Lakh TPA. The lease area lies on River Aasan. The Mine Lease area is between 30°25'46.14"N - 30°25'44.75"N to 77°41'53.59"E - 77°43'14.57"E. The Project is located in seismic zone-IV. It is 'A' category project as due to the presence of Doon Valley (Project site lies within Doon Valley), Aasan Conservation Reserve (Project site lies within the Aasan Conservation Reserve), Simbalbara Wild Life

Sanctuary (5 Km in NW direction), Interstate boundary between Uttarakhand & Uttar Pradesh (6 km in SW direction) & Interstate boundary between Uttarakhand and Himachal Pradesh (3 km in NW direction) lies within 10 Km radius of the lease area.

The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-1-2013).

Total water requirement will be 4.0 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression. Silt/Clay (6-12% of sand excavated) will be generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The total cost of project would be around Rs. 17,40,000.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee was of the view that since the site is located adjacent to Aasan Conservation Reserve (less than 1 km distance) therefore the proposal **cannot** be considered for prescribing TORs.

**2.20: Mining of Sand, Bajri and Boulders in River Aasan Lot No. 14/13 of M/s Garhwal Mandal Vikas Nigam Ltd. Located at Vill-Kunja Grant, Tehsil-Vikasnagar, Distt-Dehradun, Uttarakhand. (20.6670 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The Mine Lease area is located at Village Kunja Grant, Tehsil Vikasnagar, District Dehradun, Uttarakhand. The proposed production capacity is 1.8 Lakh TPA. The lease area lies on River Aasan. The Mine Lease area is between 30° 25'56.90"N to 77°40'17.65"E. The Project is located in seismic zone-IV. It is 'A' category project as due to the presence of Doon Valley (Project Site lies in Doon Valley), Kalesar National Park (approx 9 Km in SW direction), Simbalbara Wildlife Sanctuary (approx 5 Km in NW direction), Aasan Conservation Reserve (Project Site lies within the Aasan Conservation Reserve), Interstate boundary of Uttarakhand & Uttar Pradesh (approx 4.5 km in S direction), Interstate boundary of Uttarakhand & Himachal Pradesh (approx 1.5 km in W direction) & Interstate Boundary between Himachal Pradesh, Uttar Pradesh & Haryana (approx 9 km in SW direction) within 10 Km radius of the lease area. NBWL clearance is mandatory for the project. The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand

will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-1-2013).

Total water requirement will be 1.06 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression. Silt/Clay (6-12% of sand excavated) will be generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The total cost of project would be around Rs. 14,35,000.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee was of the view that since the site is located adjacent to Aasan Conservation Reserve (less than 1 km distance) therefore the proposal **cannot be considered** for prescribing TORs.

**2.21: Mining of Sand, Bajri and Boulders in River Yamuna Lot No. 23/1 of M/s Garhwal Mandal Vikas Nigam Ltd. Located at Vill-Dumate, Tehsil-Vikasnagar, Distt-Dehradun, Uttarakhand (30.035 ha). (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The Mine Lease area is located at Village Dumate, Tehsil Vikasnagar, District Dehradun, Uttarakhand. The proposed production capacity is 2.8 Lakh TPA. The lease area lies on River Yamuna. The Mine Lease area is between 30° 30'42.15"N to 77° 50'22.59"E. The Project is located in seismic zone-IV. It is 'A' category project as due to the presence of the interstate boundary between Uttarakhand and Himachal Pradesh and Doon Valley lies within 10 Km radius of the lease area. The proposed project is an open-cast mining project, confined to extraction of sand, *bajri* and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from *bajri* and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Extraction of sand, *bajri* and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-1-2013).

Total water requirement will be 3.4 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression. Silt/Clay (6-12% of sand excavated) will be generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The total cost of project would be around Rs. 17,50,000.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee prescribed the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) cumulative impact due to sand mining (iv) Proper conservation plan for Scheduled –I and II fauna, and (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed.(vii) Appropriate Disaster Management safeguards in view of the high seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC

**2.22: Mining of Sand, Bajri and Boulders in River Asan Lot No. 14/14 of M/s Garhwal Mandal Vikas Nigam Ltd. Located at Vill-Matak Majri, Tehsil-Vikasnagar, Distt-Dehradun, Uttarakhand. (15.622 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The Mine Lease area is located at Village Matak Majri, Tehsil Vikasnagar, District Dehradun, Uttarakhand. The proposed production capacity is 1.3 Lakh TPA. The lease area lies on River Aasan. The Mine Lease area is between 30° 25'57.49"N to 77°38'58.77"E. The Project is located in seismic zone-IV. It is 'A' category project as due to the presence of Doon Valley (Project Site lies on Doon Valley), Kalesar National Park (approx 8.5 Km in SW direction), Simbalbara Wildlife Sanctuary (approx 3 Km in NNW direction), Aasan Conservation Reserve (Part of Project Site lies on Aasan Conservation Reserve), Interstate boundary of Uttarakhand & Uttar Pradesh (approx 4.5 km in S direction), Interstate boundary of Uttarakhand & Himachal Pradesh (approx 1.5 km in W direction) & Interstate boundary between Himachal Pradesh, Uttar Pradesh & Haryana. ( approx 8.5 km in SW direction) within 10 Km radius of the lease area.

The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-1-2013).

Total water requirement will be 1.7 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression. Silt/Clay (6-12% of sand excavated) will be

generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The total cost of project would be around Rs. 12,95,000.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee was of the view that since the site is located adjacent to Aasan Conservation Reserve (less than 1 km distance) therefore the proposal **cannot be considered** for prescribing TORs.

**2.23: Mining of Sand, Bajri and Boulders in River Yamuna Lot No. 23/3 of M/s Garhwal Mandal Vikas Nigam Ltd. Located at Vill-Kulhal, Tehsil-Vikasnagar, Distt-Dehradun, Uttarakhand. (14.97 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The Mine Lease area is located at Village Kulhal, Tehsil Vikasnagar, District Dehradun, Uttarakhand. The proposed production capacity is 1.0 Lakh TPA. The lease area lies on River Yamuna. The Mine Lease area is between 30°25'56.26"N to 77°37'28.45"E. The Project is located in seismic zone-IV. It is 'A' category project as due to the presence of Interstate boundary between Uttarakhand & Uttar Pradesh (3 km in SW direction), Uttarakhand & Himachal Pradesh (Adjacent to the lease area), Uttarakhand & Haryana (5.5 km in SSW direction.), Doon Valley (Project Site lies within Doon Valley), Kalesar National Park (6.5 km in SW direction), Simbalbara Wildlife Sanctuary (4 km in N direction) and Aasan Conservation Reserve (4 km in E direction) within 10 Km radius of the lease area.

The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-1-2013).

Total water requirement will be 1.86 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression. Additional water will also be required for plantation purpose. Silt/Clay (6-12% of sand excavated) will be generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The total cost of project would be around Rs. 12,15,000.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee prescribed the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined

materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) cumulative impact due to sand mining (iv) Proper conservation plan for Scheduled –I and II fauna, and (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed.(vii) Appropriate Disaster Management safeguards in view of the high seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC

**2.24: Mining of Sand, Bajri and Boulders in River Suswa Lot No. 12/2 of M/s Garhwal Mandal Vikas Nigam Ltd. Located at Vill-Satiwala, Kudkawala, Teiliwala & Kheri, Tehsil-Doiwala, Distt-Dehradun, Uttarakhand. (141.500 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The Mine Lease area is located at Village Satiwala, Kudkawala, Teiliwala & Kheri, Tehsil Doiwala, District Dehradun, Uttarakhand. The proposed production capacity is 7.5 Lakh TPA. The lease area lies on River Suswa. The Mine Lease area is between 30°10'17.82"N to 78° 5'17.22"E. The Project is located in seismic zone-IV. As per the EIA notification the project is category 'A' as the area of the project is more than 50 hectares. The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 40/Bhu. Khani.E./2012-13 dated 18-4-2013).

Total water requirement will be 5.6 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression. Additional water will also be required for plantation purpose. Silt/Clay (6-12% of sand excavated) will be generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The total cost of project would be around Rs. 29,20,000.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee was of the view that since the site is located adjacent to Rajaji National park (less than 1 km distance) therefore the proposal **cannot be considered** for prescribing TORs.

**2.25: Sosopi iron ore mine of M/s Khushal Arjun Rathore located at village Sosopi hamlet, Singhbhum West, Jharkhand (31.984 ha)**

**(Consultant: Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar)-EC**

The proposal is for open cast Sosopi iron ore Mines with 0.60 MTPA iron ore production by M/s Khushal Arjun Rathore located at Village Sosopi Hamlet, Noamundi protected forest, Block-40, Chaibasa South division, Singhbhum West, Jharkhand. The topo sheet No is 73 F/8 and the latitudes and longitudes of the site are 22<sup>0</sup> 08' 55.73" to 22<sup>0</sup> 09' 15.56" N and 85<sup>0</sup> 27' 50.55" to 85<sup>0</sup> 28' 10.65" E. It is category 'A' project as the mine is located near the interstate boundary of Jharkhand and Orissa.

The proposal was considered by the Expert Appraisal Committee in its meeting held during August 18-20, 2008 to determine the terms of reference (TOR) for under taking detailed EIA study. The TORs were issued by the MoEF vide letter no.J-11015/1112/2007-IA.II (M) dated 23.09.2008. The additional TOR was considered by the Expert Appraisal Committee in its meeting held during May 24-26, 2010 wherein the Committee reiterated earlier TORs with few additional ones. These TORs were prescribed vide MoEF letter dated 22.06.2010. After conducting the Public Hearing the proponent submitted its Application for seeking environmental clearance on 5<sup>th</sup> April 2013.

The Project Proponent (PP) made a presentation with regard to compliance of TOR for mining of iron ore with a capacity 0.60 MTPA. The mine lease area is 31.984 ha, which is a forest land. The present Scheme of Mining was approved by IBM vide letter No. 314(3)/2012-MCCM(C)/MP-44 dated 22.05.2013. As informed by the PP, the Forest Diversion Proposal of 9.687 Ha (broken area) is under consideration at State Appraisal Committee, Ranchi, Jharkhand. It is also reported that the mine is closed since 1999.

The mine working will be open cast fully mechanised using excavator, JCB loader, drilling machine, associated compressor, dumpers & auxiliary equipment. During this five year plan period, total three quarries are proposed to be developed. Height and width of the bench are proposed to be kept at 6m & 10m. The slope of the benches would be kept at 31°. The excavation & stacking will be done by mechanical means. The iron ore will transported to the crusher site at Barajamda located 8 Kms from the mine. All the iron ore shall be treated in the crusher. Further, there is a proposal to establish a Crushing & Screening unit in the lease area. The geological reserves estimated in the recommended broken up area is about 9.18 million tonnes and the mineable reserves are estimated @ 5.43 Million Tonnes. The anticipated life of the mine will be 9 years.

The water requirement for this project (Mining, dust suppression, green belt development and domestic use) is 60 m<sup>3</sup>/day. The water requirement will be met from Kande Nalla and the approval has been sought. There will be no ground water intersection as the ground water table is at 435m AMSL & ultimate working depth will be 468m AMSL.



It was reported by the PP that Karo Karampada Elephant Corridor is beyond 10 Km from the project site. The ML area however falls within the Singhbhum Elephant Reserve. As the project is located in West Singhbhum District, an identified severely polluted area, comments of SPCB were sought, which was received vide letter no. G-2247, dated 24.06.2013 wherein it was reported that all the parameters of ambient air, noise level have been found to be within the prescribed limits. This was duly taken on record and considered by the Committee. In accordance with the TORs issued by MoEF, the Baseline studies were carried out during March-May 2009. All the parameters of water & air quality were reported to be within permissible limits.

The Public Hearing was conducted under the Chairmanship of Sri Vishnu Kumar DDC cum ADC, Chaibasa, West Singhbhum, on 19.04.2011 at Sosopi Village- Hamlet, near Sosopi Iron Ore Mines, P.O. and P.S.- Noamundi, and the representatives of Jharkhand State Pollution Control Board were also present. The issues raised in the Public Hearing were local employment, health concerns, education facilities, air & water pollution control measures, provision of drinking water, infrastructure development & assistance in vocational training for self-employment etc. These issues were considered and discussed during the aforesaid meeting. As per the villager's requirements, it was informed by the project proponent that they would take care of these issues and these have been included in the Action Plan with budgetary provisions.

It was reported by the project proponent that the Wild Life conservation and management plan was submitted to the PCCF, Ranchi on 19.06.2013. The total cost of proposed wild life conservation is Rs 67.70 lakhs, this is the contribution towards comprehensive wildlife management plan which is being prepared by the State Govt. of Jharkhand.

The cost of the project is Rs 3.0 Crores. The capital investment towards Environmental Protection Measures is Rs 13.27 lakhs and the corresponding annual revenue budget for the same is Rs. 5.30 lakhs. The budgetary provision for meeting the CSR needs is Rs. 24 crores for the next 10 year period, covering the surrounding 10 kms area. It was reported by the project proponent that there is no court case/litigation pending against the project.

Based on the discussion held, the Committee sought the following information/clarifications:

- (i) Details regarding the endangered/endemic species from the State Government and the list of Schedule I species in the core and buffer zone area;
- (ii) Details of local species of Fauna to be used for green belt;
- (iii) An undertaking to make a bridge on Kande Nala for transportation of mineral ore and to take protective measures for the Nala;

- (iv) Clarification regarding the Base line data as collected and as shared during the Public Hearing and also regarding the stations for the study and monitoring;
- (v) Status of other operating mines in the buffer zone and details of their cumulative environmental impacts;
- (vi) A note on the required Hydro Geological features of the study area and details about rain water harvesting scheme;

The Committee decided to **defer** the proposal, to be **brought back** to the Committee after the required information, as above, is submitted.

**2.26: Mining of Rare Minerals in CRZ area (Beach mineral sand @ 0.4 million TPA) of M/s Indian Rare Earths Ltd. (IREL), located at village Manavalakurichi, Midalam, Keezmidalam, Tehsil: Kalkulam and Vilavancode, District Kanyakumari, Tamil Nadu. (ML area 44.6212 ha) (Consultant: M/s Bhagavathi Ana Labs Limited, Hyderabad)-EC**

The proposal is for beach sand mines of M/s Indian Rare Earths Limited comprising of two mining lease areas viz: 14.84 ha and 29.7812ha. The 14.84 ha ML area with a production of 0.2 million TPA is located in the village Manavalakurichi, Tehsil: Kalkulam and 29.7812ha ML area with a production of 0.2 million TPA is located in the villages Midalam and Keezmidalam, Tehsil: Vilavancode, District Kanyakumari and State: Tamilnadu. The details of Latitudes & Longitudes are as below:

ML Area	Latitudes & Longitude	Production Capacity
14.84 ha	The project area falls between 08 <sup>0</sup> 09'15" - 08 <sup>0</sup> 09'30" N latitudes and 77 <sup>0</sup> 17'40" - 77 <sup>0</sup> 17'05" E longitudes. The Mining Lease area is in the Survey of India Toposheet No 58H/8/NW	0.2 million TPA
29.7812ha	The Project area falls between 08 <sup>0</sup> 11'46" - 08 <sup>0</sup> 12'18" N latitudes and 77 <sup>0</sup> 13'28" - 77 <sup>0</sup> 12'40" E longitudes. The ML area is in toposheet no: 58H/4.	0.2 million TPA

The proposal was considered by EAC in its meeting held during 23<sup>th</sup>-25<sup>th</sup> February, 2011 to determine Terms of Reference for undertaking detailed EIA study. The TORs were issued by the MoEF vide Letter no: J-11015/62/2011-IA.II. (M), dated 16<sup>th</sup> May 2011. While granting TOR, it was informed to the Committee that the proposal is a Category 'B' project; however, it was decided to consider the proposal in MoEF because of adjoining mine leases, of the same PP being dealt with at the Centre. The total mine lease area is 44.6212 ha, spread over the said two leases of 29.7812 ha (existing lease) and 14.84 ha (fresh lease). No

forestland is involved. The total production from both the leases put together will be 0.4 million TPA of beach sand mineral (Illeminite, Rutile, Zircon, Monozite and Garnet). The area is located in CRZ.

The representative of State Environment Department, who attended the EAC meeting in January, 2011 had informed during the meeting that the proposal of M/s Indian Rare Earth was considered by the Tamil Nadu State Coastal Zone Management Authority in its meeting on 6.3.2009 and the authority had resolved to recommend the proposal to MoEF. It was also stated that as per the approved CZMP, the mining site is categorized as CRZ-I(ii) and III and some area falls outside CRZ. The Authority had sought certain documents from the proponent which have not been furnished by the proponent to SCZMA. It was also informed that the expansion proposal of M/s Indian Rare Earths Ltd, relating to illmenite and other associated minerals, was considered by the CRZ Committee of MoEF in November, 2008 and was rejected on the ground that expansion of industrial activity is not permissible in CRZ. Since, the proposal is for mining of rare minerals (which is a permissible activity under the CRZ Notification), whether it be from existing or fresh Mining Leases, the Committee considered the proposal for according the TORs.

The proponent submitted the application to the MoEF for seeking environmental clearance after conducting Public hearing on 22.03.2013. The project proponent made a presentation with regard to compliance of TORs for mining of beach sand minerals. The PP had informed that the CRZ maps have been prepared as per the CRZ, Notification, 2011 and Application submitted to the Kanyakumari District Coastal Zone Management Authority on 09.2.2013 for obtaining recommendations and it is under progress. Mining operations do not generate any solid waste, effluent, sewage or the like, hence NOC is not required as per CRZ-2011 notification. However, in order to comply the condition of TORs, application has been submitted to Tamil Nadu Pollution Control Board for issue of NOC for carrying out mining operations.

#### **Details of ML area 14.84 ha:**

The ML for 14.84 ha was granted by Govt. of Tamilnadu vide letter dated 17.06.1998 for 20 years and the mining lease deed is due for execution on receipt of environmental clearance. The entire 14.84 ha ML area has been acquired by IREL for mining operations. There is no village habitation, built up areas, roads etc. in the ML area. The entire land is covered with coconut and casuarina Plantations. The ML area is about 50 metres from Arabian sea.

#### **Details of ML area 29.7812ha:**

The ML area of 29.7812 ha comprises of village, built up areas, roads, canal poromboke areas, Beach areas, private patta lands (both vacant and built up) and

IREL acquired lands. Midalam fishermen hamlet is within the 29.7812 ha ML area. Out of 29.7812 ha, 4.4550 ha belongs to IREL, 0.4450 ha is canal poromboke, 5.68 ha is Village builtup area & roads and 19.2012ha is private patta lands. The length of the ML area is about 2.2 Kms. Patta lands are also there on the beach, where replenishment of mineral sand is taking place. During mining operations, the village builtup areas, roads, canal poromboke areas will not be disturbed. The private vacant lands without buildings will be mined after obtaining consents from the concerned land owners. There will not be any involuntary displacement/dislocation of people during mining operations.

The post mining land use of both the ML area will remain almost the same at conceptual stage. However, the inland mined out areas near the sea shore will be backfilled to an elevated height as a welfare measure to protect the village habitations from high tides etc. These backfilled areas will be planted with coconut as well as casuarina trees. The mined out mineral sand will be transported through tippers/trucks to Beach Washing Plant, located in the village Manavalakurichi for further up-gradation and separation of individual minerals.

PP informed that there is no Wildlife Sanctuary / Tiger Reserve / National Park/Schedule-I species / Endangered species /Forest lands/ Wet lands/ Protected areas/ Ecologically Sensitive areas in core and buffer zones of the Mining Lease. The list of Flora and Fauna duly authenticated by DFO, Nagercoil in core and buffer zones was presented.

The inland mineable areas are away from beach zones are extracted through mechanized mining in 14.84 ha and 29.7812 ha. The mechanized mining in the inland areas will comprise of dry mining by tipper & excavator combination and wet mining by dredging. There is no generation of external solid waste, Effluent, Sewage etc. during mining operations. There is no requirement of off-site water during mining operations. The mine roads are regularly wetted to suppress the dust. Drinking water will be provided to the mining sites for the persons employed in the mines. The life of mine is 20 years during which, about 48 lakh tonnes of ROM will be mined from both 14.84 ha and 29.7812 ha ML areas. The inland mined out areas will be simultaneously backfilled with tailings transported from Beach Washing Plant.

The project proponent reported that about 39.3 lakh tonnes of tailings from both the mining lease areas will be generated out of 48 lakh tonnes of ROM in 20 years (@ 3.3 lakh TPA) and will be utilized for backfilling activities in the inland mined out lands. Proponent has also reported that under no circumstances, these tailings will be dumped in agricultural lands, wet lands, paddy fields, canals and the backfilling will be carried out only in the inland mined out areas.

Proponent has reported that the ground water table will not be intersected in the beach areas where manual mining operations are carried out. However in

the inland areas where mechanized mining is carried out, the ground water table will be intersected. Proponent informed that a detailed Hydro Geological study has been conducted and report prepared. The method of mechanized mining adopted in the inland extractions, do not affect the ground water table as there is no pumping out /abstraction of water due to mining operations. There is no net drawl of water in the dredge ponds due to dredging activities and the ground water table remains intact in the area. There is no saline intrusion due to dredging operations.

Baseline studies were carried out during Pre-monsoon season of 2011 (March, April and May, 2011). Fifteen air monitoring points, fifteen noise monitoring points, ten ground water sampling points, seven surface water sampling points and ten soil sampling points were analysed in both core and buffer zones of 44.6212 ha ML area ( 14.84 ha + 29.7812 ha). All the parameters for water, air, noise and soil were reported to be within permissible limits.

The Public Hearing was conducted at Revenue Divisional Office, Padmanabhapuram, Kanyakumari District on 22.03.2013. The PH was chaired by Sri Palanisamy, District Revenue Officer (ADM rank). The issues raised during PH were discussed by the Committee specially w.r.t. objections raised, demands of public, radiation hazards etc. The proponent informed that they have been undertaking CSR and other Welfare activities in and around the existing ML areas since inception and 2% to 3% of the net profit is always allocated for these activities. In addition to the above, proponent reported that the fisherman village society members of Kurumpanai, Midalam and Mel Midalam will be engaged for collection of replenished mineral sand from the beach areas for which a budget of Rs 100 lakhs per annum will be allocated thereby substantially improving their living standards and economic conditions. As per the villagers' requirements, it was informed by the PP that they would take care of local employment, health issues etc. as per the Government guidelines and directions. These have been incorporated in the Project Action Plan with budgetary provisions. Proponent informed that majority of the public who attended the Public Hearing supported the IREL mining and mineral separation activities.

The objections raised during PH by an organization named Coastal Environment and Ecological Conservation Committee and M/s V. V. Minerals were addressed by the PP. It was informed that these issues were mostly related to land disputes (ML disputes and surface right disputes). The proceedings of the PH, reply to issues raised by the Coastal Environment and Ecological Conservation Committee and reply to the written objections are available in the EIA/EMP document. It was ensured that the mining over the private patta lands, which are not owned by M/s IREL, mining will be carried out only after obtaining the consents from the concerned land owners as per the provisions of the Mineral Concession Rules, 1960 and MMDR Act, 1957. Compensation for such lands will

be paid to the land owners as per the agreed terms and conditions prior to mining. After mining, the mined out lands will be backfilled and handed over to concerned land owners

The radiation monitoring will be carried out by Health Physics Unit (HPU) of Bhabha Atomic Research Centre, deployed dedicatedly at IREL, Manavalakurichi. The preservation of monazite, health monitoring, and environmental monitoring will be conducted by HPU on regular basis as per the guidelines of Atomic Energy Regulatory Board and Dept. of Atomic Energy. The proponent has also reported that they have engaged National Institute of Oceanography (NIO), Kochi and conducted scientific study on Near Shore sediment transport control in Manavalakurichi and Midalam beaches. The report of NIO, Kochi reveals that there is no significant change in the shoreline configuration for the past 37 years even though IREL has been undertaking mining operations. The CRZ mapping studies carried out by IRS, Anna University, Chennai as per CRZ-2011 Notification also inferred that the coastal areas of Manavalakurichi and Midalam are non-eroding zones.

PP reported that the gross fixed assets for MLA 29.7812 ha is 6.12 lakhs (land value) and gross fixed assets for MLA 14.84 ha is 202.30 lakhs (land value). It is also reported by the proponent that the environmental cost towards EMP is Rs. 20 lakhs for the procurement of Water tankers for sprinkling along with tractors for both the ML areas and Annual Recurring cost is Rs. 185 lakhs.

It is reported by the project proponent that Writ Petition 5678 of 2007 filed by the Coastal Environment and Ecological Conservation Committee is pending in the Hon'ble High Court, Madras for 14.84 ha ML area. This is represented in the final EIA/EMP report submitted by the proponent and was accordingly shared during the public hearing with all the Public at large who attended the meeting. In addition to the above, proponent reported that another 9 cases are pending in various courts / Mining Tribunals w.r.t. 29.7812 ha ML area related to disputes in surface rights, Mining Lease Renewal, Revision applications, etc. The details of the above cases are mentioned in the EIA/EMP report.

During the deliberation of the project by the EAC, representatives of Shri Appu Natesan, President, Coastal Environment and Ecological Conservation Committee and M/s V. V. Minerals wanted to brief the Committee on the proposal of M/s IREL. The Committee was of the view that there are a large number of agenda items to be discussed for appraisal and informed the representative that they will be heard after the technical session is over in the evening. After the technical presentations were completed, the Committee wanted to hear the representatives of Shri Appu Natesan and M/s V.V. Minerals but they were not available. The Committee waited for half an hour after the technical session was over.

Further, it was informed to the Committee that the Ministry has received a complaint from M/s V.V. Mineral vide letter no. nil, dated 25.06.2013 that they had not received any intimation with regard to the consideration of proposal of M/s Indian Rare Earths Limited. In this context, it is noted that the agenda was placed in the MoEF website about a month in advance of the scheduled meeting. The complaint, inter-alia, include that the proposal of M/s IREL does not mention the nature of land, name of owners, details of road, temple, stream etc. and therefore has objected for the proposal to be considered. The Committee however was satisfied that the requisite database and other information, called for in the TORs was duly furnished in the EIA/EMP including the proceedings of the exhaustive Public Hearing, based on which the Appraisal was conducted.

Based on the information submitted, presentation made by the project proponent and discussions held, the Committee **recommended** the proposal for environmental clearance for the production of 0.4 million TPA of beach sand mineral (Illeminite, Rutile, Zircon, Monozite and Garnet from both the mine lease area, with special conditions that (i) The private patta lands which are not owned by M/s IREL, mining will be carried out only after obtaining the consents from the concerned land owners as per the provisions of the Mineral Concession Rules, 1960 and MMDR Act, 1957, (ii) During mining operations, the village built up areas, roads, human settlement areas will not be disturbed, (iii) The tailings will be backfilled only in the mined out pits, (iv) Necessary clearance from the Coastal Zone Management Authority shall be secured, (v) AERB clearance for obtaining license under the Atomic Energy (Radiation Protection) Rules, 2004 for operation of BSM (Beach Sand Minerals) facility, and (vi) Occupational health and safety measures, especially concerning radiation to be enhanced for workers who are having some ailments like hypertension, diabetes etc. They should have health checkup once in six months.

**2.27: Mining of Rare minerals in CRZ area (Beach mineral sand @ 70,000TPA) of M/s Indian Rare Earths Ltd. (IREL), located at village Manavalakurichi, Tehsil: Kalkulam, District Kanyakumari, Tamil Nadu. (ML area 7.06ha) (Consultant: M/s Bhagavathi Ana Labs Limited, Hyderabad) – EC**

The proposal is for opencast beach sand mining of M/s Indian Rare Earths Limited with a production of 70,000 TPA located at village Manavalakurichi, Tehsil: Kalkulam, District : Kanyakumari and State: Tamilnadu. The project area falls between North Latitude N 8°08'16" to 8° 9' 10" and East Longitude E 77° 17' 31" E to 77° 18' 14". The Mining Lease area is available in the Survey of India Toposheet No 58H/8/NW.

The proposal was considered by the EAC (Mining) in its meeting held during 22-25 February 2011 to determine Terms of Reference (TORs) for undertaking detailed EIA study. The TORs were issued by the MoEF vide Letter no: J-11015/61/2011-IA.II (M), dated 16<sup>th</sup> May 2011. While granting TOR, it was

informed to the Committee that the proposal is a Category 'B' project; however, it was decided to consider in MoEF because of adjoining mine leases, of the same PP being dealt with at the Centre. No forestland is involved. The total production will be 70,000 TPA of beach sand minerals (Illemnite, Rutile, Zircon, Monozite, sileminite and Garnet). The area is located in CRZ.

The representative of State Environment Department, who attended the EAC meeting in January, 2011 had informed during the meeting that the proposal of M/s Indian Rare Earth was considered by the Tamil Nadu State Coastal Zone Management Authority in its meeting on 6.3.2009 and the authority had resolved to recommend the proposal to MoEF. It was also stated that as per the approved CZMP, the mining site is categorized as CRZ-I(ii) and III and some area falls outside CRZ. It was also informed that the expansion proposal relating to illmenite and other associated mineral of M/s Indian Rare Earth was considered by the CRZ Committee of MoEF in November, 2008 and was rejected on the ground that expansion of industrial activity is not permissible in CRZ. Since, the present proposal is only for renewal of the mine lease, that too at the existing capacity, the Committee considered the proposal further. Moreover, mining of rare mineral is a permissible activity under the CRZ Notifications.

The proponent submitted the application to Ministry of Environment and Forests for seeking environmental clearance after conducting Public Hearing. The project proponent made a presentation with regard to compliance of TORs for mining of beach sand minerals and mentioned that the Environmental clearance is required for existing mining lease area and there is no expansion or modernization proposed for 7.06 ha ML area. The mine will operate @ 70,000 TPA for another 20 years. The PP had informed that the CRZ maps have been prepared as per the CRZ Notification, 2011 and application submitted to Kanyakumari District Coastal Zone Management Authority on 09.02.2013 for obtaining recommendations and it is under progress.

The Mining Lease over 7.06 ha was granted by Govt. of Tamilnadu on 01.11.1968 and the mining lease deed was executed on 31.08.1970 for 20 years. The entire area is a sea beach Poromboke land without any inhabitation and vegetation. IREL submitted the Renewal of Mining Lease application in 1989 for further period of 20 years w.e.f. 30.08.1990 for which Govt. of Tamilnadu renewed the mining lease upto 31.08.2010 (20 years). The Mining Plan was approved during 10.05.1991 for carrying mining operations @ 70,000 TPA over 7.06 ha. Again the fresh mining plan was approved by the IBM, Chennai vide letter No.TN/KNK/NP/GNT-1828.MDS, dated 15.11.2012 for undertaking mining operations. The entire ML area is a Government land and sea beach poromboke. The length of the area is about 2 Kms.

PP informed that there is no Wildlife Sanctuary / Tiger Reserve / National Park/Schedule-I species / Endangered species /Forest lands/ Wet lands/ Protected



areas/ Ecologically Sensitive areas in core and buffer zones of the mine lease. The list of Flora and Fauna duly authenticated by DFO, Nagercoil in core and buffer zones was presented.

It is reported by the proponent that the ML area 7.06 ha is a replenishable deposit located by the side of Arabian Sea. The mineral deposit replenishes through wave action in the ML area. Manual mining with hand spades and baskets deploying the village society members is the method of mining adopted over 7.06 ha ML area. The mineral sand collected from this replenishable deposit is heaped manually and transported to Beach Washings Plant/Mineral Separation Plant located at a distance of 0.5 km from the ML area for further up-gradation and separation of individual minerals. The tailings generated from Beach Washings Plant contain mostly quartz (98 to 99%) and is utilized for backfilling in the inland mined out areas of adjacent mining lease hold areas. There is no ground water intersection during mining operations over 7.06 ha area and no hydrogeological study was required to be done.

Baseline studies were carried out during Pre-monsoon season of 2011 (March, April and May - 2011). Ten air monitoring points, Ten noise monitoring points, Eleven ground water sampling points, six surface water sampling points and ten soil sampling points were analysed in both core and buffer zones of ML area. All the parameters for water, air, noise and soil were reported to be within permissible limits.

The public hearing was conducted at Revenue Divisional Office, Padmanabhapuram, Kanyakumari District on 22.3.2013 and was chaired by Sri Palanisamy, District Revenue Officer (ADM rank). The issues raised during public hearing were also discussed during meeting w.r.t. objections raised, demands of public, radiation hazards. The proponent has reported that they have been undertaking CSR and other Welfare activities in and around the ML area since inception and 2 to 3% of the net profit is always allocated for these activities. In addition to the above, proponent informed the Committee that about 400 fisherman village society members are engaged for collection of replenished mineral sand from the beach areas of 7.06 ha with an expenditure of about 150 lakhs. The objections raised during PH by an organization named Coastal Environment and Ecological Conservation Committee and M/s V. V. Minerals were addressed by the PP. It was informed that there issues were related mostly to land disputes (ML disputes and surface right disputes). The proceedings of the public hearing, reply to issues raised by the Coastal Environment and Ecological Conservation Committee, and replies to the written objections are all available in detail in the EIA/EMP document and were noted by the Committee.

It is also reported by the proponent that there will not be any involuntary displacement/dislocation of people due to mining operations. The radiation monitoring is being carried out by Health Physics Unit (HPU) of Bhabha Atomic

Research Centre, deployed dedicatedly at IREL, Manavalakurichi. The preservation of monazite, health monitoring, environmental monitoring has been conducted HPU on regular basis as per the guide lines of Atomic Energy Regulatory Board, Dept. of Atomic Energy. Proponent informed that Mining operations do not generate radiation. The environmental cost towards EMP is proposed to be capital cost Rs. 15 lakhs and Annual Recurring cost Rs. 7 lakhs.

PP reported that WP 5678 of 2007 was filed by the Coastal Environment and Ecological Conservation Committee is pending in High Court, Madras for 7.06 ha ML area. This is disclosed in the final EIA/EMP report submitted by the proponent. During the deliberation of the project by the EAC, representatives of Shri Appu Natesan, President, Coastal Environment and Ecological Conservation Committee and M/s V. V. Minerals wanted to brief the Committee on the proposal of M/s IREL. The Committee was of the view that there are a large number of agenda items to be discussed for appraisal and informed the representative that they will be heard after the technical session is over in the evening. After the technical presentations were completed, the Committee wanted to hear the representatives of Shri Appu Natesan and M/s V.V. Minerals but they were not available. The Committee waited for half an hour after the technical session was over.

Further, it was informed to the Committee that the Ministry has received a complaint from M/s V.V. Mineral vide letter no. nil, dated 25.06.2013 that they had not received any intimation with regard to the consideration of proposal of M/s Indian Rare Earths Limited. In this context, it is noted that the agenda was placed in the MoEF website well in advance of scheduled meeting. The complaint, inter-alia, include that the proposal of M/s IREL, does not mention the nature of land, name of owners, details of road, temple, stream etc. and therefore has objected for the proposal to be considered. The Committee however was satisfied that the requisite database and other information, called for in the TORs was duly furnished in the EIA/EMP including the proceedings of the exhaustive Public Hearing, based on which the Appraisal was conducted.

Based on the information submitted, presentation made by the project proponent and discussions held, the Committee **recommended** the proposal for environmental clearance for the production of 70,000 TPA of beach sand minerals (Illeminite, Rutile, Zircon, Monozite, sileminite and Garnet) with special conditions, that (i) The private patta lands which are not owned by M/s IREL, mining will be carried out only after obtaining the consents from the concerned land owners as per the provisions of the Mineral Concession Rules, 1960 and MMDR Act, 1957, (ii) During mining operations, the village built up areas, roads, human settlement areas will not be disturbed, (iii) The tailings will be backfilled only in the mined out pits, (iv) Necessary clearance from the Coastal Zone Management Authority shall be secured, (v) AERB clearance for obtaining license under the Atomic Energy (Radiation Protection) Rules, 2004 for operation of BSM (Beach Sand Minerals) facility, and (vi) Occupational health and safety measures, especially

concerning radiation to be enhanced for workers who are having some ailments like hypertension, diabetes etc. They should have health checkup once in six months.

**2.28: Expansion of Graphite Production from 72,000 TPA to 2,40,000 TPA of M/s Pradhan Industries Ltd. over Mine Lease Area of 73.427 ha & Expansion of Graphite Beneficiation Plant from 72,000 TPA to 2,40,000 TPA(throughput) at village Bandhamandi, Post Godibali, Tehsil Kashipur, District Rayagada, Odisha-EC**

The proposal is for opencast semi-mechanised graphite ore mining from 72,000 TPA to 2,40,000 TPA ROM graphite ore and beneficiation of graphite ore from 72,000 TPA to 2,40,000 TPA (throughput) by M/s. Pradhan Industries located at village Bandhamandi, Post - Godibali, Tehsil - Kashipur, District - Rayagada, Odisha. The latitude and longitude of the site is 19<sup>0</sup> 22' 07" N to 19<sup>0</sup> 22' 37" N and 83<sup>0</sup> 15' 04"E to 83<sup>0</sup> 15' 37" E.

The proposal was considered by the Expert Appraisal Committee in its meeting held during 23<sup>th</sup> -25<sup>th</sup> February 2011 to determine the Terms of Reference (TORs) for undertaking detailed EIA study. The TOR was issued by the MoEF vide letter no.No.J-11015/27/2011-IA.II(M), dated 28<sup>th</sup> March, 2011. The public hearing was conducted on 21<sup>st</sup> March 2012 and the proponent submitted the EIA/EMP report incorporating the public hearing proceeding to the Ministry on 21<sup>st</sup> February, 2013 for seeking environmental clearance.

The Project Proponent (PP) made a presentation with regards to compliance of TOR for mining of graphite ore from 72,000 TPA to 2,40,000 TPA and beneficiation plant 72000 TPA to 2,40,000 TPA (throughput). The Mine lease area is 73.427ha out of which 24.868 ha is agricultural fields, 1.675 ha basti yogya, 0.178 ha grazing land, 2.303 ha road, 6.189 ha nala, 1.420 ha village site 2.019 ha orchards, 31.427 ha waste land and 3.278 ha forest land. The Mining Plan has been approved by IBM vide letter No MP/OTFM/05-ORI/BHU/2012-13, dated 30.04.2012.

The methodology adopted for mine working will be open cast semi mechanized for excavation of graphite ore with the help of machines like small excavator, tipper & other auxiliary equipment like pick-axe, crow bar, chisel, hammer etc. Loosening of the hard rock mass will be effected through jack hammer, drilled holes. The life of the mine is 14 years. The excavated graphite ore will be beneficiated in their captive Beneficiation Plant. The technology for beneficiation plant would be wet process, grinding-washing-froth floatation-filtration, drying & packing.

The Beneficiation Plant is within the lease area. It was reported by the PP that the solid waste i.e. overburden and tailings will be generated from the mines & Beneficiation Plant respectively. A total of 3,72,089 m<sup>3</sup> of waste will be dumped

by extending the existing dump over an additional area of 19,880 m<sup>2</sup> at 7m height in lower terrace and 10m height in upper terrace. The slopes of the dumps will be maintained by dozing and levelling at suitable intervals to maintain overall slope of dump less than 37.5 degrees. Garland drain and toe wall will be provided around the dump to arrest any surface run offs. The PP has also committed that once the dump matures, it will be stabilized by afforestation completely.

The PP reported that as regards tailing management, the sand obtained after washing of graphite ore and separation of graphite will be pumped out along with water and dropped into the tailing pond. Water accumulated around the sand will be filtered into the settling tanks through the check dams/tailing dam which has already been constructed outside the ultimate pit limit over an area of 3.038 ha with height of 6m. Tailing generated during the expansion phase will be 1,25,800 m<sup>3</sup>/annum. This will be disposed off in quarry no. 1, where the total volume available for beneficiation tailings is 22,82,063 m<sup>3</sup>. The tailing disposed off in the quarry will get compacted over years and will be provided with vegetative cover.

It was reported by the PP that the water requirement of the Project is 734 KLD, out of which, the requirement for mines is 378 KLD and makeup water requirement for beneficiation plant is 356 KLD. The source of water is ground & surface water and the permission for the same has also been obtained from CGWA for ground water (659 KLD) and for drawl of surface water from Dalkana Nala (75 KLD) from Revenue and Excise Department, Govt. of Odisha

The maximum working depth of the Bandhamandi opencast Graphite mine is 48m from surface i.e. 390 mRL. In the lease area the depth to water table lies about 9 m below surface level during pre-monsoon season and at 7m during post-monsoon period. So opencast mining will intersect groundwater table. In this context, the Hydrogeological study has been carried out and the study reveals that the stage of ground water development of Kashipur Block is 24.54%, which is within the 'safe' category and there is existence of ample scope for the future development of ground water. PP has taken the ground water permission from CGWA.

As reported there is no Wild Life Sanctuary, National Park, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves within the 10 km of the mine lease area and the same has been duly authenticated by DFO & Wildlife Warden, Rayagada. However, since some of the Schedule I Wildlife species were spotted in the buffer zone, Site Specific Wildlife Management Plan with cost of implementation has been prepared by the PP, which has also been approved by the PCCF Wildlife/Chief WildLife Warden, Odisha.

Baseline data was generated for the winter season (from December 2009 to February 2010). The public hearing for the proposed project was conducted at Bandhamandi village on 21-03-2012 and was chaired by Sri Maheswar Agasti, OAS-1 (SB), Project Administrator. I.T.D.A, District Rayagada. The proponent

informed that the Chairman of the public hearing is of the level of ADM as per the EIA Notification 2006. The issues raised during the public hearing were also considered and discussed during the meeting, which inter-alia included that no process water shall be discharged outside the mine premises, adequate air pollution control measures to be adopted, raising of plantation, water sprinkling arrangements etc. As per the villager's requirement it was informed by the PP that they would take care of drinking water provisions by installation of tube wells along-with its maintenance for first two years, appointment of teacher, appointment of pharmacist, company vehicle made available for any emergency usage, road development and assistance to poor for house construction. It was also committed by the PP that, in case of acquisition of any anabadi yogya cultivated land in future, necessary compensation shall be paid to the local people as would be decided by the District Administration. These have been incorporated in the Project with budgetary provisions.

The cost of the Integrated Project is Rs.7.18 Crores (Rs. 2.68 Crores for Mine & Rs.4.5 Crores for Beneficiation Plant). The capital environmental cost towards EMP is Rs. 15.00 lakhs and annual recurring cost will be Rs. 3.1 lakhs per annum. The total investment in CSR and peripheral development activities in the initial 5 years will be Rs. 35.92 lakhs. It was reported by the PP that there is no court case pending against the project. While appraising the project, the Committee had observed that this is a **violation** case as mine continued to operate from 1992 to 2011 and increased the production without obtaining prior environmental clearance.

Based on the discussion held, the Committee sought the following information/clarification:

- (i) Details of measures to be taken by the PP for the villagers staying in the mine lease area as per the issues raised during the Public Hearing and commitment on affidavit with financial allocation of budget; and
- (ii) Details of occupational health and safety measures for workers;

The Committee decided to **defer** the proposal to be **brought back** to the Committee after the required information is submitted.

**2.29: Argat Limestone Mines (1.2 MTPA) of M/s Jaiprakash Associated Ltd. Located at village Thanghatia, Bihri Jhopa Kothari Argat and Jigna Tehsil Ramnagar, District Satna Madhya Pradesh (363.070ha) (Consultants : Vimta Labs Ltd., Hyderabad)-Reconsideration EC.**

The proposal of M/s Jaiprakash Associated Ltd. for Argat Limestone Mines (1.2 MTPA), located at village Thanghatia, Bihri Jhopa Kothari Argat and Jigna

Tehsil Ramnagar, District Satna, Madhya Pradesh was considered for prescribing TORs by the EAC in its meeting held on 25<sup>th</sup> -27<sup>th</sup> April, 2011. Accordingly TOR was prescribed vide letter No. J-11015/46/2011-IA.II) (M) dated 20<sup>th</sup> May, 2011.

The proposal for EC was earlier considered by the Committee in its 2<sup>nd</sup> Meeting of EAC held during December 19<sup>th</sup>-21<sup>st</sup>, 2012 wherein the Committee sought additional information and mentioned that the proposal may be brought back before the Committee for its further consideration after the requisite information is furnished.

The Mine Lease area is 363.070ha. The proposal is for opening of a new mine for production of 1.2 million TPA of limestone to meet the enhanced limestone requirement of their Cement Plant. No forestland is involved. No National Park / Sanctuary is reported within 10 km of the mine lease. Mine working will be opencast mechanized involving drilling and blasting. Life of mine is 11 years. Ultimate working depth will be 36 m bgl (314 mRL). Water requirement is 150 kld/day, which will be obtained from mine sump water. The groundwater table is reported to vary between 305-308 mRL. Mine working will not intersect groundwater table.

The Mine Plan approval is obtained from the IBM for ML area of 363.072 ha vide letter No. 314(3)/2010-MCCM ©/MP-2, Nagpur dated 28.7.2010. No Protected Areas/Eco-sensitive areas are located within 10 km radius of the Project. Son Gharial Sanctuary is about 10.8 km from the Mine lease area. Total 150m<sup>3</sup>/day water will be required for dust suppression, greenbelt and domestic use.

The baseline data was collected during March 2011 to May 2011. All the parameters were found within permissible limits. Public Hearing was conducted on 4<sup>th</sup> March 2012. Public hearing was conducted successfully and issues raised by public were addressed by the project proponent with commitment for implementation.

It is reported by the Proponent that OB generation will be 714,828 tonnes which will be backfilled from 5<sup>th</sup> year onwards. Mining technology involves opencast mining with shovel dumper combination. Out of total ML area of 363.07 ha, 315.297 ha is the agricultural land, 0.935 ha is Government land and 47.773 ha is waste land. Entire private land will be purchased by mutual consent. Total cost of the Project will be Rs. 20 Crores. Cost of environment protection measures will be Rs. 145.10 lakhs.

It was observed by the earlier EAC that Proponent had not submitted satisfactory information with reference to rehabilitation and socio-economic issues (TOR No 4 and 30). One of the conditions of TOR was that the location of mine is in proximity of the habitation and a village is sand-witched between the mining pits, the impact of the project on habitation and the specific precautions to be taken to minimize the impact of the project should be detailed.

It was submitted by the Proponent that there is no habitation within the mine lease area hence no resettlement issues. Secondly, Proponent was asked to take measures of socio-economic significance and influence to the local community. Proposed Action Plans to mitigate impacts of mining on the neighboring villages and loss of Agricultural Land should be provided with quantitative dimensions and time frame for implementation. Proponent had not submitted details on this issue. Based on the presentation made and discussion held in the EAC meeting held during December 19<sup>th</sup>-21<sup>st</sup>, 2012, the Committee had sought following information:

1. Submit a proposal for welfare measures to be taken for Scheduled caste/Scheduled tribe population of the study area;
2. Detailed R&R Policy and proposed measures to safeguard the villages located near mine lease area, and of socio-economic significance as stated above.

The Committee had also mentioned that the proposal may be brought back before the Committee for its further consideration after the requisite information is furnished. In this context, the proponent vide letter dated 14.02.2013 submitted the desired information. In the Meeting, the PP made a presentation giving clarifications on the points raised earlier by the Committee. The PP informed the following:

- (i) There is no habitation within ML area, hence no home oustees. Around 304 farmers' land will be acquired for proposed mining project. Compensation of agricultural land acquired for proposed mine will be as per Sec-23 of the Land Acquisition Act. Onetime payment towards acquisition of agriculture land shall be made to the farmers as per the current market rate. The acquisition price will also cover trees, wells, crops and other permanent features existing at the time of acquisition and cumulative expected income from agriculture crops for the next 7 years. Stamp duty and other fees payable for registration shall be borne by proponent.
- (ii) Depending on skills, one person per family of the land loser will be given employment. Total man power requirement for proposed mining project is 86 persons. Priority will be given to the land losers. The PP informed that the priority of employment is as per the Rehabilitation policy, Government of Madhya Pradesh.
- (iii) The proponent informed that in Sidhi and Satna Cement project site they have adopted 26 villages around for various Community rural development program and CSR activities. Out of 26 villages adopted, 9 villages are from this mining project.

- (iv) The proponent collected the prevailing data for SC/ST population within 3-km radius from the proposed mine lease boundary. There are 12 viliaggess and total population comprises of 9625 habitants (as per 2001 census) wherein Scheduled Castes are 757 & Scheduled Tribes are 2034. The SC/ST constitutes about 29% of total population in 3-km. However, the PP reported that as per in-house survey conducted there are around 19,636 habitants in 12 villages.
- (v) The Proponent informed that the Jaypee Sidhi Cement Plant has fully equipped hospital with 4 qualified doctors and 23 trained staff with pathology laboratory facilities which are being extended to the villagers surrounding the mine and the patients would be treated free of cost.
- (vi) The Proponent informed that Rs 24.60 lakhs have been allocated for welfare measures for villages in 3km radius and CSR budget for proposed mining projects is around 10.06 lakhs.

Based on the information submitted, presentation made by the proponent and discussions held, the Committee **recommended** the proposal for environmental clearance for the production of 1.2 million TPA of limestone ROM with additional specific conditions of welfare measures and R&R Policy to be adopted as mentioned above [(i) to (vi)]. The Committee was of the view that the following conditions may also be added: (i) There shall be a brick wall within the boundary of mine lease with a minimum height of 6ft and 10 rows of plantation of trees to protect the villagers; (ii) The mining operation will not take place at the same time where the villages are sandwiched between the mining pits on either side, though not falling within the lease area.

**2.30: Renewal of mine lease and increase in production from 1.94 MTPA to 5.0 MTPA and Wet Beneficiation plant of 1.5 MTPA of Oraghat Iron Ore Mine of M/s Rungta Sons Pvt. Ltd. Located at Village Oraghat and Sanindpur, District Sundergarh, Odisha (82.961ha) (Consultants: Ecomen Laboratory Pvt. Ltd., Lucknow)- Reconsideration EC.**

The Proposal of M/s Rungta Sons Pvt. Ltd. was for renewal of mine lease, which fell due on 9<sup>th</sup> December, 2012 and enhancement of production of iron ore from 1.94 million TPA to 5.0 million TPA ROM and setting up of a Wet Beneficiation Plant with a throughput capacity of 1.5 million TPA. The Oraghat Iron Ore Mine is located at Village Oraghat and Sanindpur, District Sundergarh, Odisha.

The Proposal for TORs was considered by the EAC in its meeting held during 21<sup>st</sup>-23<sup>rd</sup> September, 2011. The Ministry had prescribed the TORs vide letter No. J-11015/165/2011-IA.II (M) dated 25<sup>th</sup> October, 2011.



The Mine lease area is 82.961 ha, which include 74.933 ha of forestland. Stage-I forestry clearance for an area of 64.133 ha has been obtained on 01.03.2011. Stage-II clearance has been obtained for 10.8 ha on 04.05.2006. Earlier Environmental Clearance was granted on 27.9.2007. Life of mine is 10 years. Mine working will be opencast.

In accordance to the TORs, Proponent submitted EIA/EMP Report to the Ministry vide letter no. RS/ED/Geo/2012-13/3639 dated 24.11.2012. Baseline data collection of environmental parameters was carried out during October to December, 2011 for three months. Ambient Air Quality parameters were reported to be within permissible limits. The Public Hearing was conducted on 19.07.2012 in Village Oraghat under the Chairmanship of Additional District Magistrate, Rourkela. Regional Officer, SPCB, Rourkela was also present. Issues raised by public were addressed by the Project proponent with commitment for implementation.

The proposal for EC was earlier considered by the Committee in its 4<sup>th</sup> Meeting of EAC held during February 20<sup>th</sup>-22<sup>nd</sup>, 2013 wherein the Committee had sought additional information as follows:

- (i) Detailed Company Policy on Environment Management;
- (ii) Report on impact of transportation load on the environment;
- (iii) Report on impact of mining on groundwater;
- (iv) Specific Program for upliftment of Scheduled Caste/Scheduled Tribe Population of the study area;
- (v) Note on Cumulative impact of the active mines in the study area and common evacuation routes; and
- (vi) Report on primary survey of flora and fauna including endangered and endemic species.

In this context, the proponent vide letter dated 12.04.2013 submitted the information to the Ministry and accordingly the proposal is now placed in this meeting. PP presented the point-wise clarification as sought by the EAC:

- (i) Environment Management Policy of the Company was discussed which inter-alia focused on Judicious use of Mineral resources for growth & development synchronizing mining & environment with prosperity.
- (ii) The pollution due to transportation load on the environment will be mainly fugitive dust & vehicular emission. The PP mentioned that this will be effectively controlled as most of the roads are metalled & water sprinkling will also be done regularly. Vehicles with PUCC only will be allowed to ply.
- (iii) The PP mentioned that the area is under safe category as per ground water resource estimation and has surplus exploitable ground water

potential, thus indicating that mining activity has not affected long term ground water trend & no specific aberration of water quality is found.

- (iv) The PP reported that for upliftment of scheduled caste/scheduled tribe population, specific programmes have been taken in to consideration specially with respect to education, health care, livelihood generation, infrastructure development & promotion of sports & culture for SC/ST population and that these will be intensified in future.
- (v) The PP submitted detailed report indicating that the cumulative impact of the active mines in the area and common evacuation routes on Ambient Air Quality is within the permissible limit and incremental load of pollutants will be negligible.
- (vi) The PP submitted detailed report of Primary survey of flora & fauna undertaken in the core & buffer zone. The PP also stated that the site specific conservation plan for the core & buffer zone has been approved by PCCF, Wildlife, Odisha and have submitted copy of the approval letter to the Ministry.

The Committee deliberated at length with regard to impact of transportation load on the environment, impact of mining on groundwater, cumulative impact of the active mines in the study area and common evacuation routes. The Committee noted that the PP has got approval of site specific wildlife conservation plan for this mine with financial provision of Rs. 123.0 Lakhs.

Based on the information submitted, discussion held, the Committee **recommended** the proposal for environmental clearance for the enhancement of iron ore production from 1.94 MTPA to 5.0 MTPA ROM and setting up of Wet Beneficiation Plant of 1.5 MTPA ROM of Oraghat Iron Ore Mine with additional special conditions as mentioned above, (i) to (vi).

**2.31: Mining of Sand, Bajri and Boulders in River Aasan Lot No. 14/4 of M/s Garhwal Mandal Vikas Nigam Ltd. located at Vill-Rampur & Kalyanpur, Tehsil-Vikasnagar, District-Dehradun, Uttarakhand (35.405 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The proposal is of M/s Garhwal Mandal Vikas Nigam Ltd. for Mining of Sand, Bajri and Boulders in River Aasan. The Mine Lease area is located at Village Rampur & Kalyanpur, Tehsil-Vikasnagar, District-Dehradun, Uttarakhand. The lease area lies on River Aasan. The Project is located in seismic zone-IV. The co-ordinates of Mine Lease area are given below:

- (i) Block 1: Latitude: 30°22'1.77"N to 30°21'23.91"N & Longitude : 77°49'0.60"E to 77°49'48.14"E

- (ii) Block2: Latitude: 30°21'33.83"N to 30°21'25.18"N & Longitude : 77°49'17.99"E to 77°49'39.04"E

It is 'A' category project as the lease area lies within the Doon Valley, an eco-sensitive area and also due to the presence of Interstate Boundary between Uttarakhand & Uttar Pradesh(8 Km in South direction) lies within 10 Km radius of the lease area.

The proposed Project is an open-cast Mining Project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meters. Total material handling in a year would be 3.4 Lakh TPA and the total reserve is calculated as 9.5 lakh tonnes. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13) dated 23-1-2013. Total water requirement will be 5 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression with proper permission. Additional water will also be required for plantation purpose.

It is reported by the project proponent that there is no court case/litigation is pending against the project. The total cost of project would be around Rs. 19.80 lakhs.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) Studies by any knowledgeable, reputed Institute on Cumulative impact due to simultaneous mining to be conducted from similar mines in the study area, (iv) Proper Conservation Plan for Schedule-I and II fauna,(v) Impact of mining on plankton, (vi) Appropriate Disaster Management safeguards in view of the seismicity of the area, (vii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC.

**2.32: Mining of Sand, Bajri and Boulders in River Jakhan Lot No. 13/1 of M/s Garhwal Mandal Vikas Nigam Ltd. located at Vill-Ranipokhri, Tehsil-Rishikesh, Distt-Dehradun, Uttarakhand. (18.00 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The proposal is of M/s Garhwal Mandal Vikas Nigam Ltd. for Mining of Sand, Bajri and Boulders in River Jakhan. The Mine Lease area is located at Village Ranipokhri, Tehsil Rishikesh, District Dehradun, Uttarakhand. The lease area lies on River Jakhan. The latitude and longitude of the Mine Lease area is between 30°10'50.83"N to 78°11'35.39"E. The Project is located in seismic zone-IV. It is 'A' category project as Project Site lies within Doon Valley, an eco-sensitive area.

The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Total material handling in a year would be 1.7 Lakh TPA and the total reserve is calculated as 4.8 lakh tonnes. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 40/Bhu. Khani.E./2012-13 dated 18-04-2013. Total water requirement will be 2.2 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression with proper permission. Additional water will also be required for plantation purpose.

It is reported by the project proponent that there is no court case/litigation is pending against the project. The total cost of project would be around Rs. 14.05 lakhs.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) Studies on Cumulative impact due to mining to be conducted from the reputed Institute, (iv) Proper Conservation plan for Schedule-I and II fauna, (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed. (vii) Appropriate Disaster Management safeguards in view of the seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC.

**2.33: Mining of Sand, Bajri and Boulders in River Baldi Lot No. 15/3 and 15/4 of M/s Garhwal Mandal Vikas Nigam Ltd. located at Vill-Mirota, Mandawali, Pustadi, Kulhaan, Mansingh, Kheri Mansingh, Reniwala,**

## **Tehsil-Dehradun, Distt-Dehradun, Uttarakhand. (69.785 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The proposal is of M/s Garhwal Mandal Vikas Nigam Ltd. for Mining of Sand, Bajri and Boulders in River Baldi. The Mine Lease area is located at Village Mirota, Mandawali, Pustadi, Kulhaan, Mansingh, Kheri Mansingh, Reniwala, Tehsil Dehradun, District Dehradun,, Uttarakhand. The lease area lies on River Baldi. The Mine Lease area is between 30°23'1.193"N to 30°20'36.332"N and 78°7'30.098"E to 78°6'53.876"E. The Project is located in seismic zone-IV.

It is an 'A' category project as per EIA notification, as the lease area of the project is more than 50 ha. However, NBWL clearance is mandatory for the project as Mussorie Wildlife Sanctuary (approx 8 km in N) lies within 10km radius of the lease area.

The proposed project is an open-cast mining project, confined to extraction of sand, *bajri* and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from *bajri* and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Total material handling in a year would be 5.0 Lakh TPA and the total reserve is calculated as 18 lakh tonnes. Extraction of sand, *bajri* and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 40/Bhu. Khani.E./2012-13 dated 18-4-2013).

Total water requirement will be 3.60 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression with proper permission. Additional water will also be required for plantation purpose. It is reported by the project proponent that there is no court case/litigation is pending against the project. The total cost of project would be around Rs. 23.25 lakhs.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) Studies on Cumulative impact due to mining to be conducted from the reputed Institute, (iv) Proper Conservation plan for Schedule-I and II fauna, (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed. (vii) Appropriate Disaster Management safeguards in view of the seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline

data, which shall adequately cover every single Lease Area under consideration for EC.

**2.34: Mining of Sand, Bajri and Boulders in River Yamuna Lot No. 21/1 of M/s Garhwal Mandal Vikas Nigam Ltd. located at Vill-Dakpathar, Nawabgarh, Mandi Gangbhewa and Bhimawala Tehsil-Vikasnagar, Distt-Dehradun, Uttarakhand. (123.19 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The proposal is of M/s Garhwal Mandal Vikas Nigam Ltd. for Mining of Sand, Bajri and Boulders in River Yamuna. The Mine Lease area is located at Village Dakpathar, Nawabgarh, Mandi Gangbhewa & Bhimawala, Tehsil Vikasnagar, District Dehradun, Uttarakhand. The lease area lies on River Yamuna. The Project is located in seismic zone-IV. The co-ordinates of Mine Lease area are given below:

- (i) Block A: Latitude: 30°29'31.67"N to 30°28'36.98"N & Longitude : 77°46'43.99"E to 77°44'50.28"E
- (ii) Block B: Latitude: 30°28'22.76"N to 30°28'12.43"N & Longitude : 77°43'49.89"E to 77°43'17.89"E

It is 'A' category project as per EIA Notification, lease area being more than 50 ha.

However, NBWL clearance is mandatory for the project due to the presence of Asan Conservation Reserve (approx.4.5 km in SW) & Simbalbara Wildlife Sanctuary (approx.8.5 km in W) within the 10 km radius of the lease area.

The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Total material handling in a year would be 8.0 Lakh TPA and the total reserve is calculated as 25 lakh tonnes. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-1-2013. Total water requirement will be 7.0 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression with proper permission. Additional water will also be required for plantation purpose. It is reported by the project proponent that there is no court case/litigation is pending against the project. The total cost of project would be around Rs. 40.55 lakhs.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions

viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) Studies on Cumulative impact due to mining to be conducted from the reputed Institute, (iv) Proper Conservation plan for Schedule-I and II fauna,(v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed.(vii) Appropriate Disaster Management safeguards in view of the seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC.

**2.35: Mining of Sand, Bajri and Boulders in River Asan Lot No. 14/2 of M/s Garhwal Mandal Vikas Nigam Ltd. located at Vill-Sherpur and Central Hope Town, Tehsil-Vikasnagar, Distt-Dehradun, Uttarakhand. (21.094 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The proposal is of M/s Garhwal Mandal Vikas Nigam Ltd. for Mining of Sand, Bajri and Boulders in River Asan. The Mine Lease area is located at Village Sherpur & Central Hope Town, Tehsil Vikasnagar, District Dehradun, Uttarakhand. The lease area lies on River Aasan. The Project is located in seismic zone-IV. The co-ordinates of Mine Lease area are given below:

- (i) Block 1: Latitude: 30°20'40.32"N to 30°20'26.41"N&Longitude: 77°51'23.32"E to 77°51'48.92"E
- (ii) Block 2: Latitude: 30°20'42.28"N to 30°20'21.38"N&Longitude: 77°51'7.05"E to 77°51'56.43"E

It is 'A' category project as Project Site lies within Doon Valley and also Interstate boundary of Uttarakhand and Uttar Pradesh present (approx 8 Km in SW direction) within 10 Km radius of the lease area.

The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Total material handling in a year would be 2.0 Lakh TPA and the total reserve is calculated as 3.78 lakh tonnes. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-1-2013).

Total water requirement will be 4 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water

sources for dust suppression with proper permission. Additional water will also be required for plantation purpose. It is reported by the project proponent that there is no court case/litigation is pending against the project.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) Studies on Cumulative impact due to mining to be conducted from the reputed Institute, (iv) Proper Conservation plan for Schedule-I and II fauna, (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed. (vii) Appropriate Disaster Management safeguards in view of the seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC.

**2.36: Mining of Sand, Bajri and Boulders in River Asan Lot No. 14/12 of M/s Garhwal Mandal Vikas Nigam Ltd. located at Khasra No. 68, Vill-Aduwala, Tehsil-Vikasnagar, Distt-Dehradun, Uttarakhand. (35.00 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The proposal is of M/s Garhwal Mandal Vikas Nigam Ltd. for Mining of Sand, Bajri and Boulders in River Asan. The Committee examined the proposal and based on the information furnished and presentation made by the project proponent and discussions held, the Committee **rejected** the proposal as the proposed site falls less than 1 Km distance from the Wild Life Sanctuary.

**2.37: Mining of Sand, Bajri and Boulders in River Khoh of M/s Garhwal Mandal Vikas Nigam Ltd. located at Vill-Khoh, Tehsil-Kotdwar, Distt-Garhwal, Uttarakhand (66.255 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The proposal is of M/s Garhwal Mandal Vikas Nigam Ltd. for Mining of Sand, Bajri and Boulders in River Khoh. The Mine Lease area is located at Village Khoh, Tehsil Kotdwar, District Pauri Garhwal, Uttarakhand. The lease area lies on River Khoh. The Mine Lease area is between 29°45'20.84"N to 78°32'30.81"E. The Project is located in seismic zone-IV.

As per the EIA notification the project is Category 'A' as the area of the project is more than 50 hectare. However, NBWL Clearance is necessary due to the presence of Jim Corbett National Park (approx.9 km in SE) within 10 km radius of the lease area.



The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from *bajri* and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Total material handling in a year would be 4.0 Lakh TPA and the total reserve is calculated as 14.5 lakh tonnes. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-1-2013. Total water requirement will be 2.60 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression with proper permission. Additional water will also be required for plantation purpose. It is reported by the project proponent that there is no court case/litigation is pending against the project. The total cost of project would be around Rs. 20.45 Lakhs.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) Studies on Cumulative impact due to mining to be conducted from the reputed Institute, (iv) Proper Conservation plan for Schedule-I and II fauna,(v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed.(vii) Appropriate Disaster Management safeguards in view of the seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC.

### **2.38:Virpur (Gunawali) Bauxite Mine of M/s P.P. Makhecha located at Vill-Virpur (Gunawali), Tehsil-Kalyanpur, District Jamnagar, Gujarat (55.2520 ha)-TOR**

The proposal is of Virpur (Gunawali) Bauxite Mining Project of M/s P.P. Makhecha with proposed production capacity of 8,18,418 TPA. The Mine Lease area is located at Village Virpur (Gunawali), Tehsil Kalyanpur, District Jamnagar, Gujarat. The Mine Lease area is between 2° 15' 38.7" to 22° 16' 17" N and 69° 17' 43.6" to 69° 18' 25.5" E. The Project is located in seismic zone-IV.

The Mining Lease was granted over an area of 55.2520 Hect in Village: Virpur, Taluka: Kalyanpur, District: Jamnagar (Gujarat) in favour of Smt. Pushpa

Ben P. Makhecha vide Govt. order no. MCR/1584/M-40/5883 dated 01-02-1992 and executed on 27.06.1994 for a period 20 years. The Lease will expire on 26.06.2014. The Mining Scheme has been approved by IBM vide letter no. M.S.-522 /09 dated 20-05-2011.

The mining will be by an opencast manual cum semi mechanized method. Soil will be first scraped/excavated and stacked near the pit. It will be subsequently spread over backfilled area. Bauxite present in the area with an average thickness of 6.0m will be mined out by forming one bench of 6.00m. The width of bench will be kept 10m and height of bench will be of 6.00m. The slope of the face will be maintained 70° from vertical during mining operation. Bauxite will be drilled by wagon drill and blasted. The run of mine (ROM) bauxite so obtained will be subjected to manual sorting to remove waste. It is informed by the Proponent that the bauxite will be transported to Porbandar by hired trucks. The existing fair weathered road will be used as approach road to connect village road. Total water requirement will be 4.2 KLD. This water will be supplied from the bore well from nearby villages.

It is reported by the project proponent that there is no court case/litigation is pending against the project. While appraising the project, the Committee had observed that this is a **violation case** as mine operated without obtaining prior environmental clearance. The cost of the project is 48 Lacs.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Studies on Cumulative impact due to other mines to be conducted by any reputed Institute, (ii) Appropriate Disaster Management safeguards in view of the seismicity of the area.

### **2.39: Mining of Sand, Bajri and Boulders in River Tons Lot No. 3/11 of M/s Garhwal Mandal Vikas Nigam Ltd. located at Vill-Archadia Grant, Tehsil-Vikasnagar, Distt-Dehradun, Uttarakhand (11.10 ha) (Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The proposal is of M/s Garhwal Mandal Vikas Nigam Ltd. for Mining of Sand, Bajri and Boulders in River Tons. The Mine Lease area is located at Village Arcadia Grant, Tehsil Vikasnagar, District Dehradun, Uttarakhand. The lease area lies on River Tons. The Mine Lease area is between 30°20'27.91"N to 77°56'44.85"E and 30°20'30.01"N to 77°57'16.53"E. The Project is located in seismic zone-IV.

It is 'A' category project as due to the presence of Doon Valley (Lease area lies within the extent of Doon Valley) & Inter-State Boundary of Uttar Pradesh and Uttarakhand (9.5 Km in SW direction) within 10 Km radius of the lease area.

The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Total material handling in a year would be 85,000 TPA and the total reserve is calculated as 1.7 lakh tonnes. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-1-2013. Total water requirement will be 1.15 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression with proper permission. It is reported by the project proponent that there is no court case/litigation is pending against the project. The total cost of project would be around Rs. 11.70 lakhs.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) Studies on Cumulative impact due to mining to be conducted from the reputed Institute, (iv) Proper Conservation plan for Schedule-I and II fauna, (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed. (vii) Appropriate Disaster Management safeguards in view of the seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC.

**2.40: Enhancement of Baga-Bhalag lime stone and shale mine (3.10 MTPA to 5.25 MTPA) within existing area of M/s Jaypee Himachal Cement Plant (a unit of Jai Prakash Associates Ltd.) located at Baga & Bhalag villages, Arki taluka, Solan District, Himachal Pradesh (331.424 ha) (Consultant: Vimta Labs, Hyderabad-TOR**

The proposal is of M/s Jaypee Himachal Cement Plant for the enhancement of production from 3.10 MTPA to 5.25 MTPA lime stone and shale mine within existing area of M/s Jaypee Himachal Cement Plant (a unit of Jai Prakash Associates Ltd. The Mine Lease area is between Latitude/Longitude 31°18'50"N to 31°20'43"N and 76°53'11"E to 76°54'46"E and falls within the Survey of India Toposheet No. 53A/15. The Project is located in seismic zone-IV.

The mine will be worked by mechanized opencast method of mining. The life of mine will be 29 years. The mine lease area is 331.424ha. It is reported

by the PP that Govt. of Himanchal Pradesh had granted mining lease for limestone and shale over an area of 331.424ha on 07.03.2005 for a period of 30 years. Mine lease was executed on 29.09.2007.

It is reported by the PP that EC was granted by the MoEF vide letter dated 18<sup>th</sup> May, 2006 for 2.05 MTPA clinker and 2.54 MTPA cement manufacturing capacity. Further, PP has also mentioned that they had also applied to the MoEF for enhancement in clinker production capacity from 2.05 to 3.5 MTPA in the existing Cement plant and proposal has been placed in 4<sup>th</sup> EAC meeting (Industry Sector) held on 9<sup>th</sup> January, 2013.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TOR condition i.e. Appropriate Disaster Management safeguards in view of the seismicity of the area.

**2.41: Vanduva Quartz Mine of M/s Sri V. Narasimha Rao located at village Tudi & Vanduva, Tehsil Veeragattam Mandal, District Srikakulam, Andhra Pradesh (50 ha) (Consultant: Team Labs and Consultants)-TOR**

The proposal is for Quartz mining with production capacity of 1,20,000 TPA. The Mine Lease area is located at Village Tudi and Vanduva, Tehsil Veeragattam Mandal, Srikakulam District, Andhra Pradesh. The Mine Lease area is between Latitude 18<sup>o</sup> 38' 14" to 18<sup>o</sup> 38' 48" N and Longitude 83<sup>o</sup> 38' 31" to 83<sup>o</sup> 39' 22"E.

The proposed project is proposing open cast method of mining for quartz with the help of jack hammer drilling and blasting. Mining consists of removing two benches of 3m each, one after the other, from higher levels to lower levels. The sizing and segregation of mineral and waste will be done manually.

The water requirement for the proposed mining is 6 KLD which shall be drawn from the nearby villages through tankers. Waste water generated from domestic sewage shall be sent to septic tank followed by soak pit. Solid Mining Waste generated will be partly used for backfilling of working pits and road construction etc. It is reported by the project proponent that there is no court case/litigation is pending against the project. Total cost estimated for the proposed project is Rs. 60 Lakhs and Cost estimated for EMP is Rs. 20 Lakhs.

It was reported by the Project Proponent that The Mine lease has been obtained from Industries and Commerce (M-III) Department, Government of Andhra Pradesh vide memo. No. 15295/M.III(1)/2009-1 dated 21-05-2010 and mine plan is approved by Zonal Director of Mines and Geology, Government of Andhra Pradesh vide letter no. 3322/M/2010 dated 28.07.2010. There is no forest land involved in the ML area of 65.76 Ha.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I

**2.42: Mining of Sand, Bajri and Boulders in River Aasan Lot No.14/9 of M/s Garhwal Mandal Vikas Nigam Ltd. located at Vill-Jassuwala, Lakhanwala, Mednipur & Badripur, Tehsil-Vikasnagar, Distt-Dehradun, Uttarakhand. (45.00 ha) (consultant: Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The proposal is of M/s Garhwal Mandal Vikas Nigam Ltd. for Mining of Sand, Bajri and Boulders in River Aasan. The Mine Lease area is located at Village Jassuwala, Lakhanwala, Mednipur & Badripur, Tehsil Vikasnagar, District Dehradun, Uttarakhand. The lease area lies on River Aasan. The Mine Lease area is between 30°24'50.15"N to 77°45'0.77"E. The Project is located in seismic zone-IV.

It is 'A' category project as Project Site lies within Doon Valley, Interstate boundary of Uttarakhand and Uttar Pradesh and of Uttarakhand and Himachal Pradesh present (approx 8 Km in SW and 7 NW directions respectively) and also Aasan Conservation Reserve is present (approx 3.5 Km in NW direction) within 10 Km radius of the lease area. NBWL clearance is mandatory for the project.

The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Total material handling in a year would be 3.5 Lakh TPA and the total reserve is calculated as 10.8 lakh tonnes. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-1-2013. Total water requirement will be 5 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression with proper permission. Additional water will also be required for plantation purpose. It is reported by the project proponent that there is no court case/litigation is pending against the project. The total cost of project would be around Rs. 19.10 lakhs.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) Studies on Cumulative

impact due to mining to be conducted from the reputed Institute, (iv) Proper Conservation plan for Schedule-I and II fauna, (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed. (vii) Appropriate Disaster Management safeguards in view of the seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC.

**2.43: Mining of Sand, Bajri and Boulders in River Song Lot No.7/2 of M/s Garhwal Mandal Vikas Nigam Ltd. located at Vill-Doiwala, Misserwala Khurd, Deswala, Ghiserpadi, Fatehpur Tanda, Markhan Grant, Tehsil-Rishikesh & Dehradun, Distt-Dehradun, Uttarakhand. (135.856 ha) (Consultant: Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The proposal is of M/s Garhwal Mandal Vikas Nigam Ltd. for Mining of Sand, Bajri and Boulders in River Song. The Mine Lease area is located at Doiwala, Misserwala Khurd, Deswala, Ghiserpadi, Fatehpur Tanda, Markhan Grant, Tehsil-Rishikesh & Dehradun, Distt-Dehradun, Uttarakhand. The lease area lies on River Song. The Mine Lease area is between 30°8'22.11"N to 30°10'40.76"N and 78°7'48.27"E to 78°7'58.37"E. The Project is located in seismic zone-IV.

It is 'A' category project as per EIA Notification, 2006 as the lease area is more than 50 ha. However, NBWL clearance is mandatory for the project due to the presence of Rajaji National Park (approx.2.5 km in SW) within 10 Km radius of the lease area.

The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Total material handling in a year would be 7.5 Lakh TPA and the total reserve is calculated as 26.8 lakh tonnes. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-01-2013. Total water requirement will be 5.1 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression with proper permission. Additional water will also be required for plantation purpose. It is reported by the project proponent that there is no court case/litigation is pending against the project. The total cost of project would be around Rs. 30.20 lakhs.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) Studies on Cumulative impact due to mining to be conducted from the reputed Institute, (iv) Proper Conservation plan for Schedule-I and II fauna, (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed. (vii) Appropriate Disaster Management safeguards in view of the seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC.

**2.44: Captive Limestone Mine (5.0 MTPA) of M/s Chettinad Cement Ltd. located at Vill-Peddagarlapadu & Kesanupalli, Mandal-Dachepalli, Distt-Guntur, Andhara Pradesh (377.68 ha)-TOR**

The proposal is of Captive Limestone Mining with production capacity of 5.0 MTPA. The mine is located at Peddagarlapadu & Kesanupalli Villages, Dachepalli Mandal, Guntur District, Andhra Pradesh. The mining area lies between Lat-Long 16° 31'18" N to 16° 33' 52" N & 79° 43'48"E to 79° 44' 53"E . The mining area falls under seismic zone I. It is reported by the PP that it is an integrated cement plant with lime stone mining. The TORs are prescribed for power & cement form the Industry Sector.

The proposed Captive Limestone Mines will be over an extent of 377.68 Ha consisting of Patta lands of 347.984 ha and Government lands of 29.692 ha. It is reported by the PP that there is no forest land.

The mining will be done by using Heavy Earth Moving Machinery (HEMM) following mechanized opencast conventional method up to a working depth of 45 m (maximum) from the ground level by adopting bench sizes of a maximum 9m height and 30m width in three benches. The excavation of limestone will be done by drilling with 150 mm dia with spacing & burden as 6 m X 4 m. Blasting will be done with ANFO mixtures & slurry explosives with minimum charge per hole as 70 to 80 kg using milli second delay detonators. Loading will be by Hydraulic excavators of 4.20 cum bucket capacity and transport by rear dump trucks of capacity 35 tons directly to the Limestone Crusher. It is reported by the PP that No waste will be generated from the mine as the entire ROM limestone will be dispatched to cement plant for manufacturing of cement. Water requirement for the proposed Captive Limestone Mine is 110 KLD. It is reported by the PP that

there is no litigation / case pending against the proposal. The Project cost will be 92 crores. The EMP cost will be Rs 41 lakhs per annum.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs condition i.e. Details of control measures to be taken for 6 villages near the mine lease area.

**2.45: Patnibona Stone Mine along with crusher of M/s Narsingh Lagdhir, located at Vill-Patnibona, Thana-Taljhari, Distt-Sahebganj, Jharkhand (6.086 ha) with proposed production capacity of 58,140 TPA (consultant: Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The proposal is of Patnibona Stone Mine along with crusher of M/s Narsingh Lagdhir located at village Betla, village: Patnibona, Thana:- Taljhari, District:- Sahebganj, Jharkhand over an area of 6.086 ha with proposed production capacity of 58,140 TPA. The Mine Lease area is between Lat-Long 24°55'38.66" to 24°55'55.27"N and 87°47'54.80" to 87°48'06.44" E. The Project is located in seismic zone-III. It is a category Project 'A' due to Udwa Lake Bird Sanctuary being at a distance of about 6 km in NE direction.

The mining operation is by Opencast Semi mechanized method of mining along with crusher of 200 TPD. The Mining Lease was originally granted over an area of 6.086 ha in favour of Shri Narsingh Lagdhir on 22.03.1965 for a period of 5 years. The present mining lease was renewed by District mining Officer of Sahebganj for a period of five years from 31.3.2010 to 30.03.2015. The water required for drinking and dust suppression is estimated to be 5.28 KLD. It is reported by the project proponent that there is no court case/litigation is pending against the project. The cost of the project is 22 Lacs.

While appraising the project, the Committee had observed that this is a **violation case** as mine operated without obtaining prior environmental clearance.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TOR condition (i) Proper Conservation plan for Schedule-I and II fauna (ii) Necessary NBWL clearance should be obtained,(iii) Details of measure w.r.t Occupational health for workers, (iv) Details of measures to guard against the noise and dust from the due to Crusher.



**2.46: Balagunda Iron & Manganese Ore Mine of M/s Arjun Ladha located at Vill-Dhanurjaypur, Tehsil-Barbil, Distt-Keonjhar, Odisha (326.5 ha) (Consultant: Envomin Consultant Pvt. Ltd., Bhubaneswar)-TOR**

The proposal is Iron ore of 1.247 million TPA of ROM, Manganese ore of 0.549 million TPA of ROM and Setting up Three nos. of Screening plant, each 200TPH capacity & Two nos. of Crushing plant, each 150TPH capacity. The mining lease area is located at village – Dhanurjaypur, Tehsil – Barbil, Dist.- Keonjhar, Odisha. The lease area is between 22<sup>0</sup> 03' 56.14" to 22<sup>0</sup> 05' 11.67" North Latitudes and 85<sup>0</sup> 17' 18.35" to 85<sup>0</sup> 19' 01.56" East Longitudes and is in Survey of India Toposheet No. – 73 F/8.

It is informed by the Proponent that the Government of Odisha has granted Mining Lease over 326.5 hectares in favour of M/s Arjun Ladha for a period of 30 years on 05.11.1966. The first renewal application was made on 28.10.1995 for a period of 20years for both Iron ore & Manganese Ore w.e.f. 05.11.1996, which is under deemed renewal clause. The scheme of mining has been approved vide letter no. MS/OTFM/19-ORI/BHU/2012-13, dt 21.06.2013 by the Indian Bureau of Mines, Govt. of India. The total forest land involved in the mining lease area is 322.12 hectares (Reserve Forest 316.8ha & Village Forest 5.32ha.), for which forest clearance has been applied for under Forest Conservation Act, 1980.

It is informed by the Proponent that the project shall continue by semi-mechanized method of mining with drilling and blasting. Production of iron ore and manganese ore is by ~~in~~ open cast mining method with bench height and width of 6m each. The production of iron ore and manganese ore will be 1.247 million TPA of ROM and 0.549 million TPA of ROM respectively.

It is informed by the Proponent that the followings court cases are pending which are as under:

- (i) The determination order of the lease dt. 15.02.2011 of the State Govt. is set aside by the Govt. of India (Revision Authority) vide order no. 729 dt. 26.11.2011.
- (ii) The Hon'ble Supreme Court of India has passed the order dt. 21.03.2012 against SLP No. 33926 to allow for lifting permission.
- (iii) The lease is restored as per the letter of Director of Mines vide letter No. 96 dt. 03.01.2013 and the DDM letter No. 7419 dt 13.12.2012
- (iv) CEC has given the liberty to seek approval under the FC Act 1980 vide order No. CEC/SC/2008-PT, dt. 10.01.2013

It is also informed by the Proponent that the Temporary Working Permission (TWP) to work in the broken up land has been issued by the MoEF, New Delhi in their letter no.10F(Cons)111/2007/5589/F&E, Bhubaneswar, dt. 12.09.2008; but the Lessee could not work. So, Lessee has now sought permission from DFO, which is under active consideration. The joint verification of the lease area/ broken up area has been completed and Compensatory Afforestation land has

been identified. The Net Present Value (NPV) of the total forest land involved in the lease amount in Rs 23,51,47,600/- has been deposited in CAMPA Account.

The cost of the project is Rs 80 crores. The cost for Environmental Management Plan is Rs 70 lakhs and annual recurring cost shall be Rs 30 lakhs. While appraising the project, the Committee had observed that this is a **violation case**, as the mine was operating without obtaining prior environmental clearance.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed the TORs** for undertaking detailed EIA study as per Annexure-I with additional condition that submission of a report on Prevention measures for possible impacts of Manganese poisoning.

**2.47: Expansion of Siddavaram Silica Sand Mine (17,820 TPA to 50,000 TPA) of M/s Mangalore Minerals (Pvt.) located at Vill-Siddavaram, Tehsil-Kota, Distt-Nellore, Andhra Pradesh (105.22 ha) (Consultant: Perfect Enviro Solutions (P) Ltd., N. Delhi)-TOR**

The proposal is for expansion of Siddavaram Silica Sand Mine from 17,820 TPA to 50,000 TPA. The Mine Lease area is located at Village- Siddavaram, Mandal-Kota, District-Nellore, and Andhra Pradesh. The Mine Lease area is 105.22 Ha.

The proposed project is Manual/Semi Mechanized extraction and collection of sand, stone and bajri from khad bed up to one meter. It is reported by the Proponent that the mine plan was approved by the IBM vide letter no 5466/MP/NL2010 dated 14/06/2011.

It is reported by the project proponent that no court case/litigation is pending against the project. The Cost of the project is Rs. 100 Lakhs. While appraising the project, the Committee had observed that this is a **violation case** as the mine is operating since 2003 without obtaining prior environmental clearance. The proponent informed that the mine is closed since 2012.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I

**2.48: Color Granite Quarry of M/s Vishwaksen Industries Pvt. Ltd. located at Vill- Gagarajapuram, Tehsil-Meliaputti Mandal, Distt-Srikakulam, Andhra Pradesh (15.00 ha) (Consultant: Vision Lab, Hyderabad)-TOR**

The proposal of M/s Vishwaksen Industries Pvt. Ltd. is for mining of color granite quarry with a proposed production capacity of 2,400 cum/annum. The mine is located at Vill- Gagarajapuram, Tehsil-Meliaputti Mandal, Distt-

Srikakulam, Andhra Pradesh. It is Category 'A' project due to interstate boundary with Orissa & Andhra Pradesh.

The total mine lease area of 15ha which is Government waste land. No forest land involved. The mining is by open cast semi mechanized method. Life of mine is 20 years. Water requirement is 6m<sup>3</sup>/day. It is reported by the project proponent that there is no court case/litigation is pending against the project. The Cost of the project is Rs. 50 Lakhs.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I

**2.49: Mining of Sand, Bajri and Boulders in River Yamuna Lot No. 21/3 of M/s Garhwal Mandal Vikas Nigam Ltd. located at Vill-Dhakrani and Gangbhewa, Tehsil-Vikasnagar, Distt-Dehradun, Uttarakhand. (68.364 ha) (Consultant: Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The proposal is of M/s Garhwal Mandal Vikas Nigam Ltd. for Mining of Sand, Bajri and Boulders in River Yamuna. The Mine Lease area is located at Village Dhakrani and Gangbhewa, Tehsil Vikasnagar, District Dehradun, Uttarakhand. The lease area lies on River Yamuna. The Mine Lease area is between 30°27'14.17"N to 77°42'1.06"E. The Project is located in seismic zone-IV.

It is an 'A' category project as per EIA notification as the area of the project is more than 50 ha. However, NBWL clearance is mandatory for the project as Simbalbara WLS (approx.9 km in NW) lies within 10km radius of the lease area.

The proposed project is an open-cast mining project, confined to extraction of sand, *bajri* and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from *bajri* and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Total material handling in a year would be 6 Lakh TPA and the total reserve is calculated as 18 lakh tonnes. Extraction of sand, *bajri* and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 40/Bhu. Khani.E./2012-13 dated 18-4-2013. Total water requirement will be 6.5 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression with proper permission. Additional water will also be required for plantation purpose. It is reported by the project proponent that there is no court case/litigation is pending against the project. The total cost of project would be around Rs. 26 lakhs.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) Studies on Cumulative impact due to mining to be conducted from the reputed Institute, (iv) Proper Conservation plan for Schedule-I and II fauna, (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed. (vii) Appropriate Disaster Management safeguards in view of the seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC.

**2.50: Collection of Sand, Bajri and Boulders in River Tons Lot No. 3/14 of M/s Garhwal Mandal Vikas Nigam Ltd. located at Vill-Mehreka Gaon and Sheesambada, Tehsil - Vikashnagar, Distt -Dehradun, Uttarakhand. (6.7 ha) (consultant: Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The proposal is of M/s Garhwal Mandal Vikas Nigam Ltd. for Mining of Sand, Bajri and Boulders in River Tons. The Mine Lease area is located at Village Mehreka Gaon and Sheesambada, Tehsil Vikasnagar, District Dehradun, Uttarakhand. The lease area lies on River Tons. The Mine Lease area is between 30°20'26.48"N, 77°53'32.94"E to 30°20'17.04"N. 77°53'8.92"E. The Project is located in seismic zone-IV.

It is 'A' category project as due to the presence of Interstate boundary of Uttarakhand & Uttar Pradesh (about 8 Km in S direction), & Doon Valley (Lease area lies within the valley) within 10 Km radius of the lease area.

The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Total material handling in a year would be 55,000 TPA and the total reserve is calculated as 1.5 lakh tonnes. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 40/Bhu. Khani.E./2012-13 dated 18-4-2013. Total water requirement will be 3.3 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression with proper permission. Additional water will also be required for

plantation purpose. It is reported by the project proponent that there is no court case/litigation is pending against the project. The total cost of project would be around Rs. 10.90 lakhs.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) Studies on Cumulative impact due to mining to be conducted from the reputed Institute, (iv) Proper Conservation plan for Schedule-I and II fauna,(v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed.(vii) Appropriate Disaster Management safeguards in view of the seismicity of the area, (viii) Copy of the required NBWL clearance.

**2.51: Ongole Magnetite Deposits (ML area 529.04 ha) and iron ore beneficiation of 5.0 MTPA with a through put of 1.35 MTPA of concentrate of M/s A.P. Mineral Development Corp. Ltd at village Konijedu and Marlapadu, Mandal Ongole in District Prakasam in Andhra Pradesh (Consultants Bhagavathi Ana Labs Ltd, Hyderabad)-reconsideration of EC**

The proposal was prescribed Terms of Reference vide No J-11015/257/09 – IA.II (M) Dated November 6<sup>th</sup>, 2009. The Konijedu-Marlapadu Magnetite Iron Ore Deposit is located at about 10 Km South-Southwest of Ongole city in Prakasam district of Andhra Pradesh. The proposal is for mining of 5.0 MTPA of magnetite Iron Ore by mechanized opencast mining operations and Beneficiation of 5.0 MTPA of low grade Magnetite Iron Ore from Konijedu-Marlapadu Mines to produce 1.35 MTPA iron ore concentrate. The proposal was considered for environmental clearance in the EAC meeting held during December 19-21, 2012 wherein Committee sought additional information on following:

1. All the coordinates of the Project area would be reconciled forthwith and the correct ones furnished to MoEF for their record.
2. Efforts would be made to further reduce water consumption in the production process and a detailed quantified note on such conservation measure submitted to MoEF within the next three months.
3. Possible contamination of groundwater by the stored tailing in the two ponds would be kept under constant surveillance and remedial measures initiated if so called for.
4. Possible health impacts such as silicosis due to dust would also be guarded against and periodic Reports on occupational health submitted as required.

On receipt of information the proposal is placed in the present meeting. During the discussion, it was observed that co-ordinates mentioned in mine plan

and EIA report were not yet rectified. With respect to the query raised in the previous meeting, it was informed by the project proponent that water reduction for activities was not possible. The proposal was deliberated and the Committee was not convinced on the information provided by the PP and thus was of the view that the project proponent need to address the issues in a pragmatic manner and thus information may be re-submitted:

- (i) All the coordinates of the Project area would be reconciled forthwith and the correct ones furnished to MoEF for their record.
- (ii) In order to reduce the water consumption in the production process, a detailed quantified note on such conservation measure should be submitted.
- (iii) The remedial measures suggested for contamination of groundwater by the stored tailing should be comprehensive and details like material used for impermeable membrane, etc. should be incorporated in the plan.
- (iv) Budget allocation for the occupational health measures shall be mentioned.

Based on the information furnished and presentation made by the project proponent and discussions held Committee decided to **defer the proposal, to be brought back** to the Committee after the information, as above is submitted.

#### **2.52: Limestone Production of 2.0 MTPA of M/s Adhunik Cement Ltd , Village Thangskai, Jaintia Hills District, Meghalaya (128.52 ha and 19.33 ha outside dump) (Consultnat: B.S. Envitech, Hyderabad)- Reconsideration of EC**

The proposal is for opening of a new mine for production of 2.0 million TPA of limestone for the captive use in their cement plant adjacent to the mine lease. The project was prescribed TOR vide letter dated 15.02.2010. Based on information submitted by the project proponent about change of land category, the Ministry issued additional TORs on 05.03.2012. The proposal was further considered for environmental clearance in the EAC meeting held during August 29<sup>th</sup> -31<sup>st</sup>, 2012. the Committee recommended the project for Environmental Clearance subject to an appropriate Conservation Plan for the Schedule-I species, i.e., *Bambusicola fitchi hapkinsoni* (Assam Bamboo Partridge), duly approved by the concerned Chief Conservator of Wild Life.

While processing the file for according the environmental clearance, the Ministry was of the view that the conservation plan submitted may be examined by the EAC. Accordingly the conservation plan for the Schedule-I species, i.e., *Bambusicola fitchi hapkinsoni* was placed in the present meeting. Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **recommended** the proposal for grant of environmental clearance. Further, the Committee was of the view that as the

conservation plan has already been approved by the Competent Authority at the State level, such conservation plan need not be placed before the EAC, once the Committee has recommended the proposal.

**2.53: Nathara-Ki-Pal-III-C Soapstone Mining Project of M/s Nalwaya Mineral Industries Pvt. Ltd. located in Village Nathara Ki Pal Tehsil Sarada, District Udaipur, Rajasthan (Consultant: R.K. Consultants, Jabalpur)-Reconsideration of EC.**

The Proposal was **deferred** as the Project Proponent did not attend the meeting.

**2.54: Rampura Limestone & Calcite Mine of M/s Oriental Talc products Pvt. Ltd. located Village Rampura, Tehsil Neemka Thana, District Sikar, Rajasthan (41.13ha) (Consultant: ENKAY Enviro Services, Jaipur)- Reconsideration of EC.**

The proposal is for renewal of mine lease, which fell due in February, 2013 and enhancement of production of limestone from 50,000 TPA to 1,15,000 TPA. Mine is reported to be closed since 1998. TOR for this project were prescribed on 3.4.2008. Public hearing has been held on 31.7.2009. The mine lease area is 41.13 ha. It has been considered as category 'A' because of its location at a distance of 4 km from the inter-state boundary of Rajasthan and Haryana. The proposal was considered in the 25<sup>th</sup> meeting of the Expert Appraisal Committee held during March 19-21, 2012. It was observed that the PM<sub>10</sub> levels are high within the mine lease. It was also observed that the water quality in the area is poor, particularly as regards TDS, Chloride, Fluoride etc. the Committee sought information on the following:-

- (i) A note on the court case relating to the project and its latest status.
- (ii) Papers relating to succession of mine ownership.
- (iii) A clarification from the State Government confirming the level at which the public hearing has been chaired.
- (iv) Year-wise production till the closure of the mine clearly showing the highest production achieved prior to the EIA Notification, 1994 coming into force.
- (v) Details of the AAQ data which was placed before the public in the draft EIA report should also be given and compared with the data now being given in the EIA report.
- (vi) In view of the observed high levels of PM<sub>10</sub> in the mine lease area, particularly when the mining is reported to be closed, specific safeguard measures proposed to bring down the levels should be given along with their effectiveness in controlling the same. After implementing these measures, AAQ data should be collected afresh and submitted. AAQ monitoring network should be properly designed and monitoring carried

out as per the protocol so as to give a fair representation of the entire study area.

- (vii) The Questionnaire should be properly filled up providing information against respective Questions.
- (viii) The information relating to waste etc. should be given till the lease period as well as the conceptual stage.
- (ix) Details of R&R of the land oustees should be given.
- (x) Compensation proposed for the grazing land to be used in the project in terms of the alternate arrangements made / to be made in this regard should be given.
- (xi) The area is over exploited in terms of the groundwater potential. Specific safeguard measures for ground water recharging and water conservation should be given.
- (xii) Details of flora and fauna separately for core and buffer zone duly authenticated should be given.
- (xiii) The occupational health aspect as given are only curative and not preventive. This aspect may be looked into and details furnished.
- (xiv) Action plan to address the issues raised during public hearing should be given.

Based on information furnished, the proposal was placed in the present meeting. Based on the information furnished and presentation made by the project proponent and discussions held the committee was of the view that the information submitted was not adequate and did not address all the issues and therefore the project proponent needs to re-submit the following information:

- (i) An affidavit with latest order of the court case pending against the proposal.
- (ii) The details of flora and fauna submitted by project proponent shall be re-surveyed.
- (iii) Schedule-I species are reported in the area, therefore species specific conservation plan shall be prepared.
- (iv) The preventive aspects for occupational health, as given were sketchy/ irrelevant.

Therefore, the Committee requested PP to re-submit the preventive aspects of occupational health with commitments and budgetary provisions. The Committee decided to **defer the proposal to be brought back** to the Committee after the information as above is submitted.

**2.55: Ingani Jharan Iron Ore and Manganese Ore Mine of M/s Sri Bikash Chandra Deb, Dadwan Cahmakpur, District Keonjhar, Orissa (114.93 ha) (Consultant: Visontek Consultancy Services Pvt. Ltd.)- Reconsideration of EC**

The Proposal was **deferred** by the Committee on the request of Project



Proponent for deferment.

**2.56: Augmentation of Screening plant and associated facilities at Bailadila Deposit – 14/11C, 11B of Bailadila Iron Ore Project of M/s NMDC Limited at Kirandul complex, South Bastar Dantewada District, Chhattisgarh (Vimta Labs, Hyderabad)- Reconsideration of EC**

The proposal is for Augmentation of Screening plant and associated facilities of Bailadila Iron Ore Project of M/s NMDC Limited from 12 to 19 MTPA in Kirandul complex, South Bastar, Dantewada District in Chhattisgarh. The TORs were issued to the project on 25.02.2009 by the MoEF. The proposal was earlier considered in the EAC Meeting held on 22<sup>nd</sup> January, 2010.

The proposal is for a new screening plant-III with a capacity of 12.0 MTPA. The projected cumulative ROM production from Kirandul Complex will be 19 MTPA. The existing capacity of the screening plants is 12 MTPA. Thus, there is a need of screening capacity augmentation. The SP-I will be phased out. During the monsoon season, it is proposed to have wet circuit system. The land requirement for the SP-III is 65.93 ha. The entire area is forest land. The water requirement will increase from 9150 m<sup>3</sup>/day to 13,750 m<sup>3</sup>/day. Additional water requirement will be met from the Bachel, Kirandul and Malangir nallah. The Cost of the project is Rs. 946.04 Crores.

The EAC in its meeting held on 22<sup>nd</sup> January 2010 had recommended the project for environment clearance subject to stipulation of following specific conditions: (i) Forest clearance for diversion of forest land shall be obtained before starting the proposed activity, (ii) Ground water quality around the tailing dam shall be regularly monitored and data submitted to the Ministry/ CPCB/SPCB, (iii) Wildlife conservation plan shall be prepared in consultation with the office of the Chief Wildlife warden. The plan shall comprise of in-built monitoring mechanism with special emphasis to protection of Schedule- I species. The status of implementation shall be submitted to the Ministry. Further an authenticated list of flora/fauna separately for core and buffer zone indicating the schedule of fauna shall be submitted to the Ministry (iv) Measures shall be taken to control the dust emissions at loading and unloading points of the ore. (v) Green belt shall be raised around the Kirandul Complex and selection of plants species shall be as per the CPCB guidelines to control the fugitive dust emissions.

While processing the matter for EC it is noted that the Stage I forestry clearance was granted to the proposal in January 2012 after a lapse of 24 months. Accordingly the Committee was apprised of the matter and reiterated **recommending** the proposal for EC.

**2.57: Manganese Ore Mining of M/s Aditya Minerals Private Ltd. located at Sy. No. 85,90,91,93,94,109,110 to 115 & 133 of Pimperkunta**

**Village Tamsi Mandal & Sy. No. 100 to 103, 112, 113, & 114 of Guda Village, Jainath Mandal, Adilabad District, Andhra Pradesh (89.01 ha) (Consultant: Team Labs and Consultants)–EC**

The proposal is for Manganese Ore production of 10,000 TPA by Aditya Minerals Pvt. Ltd. located at Sy. No: 85, 90, 91, 93, 94, 109, 110 to 115 & 133 of Pimparikunta Village, Tamsi Mandal & Sy. No: 100 to 103 & 112 to 114 of Guda Village, Jainath Mandal, Adilabad District, Andhra Pradesh. The Longitude and Latitude of the ML area is 78° 28' 07" E to 78° 29' 47" E and 19° 47' 55" N to 19° 45' 40" N respectively.

The proposal was considered by the Expert Appraisal Committee (EAC) for mining projects during its meeting held on September 28-30, 2010 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/232/2010-IA.II (M) dated 25<sup>th</sup> October, 2010. The proponent submitted its application to the Ministry on 24<sup>th</sup> March, 2012 for seeking environmental clearance after conducting the Public Hearing. The proposal was earlier placed in 30<sup>th</sup> EAC meeting held during 29<sup>th</sup>-31<sup>st</sup> August 2012 wherein the proposal was deferred as the Project Proponent did not attend the meeting.

The project proponent made a presentation with regard to compliance of TOR for mining of Manganese Ore with a capacity of 10,000 TPA. It is reported by the Project Proponent (PP) that the mine lease area is 89.01 ha, which is a plain patta land. Scheme of mining (including progressive mine closer plan) is approved by IBM vide Letter No. AP/ADB/MP/Mn-19/HYD dated 23.08.2010. It is a plain patta land, no forest land is involved in the mine lease area. Lease deed was obtained from the Department of Mines and Geology, Govt. of Andhra Pradesh vide proceeds. No. 2644/M/2004 dated 13.07.2009. The Project Proponent has further informed that this proposal is for a renewal of mining lease. The mine was earlier operating since 1970 and then closed since 2009 as mine lease fell due in 2009. It is reported by the PP that Total Geological Reserves are about 1,47,374 Tonnes with average grade of 24-33%.

It is reported by the Project Proponent that the method of mining will be by open cast method, top soil cover will be removed by manual means. The upper limestone bed, which overlies the manganese horizon will be removed after blasting. Depth of mining is restricted to 5.5m BGL and the ground water level in this area is 50m BGL, hence no impact on ground water is anticipated. Life of the mine is 15 years. The water requirement is estimated as 12 KLD, which will be obtained from nearby villages through tankers. The waste generation will be 2,34,059 m<sup>3</sup> (soil-15,658 m<sup>3</sup>+Lime stone-2,18,401m<sup>3</sup>) during scheme period, area earmarked for over burden/waste dump is 2.64ha and area proposed for top soil storage is 0.2 ha. The waste generated will be progressively backfilled in the working pits. The reclaimed land will be covered with top soil to get its original

profile and grass will be grown to avoid erosion of land. For transportation of material temporary road of length 630m and width 3m is proposed from material storing place to the existing village road.

It was reported by the PP that there are no Wild Life Sanctuary/Tiger Reserve/National Park within 10km radius of the ML area. Arli Reserve Forest is located at a distance of 6.5km in NW direction and Tamsi Reserve Forest located at a distance of 7.72km in west direction. Penganga River is flowing at a distance of 3.0km in North direction, Andhra Pradesh and Maharashtra state boundary is located at a distance of 3.0km in North direction, wherein it was reported that all the parameters of ambient air, noise level have been found to be within the prescribed limit. Baseline studies were carried out during post monsoon season of 2010. All the parameters for water and air quality were reported to be within permissible limits.

The Public Hearing for the proposed project was conducted at Pimparikunta Village on 17.08.2011. The PH was chaired by Dr. A. Ashok, IAS, Collector & District Magistrate, Adilabad. The issues raised during public hearing were also considered and discussed during the meeting, which inter-alia, included that there should not be any asthma, TB cases among the mine workers nor any fatalities in the mine pits, nor should any effluent be discharged from the mine lease area. Air pollution control measures should be adopted (by sprinkling of water etc.), plantation should be raised, rainwater harvesting measures should be undertaken etc. As per the villager's requirements, it was informed by the PP that they would take care of local employment; health issues, providing education, participation in development of village road and assistance in vocational training etc. These have been incorporated in the Project Action Plan with budgetary provisions.

The cost of the project is Rs. 20.0 Lakhs and cost proposed for environmental protection measures is Rs. 17 Lakhs and Recurring cost is Rs. 5.5 Lakhs. Fund allocated for CSR is Rs. 2 Lakhs. It was reported by the PP that there is no court case/litigation pending against the project.

Based on the discussion held, the Committee sought the following information/clarification:

- (i) Though Schedule-I species are found, no Conservation Plan has been prepared. In this context, an authentic list of Schedule I species should be provided and a Conservation Plan with Species specific habitats and conservation measures should be prepared in consultation with the Forest Department of State Govt. of and submitted.
- (ii) Questionnaire containing all details need to be submitted.
- (iii) Detailed Action plan on notarized affidavit should be provided with

budgetary provision on public health, education, air & water pollution and other issues raised during the public hearing.

(iv) Detailed Action plan on notarized affidavit should be provided with budgetary provisions for socio-economic development of the local Communities.

(v) Supporting Details of the provisions made towards Project Cost and Cost of EMP (capital and recurring cost) including PH commitments and CSR should be furnished in a Tabular form.

The Committee decided to **defer** the proposal to be **brought back** to the Committee after the required information is submitted as above.

**2.58: Expansion of Mainpat Bauxite Mine (ML area 639.169 ha) from 0.45 MTPA to 0.75 MTPA of M/s Bharat Aluminium Company Limited at villages Kesra, Kudardih and Sapnadar, Sitapur Tehsil, Sarguija District, Chhattisgarh-Extension of EC**

The proposal is of M/s Bharat Aluminium Company Limited for Extension of Validity of EC of Mainpat Bauxite Mine (ML area 639.169 ha) located at villages Kesra, Kudardih and Sapnadar, Sitapur Tehsil, Sarguija District, Chhattisgarh.

It is reported by the PP that Mining Lease was granted on 09.07.1992 for 20 years (valid till 08.07.2012). The Environmental Clearance for 4.5 LTPA was granted by the MoEF in 28<sup>th</sup> July 1993. Further, The Environmental Clearance for expansion of capacity from 4.5 LTPA to 7.5 LTPA was granted by the MoEF for the period of two years on 17<sup>th</sup> September, 2008 under the EIA, Notification 2006. On 26<sup>th</sup> October 2010, the Environmental Clearance for capacity 7.5 LTPA was further extended upto the lease period i.e. 8th July 2012. ML renewal has been applied for further 10 years period w.e.f. 09.07.2012 without any change in ML area, capacity or mining technology. The PP has informed to the Committee that there is no change in existing mine lease area, production capacity (7.5 LTPA) and mining technology.

The Committee deliberated the issues with regard to MoEF Notification dated 13<sup>th</sup> March, 2013. As per this notification, "No fresh Environmental Clearance would be required for a mining project or activity at the time of renewal of mine lease which has already obtained Environmental Clearance under this (S.O. 1533 (E) dated 14th Sept 2006) notification. In view of this, and also since there is no change in existing mine lease area, production capacity (7.5 LTPA) or mining technology, therefore the Committee **recommended** extension of EC till the life of mining or period of 30 years from date of issue of the present Environmental Clearance whichever is earlier. The Committee was of the view that this being a policy matter; MoEF may like to look in to this matter.

**2.59: Jhakol Sehnwa Soapstone Mine of M/s Deepak Sharma located at Village Jhakol, Tehsil and District Durgapur, Rajasthan (193.531 ha) (Consultant: Udaipur Min-tech Pvt. Ltd)-Reconsideration of EC.**

The Proposal of Jhakol Sehnwa Soapstone Mine of M/s Deepak Sharma located at Village Jhakol, Tehsil and District Durgapur, Rajasthan was earlier considered by the EAC during its meeting held on 16-18 April, 2012 and January 16<sup>th</sup> -18<sup>th</sup>, 2013. The Committee sought certain clarifications/information and decided that the Proposal be brought back after receipt of the requisite information.

While appraising the project in the EAC meeting held during 16-18 April, 2012, the Committee had observed that this is a **violation** case as mine continued to operate from July 2000 to March 2004 without obtaining prior environmental clearance. Mine is reported to be closed since 31.3.2004. The Committee noted that the **violation** action is still pending and the proposal was inadvertently placed in this meeting.

The Committee decided to **defer** the proposal, to be brought back to the Committee after the required action is taken and information as sought by the EAC in January 2013 is submitted.

**2.60 Mining of Sand, Bajri and Boulders in River Yamuna Lot No. 21/2 of M/s Garhwal Mandal Vikas Nigam Ltd. Located at Vill-Dhakrani, Tehsil-Vikashnagar, Distt-Dehradun, Uttarakhand. (34.940 ha) (consultant: Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The Mine Lease area is located at Village Dhakrani, Tehsil Vikashnagar, District Dehradun, Uttarakhand. The proposed production capacity is 3.3 Lakh TPA. The lease area lies on River Yamuna. The Mine Lease area is between 30°28'3.21"N to 77°42'59.22"E. The Project is located in seismic zone-IV. It is 'A' category project as due to the presence of Doon Valley (lies next to the Lease area in S direction), Aasan Conservation Reserve (3 Km in SW direction.) & Simbalbara Wildlife Sanctuary (9 Km in W direction) within 10 Km radius of the lease area. Interstate boundaries between Uttarakhand and Himachal Pradesh (next to mine site in W direction) and Interstate Boundary between Uttarakhand and Uttar Pradesh (8 km in SW direction) also lies within 10 km radius of the site. The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from *bajri* and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Extraction of sand, *bajri* and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 40/Bhu. Khani.E./2012-13 dated 18-4-2013).

Total water requirement will be 5.0 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression. Additional water will also be required for plantation purpose. Silt/Clay (6-12% of sand excavated) will be generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The total cost of project would be around Rs. 18,50,000.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee prescribed the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) cumulative impact due to sand mining (iv) Proper conservation plan for Scheduled –I and II fauna, and (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed.(vii) Appropriate Disaster Management safeguards in view of the high seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC

**2.61: Mining of Sand, Bajri and Boulders in River Jakhan Lot No. 13/2 of M/s Garhwal Mandal Vikas Nigam Ltd. Located at Vill-Majrigrant, Tehsil-Rishikesh, Distt-Dehradun, Uttarakhand. (92.652 ha) (consultant: Grass Roots Research & Creation India (P) Ltd. Noida)-TOR.**

The Mine Lease area is located at Village Majrigrant, Tehsil Rishikesh, District Dehradun, Uttarakhand. The proposed production capacity is 7.0 Lakh TPA. The lease area lies on River Jakhan. The Mine Lease area is between 30° 9'30.98"N to 78° 9'54.90"E. The Project is located in seismic zone-IV. As per the EIA notification the project is category 'A' as the area of the project is more than 50 hectares. The project is located near Rajaji National Park (approx.3.5 km in SW). The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 40/Bhu. Khani.E./2012-13 dated 18-4-2013).

Total water requirement will be 5 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water

sources for dust suppression. Silt/Clay (6-12% of sand excavated) will be generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The total cost of project would be around Rs. 20,88,000.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee prescribed the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) cumulative impact due to sand mining (iv) Proper conservation plan for Scheduled –I and II fauna, and (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed.(vii) Appropriate Disaster Management safeguards in view of the high seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC

**2.62: Collection of Sand, Bajri and Boulders in River Mohan Rao of M/s Garhwal Mandal Vikas Nigam Ltd. Located at Vill-Banjarewala, Tehsil-Roorkee, Distt-Haridwar, Uttarakhand. (72.32 ha) (consultant: Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The Mine Lease area is located at Village Banjarewala, Tehsil-Roorkee, District-Haridwar, Uttarakhand. The proposed production capacity is 4 Lakh TPA. The lease area lies on River Mohan Rao. The Project is located in seismic zone-IV. The project is located adjacent to Rajaji National Park. The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13) dated 23-1-2013.

Total water requirement will be 4.7 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression. Silt/Clay (6-12% of sand excavated) will be generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The total cost of project would be around Rs. 20,45,000.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee was of the view that since the site is located adjacent to Rajaji National park (less than 1 km distance) therefore the proposal **cannot** be considered for prescribing TORs.

**2.63: Mining of Sand, Bajri and Boulders in River Sukhrao & Mohanrao of M/s Garhwal Mandal Vikas Nigam Ltd. Located at Vill-Budhwa-shahid, Tehsil-Roorkee, Distt-Haridwar, Uttarakhand. (104.504 ha) (consultant: Grass Roots Research & Creation India (P) Ltd. Noida)-TOR.**

The Mine Lease area is located at Village Budhwa-Shahid, Tehsil Roorkee, District Haridwar, Uttarakhand. The proposed production capacity is 7.5 Lakh TPA. The lease area lies on River Sukhrao & Mohanrao. The Project is located in seismic zone-IV. The project is located adjacent to Rajaji National Park. The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 589/Bhu. Khani.E./2012-13 dated 23-1-2013).

Total water requirement will be 5.7 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression. Silt/Clay (6-12% of sand excavated) will be generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The total cost of project would be around Rs. 30,20,000.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee was of the view that since the site is located adjacent to Rajaji National park (less than 1 km distance) therefore the proposal **cannot** be considered for prescribing TORs.

**2.64: Mining of Sand, Bajri and Boulders in River Asan Lot No. 14/1 of M/s Garhwal Mandal Vikas Nigam Ltd. Located at Vill-Singhniwala & Sishambada, Tehsil-Vikashnagar, Distt-Dehradun, Uttarakhand. (18.4 ha) (consultant: Grass Roots Research & Creation India (P) Ltd. Noida)-TOR**

The Mine Lease area is located at Village Singhniwala & Sishambada, Tehsil-Vikashnagar, Distt-Dehradun, Uttarakhand. The proposed production capacity is 1.6 Lakh TPA. The lease area lies on River Aasan. The Project is located in seismic zone-IV. It is 'A' category project as due to the presence of Interstate Boundary



between Uttarakhand & Uttar Pradesh (8 Km in South direction) within 10 Km radius of the lease area, and the lease area lies within the Doon Valley, an eco-sensitive area. The proposed project is an open-cast mining project, confined to extraction of sand, bajri and boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. Excavation will be carried out up to a maximum depth of 1.5 meter. Extraction of sand, bajri and boulder material will be done only during the day time and completely stopped during the monsoon season. The lease area has been decided as per the Letter of Intent (Letter No. 40/Bhu. Khani.E./2012-13) dated 18-4-2013.

Total water requirement will be 4 KLD. This water will be supplied from the bore well from nearby villages through tankers as well as from surface water sources for dust suppression. Silt/Clay (6-12% of sand excavated) will be generated as waste, to be disposed off as filling in low-lying area, for plantation & as spreading in agricultural fields. The total cost of project would be around Rs. 13,80,000.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee prescribed the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of replenishment studies, (ii) Details of Transportation of mined materials as per the Indian Road Congress for both the ways with loaded as well as unloaded traffic load and its impact on Environment (iii) cumulative impact due to sand mining (iv) Proper conservation plan for Scheduled –I and II fauna, and (v) Impact of mining on plankton, (vi) Cluster approach for collection of baseline data shall be followed. (vii) Appropriate Disaster Management safeguards in view of the high seismicity of the area, (viii) NBWL clearance should be obtained. As regards the PP's request for common Base line Study for contiguous Lease areas of similar nature, the Committee agreed for a 'Cluster Approach' to be adopted for collection of baseline data, which shall adequately cover every single Lease Area under consideration for EC

**2.65: Gudwa Stone Mine (12,00,000 TPA) of M/s Mineral India located at Vill-Gudwa, P.S-Taljhari, Distt-Sahibganj, State-Jharkhand. (16.80 ha) (consultant: Grass Roots Research & Creation India (P) Ltd. Noida)-ToR**

The mining lease area is located in Village Gudwa, District- Sahibganj, Jharkhand at 25°13'47.0172"N Latitude and 87°43'18.2712" E Longitude. The area falls in seismic Zone III. The mining lease area falls in Survey of India Toposheet No. 72 0/12. It is a category A Project, due to Interstate boundary with Bihar & West Bengal. The entire lease area is government waste land. Total mineable reserves are about 60,00,000 tonnes. The proposed rate of production is 12,00,000 TPA of stone. The anticipated life of the mine at this rate of

production is 5 years. Water Requirement is of 8.5 KLD which will be sourced from nearby village. The waste generation will be in the form of top soil, overburden and inter burden. The estimated project cost is Rs 1 crore.

It was observed that this is a **violation case** as the mine was operating from 1999 till December 2011, without obtaining valid EC. Based on the information furnished and presentation made by the project proponent and discussions held, the Committee prescribed the TORs for undertaking detailed EIA study as per Annexure-I with additional TOR condition (i) Study on occupational health of workers due to noise from stone crusher and measures to be taken for protection shall be submitted.

**2.66: Melavenkateswarapuram Limestone Mine of M/s Madras Cements Ltd., located at Villages-Pudur, Nadukattur, Tehsil-Sennayampatti, Taluk-Vilathikulam, Distt-Thoothukudi, Tamil Nadu (103.53 ha) (Consultant: Creative Engineers & Consultants, Chennai)-TOR**

The proposal is for expansion of production from 0.101 MTPA to 0.50 MTPA (0.71 MTPA ROM) for Melavenkateswarapuram Limestone Mine of M/s Madras Cements Ltd., located at Villages-Pudur, Nadukattur, Tehsil-Sennayampatti, Taluk-Vilathikulam, Distt-Thoothukudi, Tamil Nadu.

It is reported by the PP that mining scheme and progressive mine closure plan for the period 2008-13 was approved by the IBM vide letter dated 26.09.2008.

The method of mining is open cast mechanized and proposed to produce 0.71 million TPA ROM limestone. Life of mine will be 10 years. The drilling and blasting will be done for mining. Water requirement is 50m<sup>3</sup>/day. It is reported that no forest land is involved and all the land is Private Patta land and owned by the Madras Cement Land.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs conditions viz: (i) Details of Transportation of mined materials as per the Indian Road Congress for both the ways (loaded as well as unloaded trucks) and its impact on Environment be provided. (ii) Studies by any reputed Institute on Cumulative impacts due to simultaneous mining by all the operating Mines in the Study area be conducted and a Report submitted. (iii) Status of the required Compliance Report from the Regional Office of MoEF.

**2.67: Expansion of Mallapura Limestone & Dolomite mines (ML.No.2304-ML area 336.50 ha) of M/s Vanivilas Cements (P) Ltd located at village Mallapura, Iyyanahalli & Bevinahalli, Taluk Hosadurga, District Chitradurga, Karnataka-TOR**

The proposal is for expansion from 12,900 TPA to 1.26 million TPA of Mallapura Limestone & Dolomite mines (ML area 336.50 ha) of M/s Vanivilas Cements (P) Ltd. located at village Mallapura, Iyyanahalli & Bevinahalli, Taluk Hosadurga, District Chitradurga, Karnataka.

The method of mining is open cast mechanized and it is proposed to produce 1.25 million TPA limestone and 0.71 million TPA of dolomite. Drilling and blasting will be done for mining. Water requirement is 21.6 KLD. It is reported by the PP that about 2.6 Lakh MT per annum of waste will be generated.

While appraising the project, the Committee had observed that this is a **violation** case as mine continued to operate from 1979 to 1999 without obtaining prior environmental clearance. Mine is renewed up to 2019.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I.

**2.68: Expansion of Srikurmam Mineral Sand Mine (2.0 MTPA to 8.0 MTPA) of M/s Trimex Sands Pvt. Ltd. located at Village Vatsavalasa, Mandal Gara, District Srikakulam, Andhra Pradesh. (ML Area 720 ha & Plant Area 59.27 ha) (consultant: Bhgvathi Ana Labs Ltd., Hyderabad)-Amendments in TOR**

The proposal is for amendment of ToRs w.r.t downgrading 8.0 MTPA to 6 MTPA of M/s Trimex Sands Pvt. Ltd. located at Village Vatsavalasa, Mandal Gara, District Srikakulam, Andhra Pradesh.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **recommended** the amendment of TORs for downgrading the ROM output from 8.0 MTPA to 6 MTPA.

**2.69: Mohanpura Limestone Mine of M/s Ultra Tech Cement Ltd. located at village Mohanpura, Soyla, Attarsuma, Karondiya, Badiya, District Dhar, Madhya Pradesh (Consultant: J.M. Environet Pvt. Ltd., Gurgaon) (ML Area 1026 ha)-Amendments in TOR**

The proposal is for amendments in TORs prescribed to the M/s UltraTech Cement Ltd. for proposed Mohanpura Limestone Mine located at village Mohanpura, Soyla, Attarsuma, Karondiya, Badiya, District Dhar, Madhya Pradesh.

MoEF has prescribed ToRs vide letter no. J-11015/275/2011-IA.II (M) dated 26<sup>th</sup> March, 2012 wherein in Para no.2, line no.2, it is mentioned that "..... Captive Cement plant at a distance of about 3km."

The Committee noted that it is a typographical error and **recommended** for amendment from "..... Captive Cement plant at a distance of about 3km to "..... Captive Cement plant at a distance of about 9.8km.

**2.70: Expansion of Karwahi Dolomite Mine of M/s Shri Pradyuman Kumar J. Trivedi located at Village Karwahi, Tehsil Ramteck, District Nagpur, Maharashtra (8.84 ha)**

The Proposal was **deferred** as the Project Proponent did not attend the meeting.

**2.71: Pali Limestone Mine (755.10 ha) with production capacity of 3.3 MTPA of M/s Ultra Tech Cement Ltd. located at village Moharai, Dagla, Asarlai, Tunkara, Nimbera Khurd in Tehsil-Jaitaran & Village Meshia in Tehsil-Raipur, District-Pali, Rajasthan (Consultant: J.M. Environet Pvt. Ltd., Gurgaon)**

The proposal is for amendments in TORs prescribed to the M/s UltraTech Cement Ltd for proposed Limestone Mine (ML No. 29/99 & ML Area: 755.10 ha) with Production Capacity of 3.3 MTPA Limestone near Villages - Mohrai, Dagla, Asarlai, Tunkra, Nimbera Khurd, in Tehsil – Jaitaran & Village - Meshia in Tehsil - Raipur, District–Pali (Rajasthan).

MoEF has prescribed ToRs vide letter no. J-11015/281/2011-IA.II (M) dated 7<sup>th</sup> June, 2012 wherein in Para no.2, line no.2, it is mentioned that "..... A crusher with 200 TPH Capacity also forms part of the project."

The Committee noted that it is a typographical error in the capacity and **recommended** amendment from "..... A crusher with 200 TPH Capacity also forms part of the project." to "..... A crusher with 1200 TPH Capacity also forms part of the project."

**Agenda Item No. 3:**

**(3.1). Mining (ML area 141.2269 ha) of rare minerals in CRZ area of M/s Indian Rare Earths Ltd. (IREL), located at village Manavalakurichi, Laxmipuram and Colachel, Tehsil : Kalkulam, District Kanyakumari, Tamil Nadu. (Consultant: M/s Bhagavathi Ana Labs Limited, Hyderabad) – Environmental Clearance-EC**

The proposal is for beach sand mines along with a mineral separation plant of M/s Indian Rare Earths Limited, located in the village Manavalakurichi, Tehsil: Kalkulam District Kanyakumari and State: Tamilnadu The 141.2269 hec project area falls between 08<sup>o</sup>08'14" - 08<sup>o</sup>10'31" N Latitudes and 77<sup>o</sup>15'50" - 77<sup>o</sup>18'16" E Longitudes. The Mining Lease area is available in the Survey of India Toposheet No 58H/8/NW.

The proposal was considered by EAC (Mining) in its meeting held during 23-25<sup>th</sup> Feb 2011 to determine Terms of Reference (TORs) for undertaking detailed EIA study. The TORs were issued by MoEF vide their Letter no: J-11015/387/2010-IA.II(M), dated:16.5.2011. The proponent submitted the Application for seeking environmental clearance to Ministry of Environment and Forests after conducting Public Hearing.

The proposal is for production of 1.0 million TPA of beach sand mineral along with a mineral separation plant with a throughput capacity of 200 tonnes/hr to produce 90,000 TPA of finished product (Illeminite, Rutile, Zircon, Monozite and Garnet). It was also stated that there is no enhancement of capacity either in mining or in the Mineral Separation Plant (MSP). No forestland is involved. The MSP is located within the mine lease area.

While granting TOR, the Committee took note of the order of the Hon'ble High Court of Madras dated 10.11.2010 in W.P. no. 5678 of 2007 and accordingly the Coastal Environment and Ecological Conservation Committee was permitted to make their submissions, if any, before the Committee and heard during the meeting. Their written submissions were also taken on record. They contended inter-alia, that the land is reported to have been agricultural land, ambient air quality survey has not been carried out, the earlier commitments have not been complied with by the proponent, the effluents discharged is higher than the consent granted, the area is prone to Tsunami and location of the activity in CRZ, which according to them, is prohibited and that no State clearance has been obtained etc. They, however, stated that they do not have any objections against issue of TOR to the Proponent. The Committee observed that the proposal of IREL is at the stage of prescribing of TOR for undertaking detailed EIA study and therefore the concerns raised by the petitioner should be addressed in the EIA report to be prepared by the proponent, which will further be subjected to public hearing; thereby the issues / concerns of the public can also be raised there and addressed.

The project proponent made a presentation with regard to compliance of TORs for mining of beach sand minerals over 141.2269 ha with a mining capacity of 1.0 million TPA. It is reported by the PP that CRZ maps have been prepared as per the CRZ-2011 notification and Application submitted to Kanyakumari District Coastal Zone Management Authority on 09.2.2013 for obtaining recommendations and it is under progress. The PP contended that Mining operations do not generate any solid waste, effluent, sewage or the like, hence NOC is not required as per CRZ-2011 notification; however, in order to comply with the TORs, Application has been submitted to Tamilnadu Pollution Control Board on 19.4.2013 for issue of NOC for carrying out mining operations.

The ML area 141.2269 ha was granted by Tamilnadu Govt. on 12.8.1981 for 20 years. The mining lease deed was executed on 26.6.1984. IREL has

submitted the Application in time for Renewal of Mining Lease on 24.3.2003 to Govt. of Tamilnadu. The mining plan has been approved for 141.2269 ha vide order nos: a) AMD/MPA/3M/IREL-MLC/2005/ 934, dated 26.5.2005 and b) TN/KK/MP/GNT-1652-/SZ, dated: 1.8.2006. Presently the 141.2269 ha ML area is under deemed extension as per Rule 24A(6) of MC Rules 1960. Scheme of mining for 141.2269 ha ML area has been prepared as per the latest guidelines of Indian Bureau of Mines and got approved by IBM, Chennai on 15.11.2012 (No: TN/KNK/GNT/MS-746.MDS) for undertaking mining operations over 141.2269 ha with a production quantity of 1.0 million tonnes of Beach Mineral sand per annum.

It is informed by the PP that out of 141.2269 ha, 71.4795 ha was acquired by IREL for mining and mineral beneficiation operations, 9.50 ha is sea beach poromboke and 60.2474 ha belongs to private patta land owners. The land in 141.2269 ha comprises of village built up areas, roads, beach poromboke areas, Mineral Separation Plant (Beneficiation Plant), private patta lands (both vacant and builtup) and M/s IREL acquired lands. Chinnavilai, Periavilai, Puthoor fisherman hamlet are within the 141.2269 ha ML area. Out of this, 60.2474 ha are private lands, 19.81 ha is village built up areas with roads and 40.4374 ha are vacant lands with coconut plantation. The length of the ML area is about 5.8 Kms. The poromboke lands are on the beach and are subjected to replenishment of mineral sand through wave action. During mining operations, the village built up areas, roads, human settlement areas will not be disturbed. The private vacant lands will be mined after obtaining consents from the concerned land owners. There will not be any involuntary displacement/dislocation of people during mining operations. The post mining land use of 141.2269 ha will remain almost same even at conceptual stage. The Mineral Separation Plant will remain within ML area even at conceptual stage. However, the inland mined out areas near to sea shore will be backfilled to an elevated height as a welfare measure to protect the village habitations from high tides, cyclones, tsunami etc. These backfilled areas will be planted with coconut as well as casuarina plantation to generate greenery in the locality. The mined out mineral sand is transported to Beach Washing Plant through tippers/trucks located within Mining Lease area for further up gradation and separation of individual minerals.

PP informed that there is no Wildlife Sanctuary / Tiger Reserve / National Park/Schedule-I species / Endangered species /Forest lands/ Wet lands/ Protected areas/ Ecologically Sensitive areas in core and buffer zones of the mine lease. The list of Flora and Fauna duly authenticated by DFO, Nagercoil in core and buffer zones was presented.

The project proponent reported that about 139 lakh tonnes of tailings from 141.2269 ha will be generated out of the 158 lakh tons of ROM in 20 years (58 lakh tons inland + 100 lakh tons from beach mining) and these tailings will be utilized for backfilling activities in the inland mined out lands. The PP has mentioned that under no circumstances, these tailings will be dumped in

agricultural lands, wet lands, paddy fields, canals and the backfilling will be carried out only in the inland mined out areas.

Proponent has reported that the ground water table will not be intersected in the beach areas where manual mining operations are carried out. However in the inland areas, where mechanized mining is carried out, the ground water Table will be intersected. Proponent informed that a detailed Hydro geological study has been conducted and report submitted. The method of mechanized mining adopted in the inland extractions, do not affect the ground water table as there is no pumping out /abstraction of water due to mining operations. There is no net drawl of water for the dredge pond due to dredging activities and the ground water table remains intact in the area. There is no saline intrusion due to dredging operations.

Baseline studies were carried out during Pre-monsoon season of 2011(March, April and May – 2011). Ten air monitoring points, Ten noise monitoring points, Eleven ground water sampling points, six surface water sampling points and ten soil sampling points were analysed in both core and buffer zones of 141.2269 ha ML area. All the parameters for water, air, noise and soil are reported to be within permissible limits.

The public hearing was conducted at Revenue Divisional Office, Padmanabhapuram, Kanyakumari District on 22.03.2013. The PH was chaired by Sri Palanisamy, District Revenue Officer (ADM rank). The issues raised during PH were also discussed by the committee during the meeting w.r.t. objections raised, demands of public, radiation hazards etc. The Proponent has reported that they have been undertaking CSR and other Welfare activities in and around the existing ML areas since inception and 2 to 3% of the net profit is always allocated for these activities. In addition to the above, PP reported that the fisherman village society members of Chinnavilai, Periavilai and Puthoor are engaged for collection of replenished mineral sand from the beach areas of 141.2269 ha. The Committee observed that the objections raised during PH are mostly related with land disputes, ML disputes and surface right disputes. PP informed that mining operations will not generate any incremental radiation and the background radiation reduces after removal of monazite and backfilling with monazite-free sand in the inland areas. PP ensured that mining over the private patta lands which are not owned by IREL will be carried out only after obtaining the consents from the concerned land owners prior to mining as per the provisions of the Mineral Concession Rules 1960 and MMDR Act, 1957. Compensation for such lands will be paid to the land owners as per the agreed terms and conditions prior to mining. After mining, the mined out lands will be backfilled and handed over to concerned land owners.

The objections raised during PH by an organization named Coastal Environment and Ecological Conservation Committee and M/s V. V. Minerals were

addressed by the PP. It was informed that these issues were related to land disputes (ML disputes and surface right disputes). The proceedings of the Public Hearing, clearly record the issues raised by the Coastal Environment and Ecological Conservation Committee, replies to the same as well as the written objections received. The same form part of the EIA/EMP document. The PP has categorically stated that they would ensure that over the private patta lands which are not owned by M/s IREL, mining will be carried out only after obtaining the consents from the concerned land owners as per the provisions of the Mineral Concession Rules, 1960 and MMDR Act, 1957. Compensation for such lands will be paid to the land owners as per the agreed terms and conditions prior to mining. After mining, the mined out lands will be backfilled and handed over to concerned land owners

PP informed that the radiation monitoring is carried out by Health Physics Unit (HPU) of Bhabha Atomic Research Centre, deployed dedicatedly at IREL, Manavalakurichi. The preservation of monazite, health monitoring and environmental monitoring will be conducted by HPU on regular basis as per the guide lines of Atomic Energy Regulatory Board, Dept. of Atomic Energy.

PP reported that the gross fixed assets for MLA are Rs. 52 crores (land and beneficiation plant). The environmental cost towards EMP is Rs. 580 lakhs for the procurement of water tankers for sprinkling along with tractors, replacement of chimneys, repairing of shaft drier chimneys, procurement of high-tech equipment for monitoring of background radiation, Occupational Health, Safety, establishment of Emergency Response Centre and Annual Recurring cost is Rs. 350 lakhs.

It is reported by the project proponent that there is no court cases pending for 141.2269 ha ML area as disclosed in the final EIA/EMP report. The issues raised by the Coastal Environment and Ecological Conservation Committee are addressed and reply to the written objections of M/s V.V. Minerals are all in the EIA/EMP document.

During the deliberation of the project by the EAC, representatives of Shri Appu Natesan, President, Coastal Environment and Ecological Conservation Committee and M/s V. V. Minerals wanted to brief the Committee on the proposal of M/s IREL. The Committee was of the view that there are a large number of agenda items to be discussed for appraisal and informed the representatives that they will be heard after the technical session is over in the evening. After the technical presentations were completed, the Committee wanted to hear the representatives of Shri Appu Natesan and M/s V.V. Minerals but they were not available. The Committee waited for half an hour after the technical session was over.

Further, it was informed to the Committee that the Ministry has received a complaint from M/s V.V. Mineral vide letter no. nil, dated 25.06.2013 that they



had not received any intimation with regard to the consideration of proposal of M/s Indian Rare Earths Limited. In this context, it is noted that the agenda was placed in the MoEF website about a month in advance of the scheduled meeting. The complaint, inter-alia, include that the proposal of M/s IREL does not mention the nature of land, name of owners, details of road, temple, stream etc. and therefore has objected for the proposal to be considered. The Committee however was satisfied that the requisite database and other information, called for in the TORs was duly furnished in the final EIA/EMP including the proceedings of the exhaustive Public Hearing, based on which the Appraisal was conducted.

Based on the information submitted, presentation made by the project proponent and discussions held, the Committee **recommended** the proposal for environmental clearance for the production of 1.0 million TPA of beach sand mineral along with a mineral separation plant with a throughput capacity of 200 tonnes/ hr to produce 90,000 TPA of finished products (Illeminite, Rutile, Zircon, Monozite and Garnet) with with special conditions, that (i) The private patta lands which are not owned by M/s IREL, mining will be carried out only after obtaining the consents from the concerned land owners as per the provisions of the Mineral Concession Rules, 1960 and MMDR Act, 1957, (ii) During mining operations, the village built up areas, roads, human settlement areas will not be disturbed, (iii) The tailings will be backfilled only in the mined out pits, (iv) Necessary clearance from the Coastal Zone Management Authority shall be secured, (v) AERB clearance for obtaining license under the Atomic Energy (Radiation Protection) Rules, 2004 for operation of BSM (Beach Sand Minerals) facility, and (vi) Occupational health and safety measures, especially concerning radiation to be enhanced for workers who are having some ailments like hypertension, diabetes etc. They should have health checkup once in six months.

**(3.2). Kalwar-Nagur Iron Ore Mine of M/s Steel Authority of India Ltd. over an area of 938.059 ha with capacity 1 MTPA at Kanker District of Chhattisgarh State-TOR.**

The proposal is of Kalwar-Nagur Iron Ore Mine of M/s SAIL, Bhilai Steel Plant over an area of 938.059 hectare and the mine is located in Kanker district of Chhattisgarh State. The deposit is located in the Toposheet Nos. 64 D/15 and 64 H/3 between longitude 80° 56' 44" to 81°00'48" E and between latitude 20°25'00" to 20°27'31" N.

The PP has informed that the MoEF has earlier prescribed TORs for this project in 2007 and the validity of TOR has expired. Now, PP has applied for the fresh TORs.

The Iron ore produced from this mine will be transported by road to Dalli-Rajhara Iron ore Complex located at a distance of 23 km. The Proposed mining

block of Kalwar-Nagur lease can be approached from Mahamaya-Dulki mine towards south by a Kuccha road for a distance of another 3 kms.

The Mining Plan of Kalwar - Nagur Iron Ore Mining Lease has been approved by IBM, Nagpur vide letter No.314(3)/2005-MCCM(CZ)/MP-36 Nagpur dated - 22.03.2007. It is reported by the project proponent that Forestry Clearance was renewed by the MoEF for 17 ha on 07.01.2008 and is valid up to 31/03/2025.

The mine will be worked by conventional mechanized method using shovel tipper/dumper combination, with deep hole drilling. The blasting will be done by slurry explosives. The blasted mass will be handled ~~done~~ by 0.9-1.2 m<sup>3</sup> bucket capacity shovel and will be transported directly to Crusher & Screening plant at Dalli/Rajhara. No reject sub-grade ore will be generated at the mine as the entire ROM ore will be sent to the Dalli/Rajhara plant. Water requirement will be 24 KL/Day. It is reported by the project proponent that there is no court case/litigation is pending against the project. The cost of the project is Rs. 7 Crores and the cost earmarked for Environment Management Plan is Rs.1.76 Crores.

The PP has also informed that they had conducted Public Hearing in February 2012 and also collected the base line data for the project during March 2013 to May 2013. PP has requested to allow using of base line data generated and use the Public Hearing proceeding for the EIA/EMP report.

The issue of Public Hearing and using the base line data generated was discussed at length. The Committee was of the view that since the Public Hearing was conducted in February 2012 and base line data generated during March 2013 to May 2013, which is quite recent, and accordingly, the Committee recommended to allow the use of base line data generated and proceedings of the public hearing for the EIA/EMP report.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I and allowed to use the public hearing proceeding and base line data generated during March 2013 to May 2013 for EIA/EMP report.

#### **Any other item with the permission of the Chair**

**4.1: Underground Lawa Gold Ore Mining (150 TPD) & Beneficiation Project of M/s Manmohan Mineral Industries Pvt. Ltd. At village Lawa, Nimdih Block, Saraikela Kharsawan District, Jharkhand (54.55 ha) (Consultant: Bhagavathi Anna Labs Ltd., Hyderabad)-Reconsideration of EC**

The proposal was for underground Lawa Gold Ore Mining with proposed production of 150 TPD (45000 Tonnes /Annum ROM Gold Ore) & Beneficiation of 150 TPD gold ore by M/s Manmohan Mineral Industries Pvt. Ltd., located at village Lawa, Nimdih Block, Saraikela Kharsawan District, Jharkhand.

The proposal was earlier placed in EAC meeting held in April, 2013 wherein the Committee had recommended the proposal for environmental clearance subject to the submission of Wildlife Conservation plan duly approved by the State Govt. The PP requested for an amendment to earlier recommendation for not making the required approval of the project subject to Conservation Plan by the competent Authority, a condition 'prior' to the issue of the EC letter, on the ground that these are different clearances relating to Forests, Wildlife etc. are parallel processes with their respective time-frames, without securing each and every single approval, entry in to the leasehold or any activity therein is prohibited. Any withholding of EC letter of a Project till other Approvals under due process, are secured, severely impairs/delays some linked processes like execution of Mining Leases etc. Examples were also quoted where, EC letters, based on recommendations of EAC (Mining) were issued, though stating that the EC is subject to 'Wild life', 'Forest Diversion' Clearances/Approvals from the concerned Authorities, as the case may be, but not insisting on submission of copies of such clearances, being made a 'prior' condition for issue of the duly approved EC letter.

In the instant case also, the Committee had duly appraised the Conservation Plan submitted by the Project Proponent to the State Govt. As may be seen from the Minutes, The Committee has **recommended** the proposal for environmental clearance. The Committee again considered the request for the aforesaid amendment to the earlier recommendation for EC and is of the view that it may be conceded to, but a specific condition be stipulated in the Environmental Clearance that the Conservation Plan should be species specific, should have allocation of budget, time frame and agencies to be responsible for the implementation for each of the target species. The Conservation Plan of course has to be approved by the State Govt. The Committee also decided that such proposals need not be referred back to the Committee for re-consideration.

The Committee **recommended** the proposal for environmental clearance with a special condition that Conservation Plan should be species specific, should have allocation of budget, time frame and agencies to be responsible for the implementation for each of the target species.

**4.2: Bhavanapadu Mineral Sand Project (ML Area 1788ha and capacity 10.0 MTPA) of M/s Trimex Heavy Minerals Pvt. Ltd. located at Villages Rajapuram & Bhavanapadu in Santhabommali Mandal, and Devunalthada, Suryamanipuram, Komarlathada, Sainooru, URK puram, Amalapadu, & Pallivuru villages in Vajrapukothuru Mandal,**

### **in Srikakulam District in Andhra Pradesh (Consultant: Bhagavathi Ana Labs Ltd., Hyderabad) – Reconsideration of EC.**

The proposal was for Heavy Mineral Beach Sand Mining with proposed production of 10.0 Million TPA and Pre-concentration Plant (1525 TPH) & Mineral Separation Plant (270 TPH) by M/s Trimex Heavy Minerals Pvt. Ltd. located at Villages Rajapuram & Bhavanapadu in Santhabommali Mandal, and Devunalthada, Suryamani puram, Komarlathada, Sainooru, URK puram, Amalapadu, & Pallivuru villages in Vajrapukothuru Mandal, in Srikakulam District in Andhra Pradesh.

The proposal was earlier placed in EAC meeting held in May, 2013 wherein the Committee had recommended the proposal for environmental clearance, subject to submission of Wildlife Conservation plan for Schedule-I species duly approved by the State Govt. Their present Application is for reconsideration of the recommended EC conditions as regards the withdrawal of the 'prior' submission of State approved Conservation Plan.

The Committee had examined the Conservation Plan submitted by the Project Proponent to the State Govt. and the deliberations on the subject had highlighted the need for inclusion of species specific conservation measures for the Schedule I fauna, appropriate provision of Funds for the same and delineation of responsibility as between the PP and the concerned Authorities, accompanied with detailed Action Plan for implementation and monitoring.

Now then after examining the present request for modification of the EC conditions the Committee is of the view that it merits consideration and it **recommends** the proposal with a Specific Condition to be stipulated in the Environmental Clearance that the Conservation Plan should be species specific, with allocation of budget, time frame and Agencies responsible for implementation to be delineated for each of the Schedule I/endangered fauna, and of course the Conservation Plan be approved by the State Govt. The Committee decided that such proposals need not be referred back to the Committee for re-consideration.

The Committee **recommended** the proposal for environmental clearance with a special condition that Conservation Plan should be species specific, should have allocation of budget, time frame and agencies to be responsible for the implementation for each of the target species.

#### **4.3: Expansion of Roida-I Iron Ore Mine of M/s Midest Integrated Steels Ltd. in District Keonjhar, Odhisa. –Extension of TOR**

The Proponent received TOR from the MoEF vide letter no. J-11015/57/2011-IA. II (M) dated 20.05.2011, which was valid up to 19.05.2013. The project proponents vide Letter dated 27.04.2013 requested to extend the

validity of the TORs; as they anticipated delay in submission of final EIA Report to MoEF.

Based on the information furnished and discussions held, the Committee **recommended** extension of the validity of TOR as per MoEF circular for additional one year i.e. from 20.05.2013 to 19.05.2014.

**4.4: Iron Ore Beneficiation & Pelletization Plant by M/s Archana Hi-Tech Automation Systems Pvt. Ltd. at Village Hargarh, Tehsil sehora, Distt. Jabalpur, M.P. (0.72 MTPA and 0.64 MTPA) - EC reconsideration.**

The proposal is for setting up of a iron ore Beneficiation Plant with a capacity of 0.72 million TPA along with Pelletization Plant with a capacity of 0.64 million TPA. The land requirement for the project is estimated at 1.096 ha, which will be located in Hargarh Notified Industrial Area in Silhora Tehsil, District Jabalpur, Madhya Pradesh. The proposal was prescribed TOR on 28.12.2011. On submission of EIA/EMP report the proposal was considered in EAC meeting held during August 29<sup>th</sup> -31<sup>st</sup>, 2012 and re-considered in EAC meeting held during May 15<sup>th</sup>-17<sup>th</sup>, 2013. In the meeting held during May 15<sup>th</sup>-17<sup>th</sup>, 2013 the Committee had sought submission of the following information:

- (i) Action Plan based on Public hearing shall be submitted on affidavit.
- (ii) AAQ data needs to be resubmitted from accredited lab.

On submission of Action Plan based on public hearing and AAQ data by project proponent, as asked for, the proposal is placed in the present meeting. Based on the information furnished and discussions held, the Committee **recommended** the proposal for grant of environmental clearance.

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## **Annexure-I**

<b>S. No.</b>	<b>Terms of Reference (TORs)</b>
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 and mining technology 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 should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
5)	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.
6)	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.
7)	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.
8)	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.
9)	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.
10)	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.
11)	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.
12)	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.
13)	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
14)	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.
15)	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the State Wildlife Department/Chief Wildlife Warden under the Wildlife (Protection) Act, 1972 and copy furnished.
16)	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, 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 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.
17)	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.
18)	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).
19)	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 mine 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.
20)	One season (non-monsoon) primary baseline data on ambient air quality (PM <sub>10</sub> , SO <sub>2</sub> and NO <sub>x</sub> ), 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 PM <sub>10</sub> , particularly for free silica, should be given.
21)	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.
22)	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.
23)	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
24)	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.



25)	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.
26)	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. 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.
27)	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.
28)	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.
29)	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.
30)	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.
31)	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA report.
32)	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.
33)	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.
34)	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.

35)	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.
36)	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.
37)	Detailed environmental management plan 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.
38)	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.
39)	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the project should be given.
40)	The cost of the project (capital cost and recurring cost) as well as the cost towards implementation of EMP should clearly be spelt out.

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**List of Participants**

1. Shri M.S. Nagar Chairman
2. Dr. S. Subramaniyan Member
3. Dr. L Ajay Kumar Member
4. Dr. S.K. Peshin Member
5. Prof. G.S. Roonwall Member
6. Prof. Asha Rajbanshi Member
7. Sri P.K. Verdia Member
8. Prof. A. K. Bhatnagar Member
9. Dr. Saroj Director, MoEF Member Secretary
10. Dr. R.B. Lal, Deputy Director, MoEF
11. Dr. Sonu Singh, Deputy Director, MoEF
12. Representative of M/s Lafarge India Pvt. Ltd.
13. Representative of M/s Chawla Silica Sand Trading Co.
14. Representative of M/s Penna Cement Industries Ltd.
15. Representative of M/s The Industrial Development Corporation of Orissa Ltd.
16. Representative of M/s Bharat Coking Coal Ltd.
17. Representative of M/s Ultra Tech Cement Ltd.
18. Representative of M/s Sri Venkatasai Granites
19. Representative of M/s Kanhaiya Lal RameshwarDass
20. Representative of M/s Saurashtra Calcine Bauxite and Allied Industries Ltd.
21. Representative of M/s Himachal Chemicals & Silicate Works
22. Representative of M/s East India Stone Quarry
23. Representative of M/s SNS Enterprises
24. Representative of M/s GarhwalMandalVikas Nigam Ltd.
25. Representative of M/s Khushal Arjun Rathore
26. Representative of M/s Indian Rare Earth Ltd.
27. Representative of M/s Pradhan Industries Ltd.
28. Representative of M/s Jaiprakash Associated Ltd.
29. Representative of M/s Rungta Sons Pvt. Ltd.
30. Representative of M/s P.P. Makhecha
31. Representative of M/s Jaypee Himachal Cement Plant
32. Representative of M/s Sri V. Narasimha Rao
33. Representative of M/s Chettinad Cement Ltd.
34. Representative of M/s NarsinghLagdhir
35. Representative of M/s Arjun Ladha
36. Representative of M/s Mangalore Minerals (Pvt.)
37. Representative of M/s Vishwaksen Industries Pvt. Ltd.
38. Representative of M/s A.P. Mineral Development Corp. Ltd
39. Representative of M/s Adhunik Cement Ltd
40. Representative of M/s Oriental Talc products Pvt. Ltd.

41. Representative of M/s NMDC Limited
42. Representative of M/s Aditya Minerals Private Ltd.
43. Representative of M/s Bharat Aluminium Company Limited
44. Representative of M/s Steel Authority of India Ltd.
45. Representative of M/s Deepak Sharma
46. Representative of M/s Mineral India
47. Representative of M/s Madras Cements Ltd.
48. Representative of M/s Vanivilas Cements (P) Ltd
49. Representative of M/s Trimex Sands Pvt. Ltd.
50. Representative of M/s Steel Authority of India Ltd.

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