

**MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE
(IMPACT ASSESSMENT DIVISION)
NON COAL MINING SECTOR)**

**SUMMARY RECORD OF 29th MEETING OF THE RECONSTITUTED COMMITTEE OF
THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF
MINING PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.**

The 29th 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 **January 15-16, 2015**. 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 28th EAC Meeting

The Minutes of the 28th Meeting of EAC held during **December 22-23, 2014** were confirmed and circulated.

Agenda Item No. 2:

Day 1: 15th January, 2015 (Thursday)

Consideration of Environmental Clearance Proposals

(2.1). Mining of Stone (Minor Mineral) with production capacity of 10 million TPA (ROM) of Stone by M/s Haryana State Industrial and Infrastructure Development Corporation Ltd., located at village-Khanak, Tehsil-Tosham, District-Bhiwani, Haryana (258.30ha) (Consultant: JM EnviroNet Pvt. Ltd., Haryana)-EC

The proposal of M/s Haryana State Industrial and Infrastructure Development Corporation Ltd. is for mining of Stone (Minor Mineral) with production capacity of 10 million TPA (ROM) of Stone in the mine lease area of 258.30 ha. The mine lease is located at village: Khanak, Tehsil: Tosham, District: Bhiwani, Haryana. The Latitudes & Longitudes of the site are 28° 53' 36.51" N to 28° 54' 48.46" N and 75° 50' 51.39" E to 75° 52' 50.70" E respectively on Survey of India Toposheet No. H43V13 (or 44P/13).

The proposal was considered by the Expert Appraisal committee (Non-coal Mining) in its meeting held during 29th-30th April, 2014 to determine the Term of Reference (ToRs) for undertaking detailed EIA study. The ToRs were issued by the Ministry vide letter no. J-11015/97/2014-IA.II (M), dated 11th June, 2014. The Project Proponent submitted the EIA/EMP report to the Ministry online for seeking Environmental Clearance after conducting Public Hearing. PP has informed that as per LoI condition they will extract mineral only 50% of the proposed production i.e. 5.0 million TPA (ROM). Therefore, the Traffic density impact will not be significant with proposed production i.e. 5.0 million TPA (ROM) of Stone.

The total mining lease area is 258.30 ha which is Government Land. Project Proponent has reported that no forest land is involved. Mining Plan & Progressive Mine Closure Plan for the proposed stone has been approved by Director of Mines & Geology, State Govt. of Haryana vide letter No. DMG/Hy/ML/Khanak/HSI IDC/4442, dated 09.10.2014. Project Proponent reported that 193.13 ha area will be used for excavation, 1.65 ha area will be built up, 1.50 ha for road, 135.10 ha for Greenbelt development and 9.95 ha area will be the undisturbed area. The mineable reserves are 198 million tonnes and life of mine is 23 years. Project Proponent reported that the Mining lease does not fall in Aravalli plantation and submitted a certificate from the Department of Mines & Geology, State Govt. of Haryana, vide letter dated 25.08.2014. M/s HSI IDC was granted LOI for mining lease by Department of Mines & Geology, Haryana vide Memo No. DMG/HY/ML/Khanak/HSI IDC/174, Chandigarh dated 03.01.2014, over an area of 258.30 ha for mining of Stone and mining lease was executed on 1st January, 2015.

Method of Mining will be opencast mechanized for mining of Stone (Minor Mineral) with production capacity of 5.0 million TPA (ROM) of Stone. Mineral will be sorted and transported through trucks. Total water requirement for the project is 40 KLD which will be sourced from ground water within lease area.

Project Proponent reported that there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves, Reserved Forests or Protected Forests within 10 km radius of mine site. Location Map of 10 km of mining lease boundary has been authenticated by Chief Wildlife Warden, Haryana on 17.11.2014. No Schedule-I species were reported within buffer zone.

The baseline data was collected for the period during Summer Season - March to May, 2014 and one month additional monitoring was done during October, 2014. All the parameters for air quality were within permissible limits.

The Public Hearing for the proposed minor mineral mining project was conducted on 18th November, 2014 at 11:00 AM at Mine Site, Village: Khanak, Tehsil: Tosham, District: Bhiwani, Haryana. The Public Hearing was presided over by Shri D.K. Behera, Deputy Commissioner. The representative from Haryana Pollution

Control Board was also present. The issues raised during Public Hearing were discussed during the meeting.

Total cost of the Project is Rs. 145 Crores. The Project Proponent has earmarked Capital Cost of Rs. 1.0 Crore/- for Environmental Protection Measures and Rs. 10 Lakh/annum as recurring cost. Project Proponent has earmarked Rs. 290 Lakhs/- towards CSR activities. PP has informed that one Court case - CWP No. 2599 of 2014 (M/s KJSL–Sunder & others V/s State of Haryana & others), challenging the allotment of mining lease area to M/s HSIIDC, is pending before the Hon'ble Punjab & Haryana High Court. However, no stay has been granted by Hon'ble Haryana High Court. The Committee suggested that the Ministry may stipulate a condition that, "Environmental Clearance is subject to final outcome of the above case in Hon'ble High Court of Punjab and Haryana".

The Committee deliberated at length the information submitted by Project Proponent and **recommended the Proposal for environmental clearance for Mining of Stone (Minor Mineral) with proposed production capacity of 5.0 million TPA (ROM) of Stone.**

The Committee **recommended** additional specific conditions viz. (i) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; (ii) An independent study be organised during peak activity, to understand how the actuals compare with the carrying capacities and further decisions taken to maintain sustainability of this essential stone extraction and supply activity. Project Proponent shall ensure that the road may not be damaged due to transportation of stone; (iii) Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The PP shall complete all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing held on 18.11.2014; (iv) The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, Forests and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry; (v) The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centres; (vi) There shall be planning, developing and implementing

facility of rainwater harvesting measures on long term basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board; (vii) Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured; (viii) A comprehensive study for slope stabilization of mine benches and OB dumps shall be undertaken within one year; (ix) Washing of all transport vehicle should be done inside the mining lease (x) "Environmental Clearance is subject to final outcome of the Court case in Hon'ble High Court of Punjab and Haryana"; (xi) Native plant species of Amla, Tamarind, Neem, Arjun, Bauhinia and others as suggested by villagers/specialist may be planted; (xii) Two villages namely Khanak and Toshan heavily saturated with respect to Ambient Air Quality may be selected for Air Pollution prevention and control measures to bring down AAQ within the prescribed standards; and (xiii) The EC will be valid only for 50% of the proposed production (5.0 million TPA (ROM) as per condition of Lol as informed by the PP.

(2.2). Limestone & Marl Mining with production capacity of 0.5 million TPA (ROM) by M/s UltraTech Cement Ltd., located near Village: Varagupadi, Tehsil, Kunnam District: Perambalur State Tamilnadu (54.68 ha) (Consultant: J.M. EnviroNet Pvt. Ltd.)-EC

The proposal was inadvertently placed in this meeting as it was already appraised in the EAC meeting held during December 22-23, 2014.

(2.3). Mining of Sand (Minor Mineral) in the Mine of "Karnal Unit-3" with production capacity of 94.6 Lakhs TPA of Sand by Shri Rajvir Chauhan S/o Shri Ranjit Singh, located at village(s)- Dabar ki par, Mustafabad, Dhakwala (Block/Knl-4), Manglaura Qadin(Block/Knl-5) Chandipur (Block/Knl-10), NaglaMega, Andehra(Block/Knl-11), District-Karnal, Haryana (780.32ha)-(Consultant: Grass Roots Research & Creation India (P) Ltd.)-EC

The proposal of Shri Rajvir Chauhan S/o Shri Ranjit Singh is for Mining of Sand (Minor Mineral) in the Mine of "Karnal Unit-3" with production capacity of 94.6 Lakhs TPA of Sand in mine lease area of 780.32ha. The mine lease area is located at village(s)- Dabar ki par, Mustafabad, Dhakwala(Block/Knl-4), Manglaura Qadin (Block/Knl-5), Chandipur(Block/Knl-10), NaglaMega, Andehra (Block/Knl-11), District-Karnal, Haryana. The lease area lies in the bed of River Yamuna & outside the river bed too. The Latitudes and Longitudes of mine lease area are (Block/Knl-4) Latitudes: 29°39'37.21"N to 29°36'47.05"N Longitudes: 77°07'49.91"E to 77°06'52.68"E, (Block/Knl-5) Latitudes: 29°36'49.52"N to 29°36'2.49"N Longitudes: 77°5'47.36"E to 77°5'43.25"E, (Block/Knl-10) Latitudes: 29°40'3.30"N to 29°39'2.57"N Longitudes: 77°5'17.74"E to 77°4'49.28"E (Block/Knl-11) Latitudes: 29°37'45.04"N to 29°36'26.18"N Longitudes: 77°4'4.78"E to 77°4'59.35" E respectively on the Survey of India Toposheet numbers 53G/1, 53G/6, 53G/5, 53G/6, 53C/13 & 53C/14. The Project is located in seismic zone-III. Interstate boundary of Haryana and Uttar

Pradesh lies within the 10 Km radius of the lease area.

The Proposal was considered by the Expert Appraisal Committee (Mining) in its meeting held during March 20-21, 2014 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by the Ministry vide letter no. J-11015/53/2014-IA.II (M), dated 8th May, 2014. The Proponent submitted the EIA/EMP report online to the Ministry seeking environmental clearance after conducting Public Hearing.

The proposed project is an open-cast mining project, confined to excavation of sand from the proposed site. The project consists of land type of both riverbed & off-river bed (paleo channels). The total proposed production capacity of Sand will be 94.60 Lakhs TPA of Sand (ROM), out of which, 35.80 Lakhs TPA of Sand (ROM) will be mined from River bed and 58.80 Lakhs TPA of Sand (ROM) will be mined from Off-Riverbed. The operation will manual on river bed blocks & in off-river bed blocks operation will be semi-mechanized with use of Excavator, Trucks etc. Excavation shall be carried out upto a maximum depth of 3 m in the river bed or one meter above water level whichever comes first, and a maximum depth of 9 m in area falling outside river bed or 2 m above water table whichever comes first. Extraction of material will be done only during the day time and will be completely stopped during the monsoon season. The Letter of intent has been issued to Shri Rajvir Chauhan by Director of Mines & Geology, State Govt. of Haryana, Chandigarh vide letter no. DGM/Hy/Karnal Unit-3/2013/119 dated 03.01.2014. Life of mine is 10 years.

Mine Plan has been approved by Department of Mining & Geology, Haryana vide letter no. DMG/HY/KNLUNT-3/5611-5614 dated 10.12.2014. The Committee noted that Mine Plan has been approved by Department of Mining & Geology, Haryana vide letter dated 10.12.2014 and the Public Hearing was held during 01.12.2014 i.e. prior to approval of the Mine Plan. Thus the Public was informed about the Mining Proposal with a draft Mine Plan only. In this context, PP vide letter dated 16.01.2015 has submitted that the draft mine plan and approved plan are the same except certain typographical corrections. Mining & Geology Department of State Govt. vide letter dated 16.01.2015 has also confirmed that the contents of mine plan are by and large same except certain typographical corrections. Project Proponent has submitted the revised Questionnaire w.r.t. details of land.

The Committee noted that PP will use 583.02ha agricultural land for the mining activities which may affect the fertility of the soil. The Committee noted that a representation was received from the Society for Awareness and Development which *inter-alia* has cited the Report of Haryana Agricultural University, Hissar (2006) which was relied upon by the Hon'ble High Court of Punjab and Haryana requiring the Environmental Impact Assessment Authorities to examine the issues prior to grant of environmental clearances. The Committee noted that the provision of the EIA Notification, 2006 entails prior examination of issues before the proposals are recommended for EC. However, the present proposal is for District Karnal but the

impact being of similar nature, the Committee is of the view that all necessary precautions to prevent the degradation of the surrounding eco-system shall be put in place. In case any degradation is noticed, the affected fertile land shall be duly compensated for loss in productivity. HAU in their summary have concluded with respect to three Districts namely Sonapat, Panipat and Yamuna Nagar that, *"the sand mining has disturbed the natural soil profile, land degradation due to soil erosion, formation of gullies at the junction of mined and un-mined fields and drifting of fine dust particles causing air pollution; the depleted soil fertility and low water holding capacity of the soil as a result of sand mining, the inputs of requirement in terms of fertilizers and water will be high resulting in high cost of crop production and less net profit". Representation has also been received requesting the EAC to consider sand mining cases in the meetings to be held during the next few months. Accordingly, the issue of mining over agricultural land should be considered in a broader prospective and views of various Expert Institutions that have carried out detailed studies and research, should be taken before any sand mining or mining of any mineral which is otherwise abundantly available elsewhere, be allowed over agriculture land.*

Proponent reported that no ecologically sensitive area such as National Parks, Wildlife Sanctuaries, Tiger Reserves falls within the study area (10 km radius of the mine boundary). However, one Reserved Forest exists within the study area. The conservation plan for three Schedules-I species viz. Monitor Lizard, Black Buck and Peacock has been prepared and approved on 23.12.2014 by Chief Wildlife Warden of the State Govt. The total water requirement is 22 KLD including water demand for domestic purpose, dust suppression & green belt development which shall be met by tanker supply.

Baseline studies were carried out during Summer Season i.e. March-2014 to May-2014. All parameters for air, water, soil & noise quality were within the permissible limits. The Public Hearing was held on 01.12.2014 at District-Karnal, Haryana. The Public Hearing was presided over by Shri Girish Arora, Additional Deputy Commissioner, Karnal. The representative from Haryana Pollution Control Board was also present. The issues raised during Public Hearing were discussed during the meeting.

The total cost of the Project is Rs 4.04 Crores. The cost on environment protection measures will be Rs. 16.75 Lakhs (capital cost) and Rs. 13.66 Lakhs per annum as recurring cost. It is proposed to incur Rs 15 Lakhs on CSR activities. One case CWP No.27700 of 2013 filed by Shri Rajbeer Singh is pending before Hon'ble Punjab and Haryana High Court. The Letter of Intent issued by State Govt. is subject to the outcome of this CWP. PP reported that there is one more case no CWP 8470 of 2004 in the matter of Ajeet Singh vs. State of Haryana & Ors. The Committee suggested that the Ministry may stipulate a condition that, "Environmental Clearance is subject to final outcome of the above mentioned cases pending before the Hon'ble Court.

Further to the information cited above, the Committee desired that Project Proponent should submit the following documents/clarifications, **where after, the Committee will take up the matter** for further appraisal of the Project, **without calling the Project Proponent**: -

- (i) Detailed Report regarding likely increase in productivity of Agricultural land after mining (as informed by the PP on the basis of Reports of some Institutes); The Expert may also send a Report in this regard;
- (ii) Onsite disaster management plan with complete mitigation measures for disaster management;
- (iii) Details of compensation proposed to be given to farmers as per R&R Policy of the State Govt. alongwith pert chart showing acquisition, and returning land for cultivation after mining activity;
- (iv) A Plan for providing potable drinking water in villages viz. Dabar ki Par, Mustafabad, Dakhwala, Manglaura, Chandipur and Nagla Mega Andhera having high fluoride in water;
- (v) Proposed Plan with map for 7.5 m green belt as proposed by the PP between mining land and adjacent Agricultural land; and
- (vi) Proposed Protective measures in respect of Project located in seismic zone-III as part of Disaster management plan.

(2.4). Mining of Sand (Minor Mineral) in the Mine of "Karnal Unit-1" with proposed production capacity of 12.75 million TPA of Sand (ROM) by Shri Vipin Gupta S/o Shri G.K. Gupta, located at village-Chandrown, Gharpur Tapu, Kalsora, Nabiyabad, Jupti Chapra (Block/Knl-1), Nagal, Kamalpur, Dabkoli Khurd (Block/Knl-2), Garhi-Birbal (Block/Knl-7), District- Karnal, Haryana (941.00ha)-(Consultant: Grass Roots Research & Creation India (P) Ltd.)-EC

The proposal of Shri Vipin Gupta is for mining of Sand (minor mineral) in the mine of "Karnal Unit-1" with proposed production capacity of 12.75 million TPA of Sand (ROM) in mine lease are of 941.0ha. The mine lease area is located at village(s)- Chandrown, Gharpur Tapu, Kalsora, Nabiyabad, Jupti Chapra (Block/Knl-1), Nagal, Kamalpur, Dabkolikhurd (Block/Knl-2), Garhi-Birbal (Block/Knl-7), District-Karnal, Haryana. The lease area lies on River Yamuna & its palaeochannel. The Latitudes and Longitudes of mine lease area are given block wise as follows: Block/Knl-1: Latitudes: 29°54'33.01"N to 29°49'13.21"N Longitudes: 77°13'12.55"E to 77°10'19.70"E, Block/Knl-2: Latitude: 29°47'6.52"N to 29°48'11.12"N Longitudes : 77°6'46.58"E to 77°8'9.18"E, Block/Knl-7: Latitudes: 29°54'26.33"N to 29°53'23.21"N Longitudes: 77° 9'39.87"E to 77° 9'16.01"E on the Survey of India toposheet number 53G/1,2,5 & 6. The Project is located in seismic zone-III. The mine

site is located in the interstate boundary of Haryana and Uttar Pradesh within 10 Km radius of the lease area.

The Proposal was considered by the Expert Appraisal Committee (Mining) in its meeting held during March 20-21, 2014 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by the Ministry vide letter no. J-11015/52/2014-IA.II (M) dated 5th May, 2014. The Proponent submitted the EIA/EMP Report online to the Ministry seeking environmental clearance after conducting Public Hearing.

The proposed Project is an open-cast mining project, confined to excavation of sand from the proposed site. The project consists of land type of both riverbed & off-river bed (paleo channels). The total proposed production capacity of Sand will be 94.60 Lakhs TPA of Sand (ROM). Out of which 35.80 Lakhs TPA of Sand (ROM) will be mined from River bed and 58.80 Lakhs TPA of Sand (ROM) will be mined from Off-Riverbed. The operation will be manual on river bed blocks & in off-river bed blocks operation will be semi-mechanized with use of Excavator, Trucks etc. Excavation shall be carried out upto a maximum depth of 3 m in the river bed or one m above water level whichever comes first, and a maximum depth of 9 m in area falling outside river bed or 2 m above water table whichever comes first. Extraction of material will be done only during the day time and will be completely stopped during the monsoon season. The Letter of intent has been issued to Shri Vipin Gupta by Director of Mines & Geology, State Govt. of Haryana, Chandigarh vide letter no. DMG/Hy/Karnal Unit-1/2013/115 dated 03.01.2014. The period of contract of mine is 8 years. Mine Plan has been approved by Department of Mining & Geology, Haryana vide letter no. DMG/HY/KNLUNT-1/5607-5610, dated 10.12.2014.

Mine Plan has been approved by Department of Mining & Geology, Haryana vide letter no. DMG/HY/KNLUNT-1/5607-5610, dated 10.12.2014. The Committee noted that Mine Plan has been approved by Department of Mining & Geology, Haryana vide letter dated 10.12.2014 and the Public Hearing was held during 02.12.2014 i.e. prior to approval of the Mine Plan. Thus the Public was informed about the Mining Proposal with a draft Mine Plan only. In this context, PP vide letter dated 16.01.2015 has submitted that the draft mine plan and approved plan are the same except certain typographical correction. Mining & Geology Department of State Govt. vide letter dated 16.01.2015 has also confirmed that the contents of mine plan are by and large same except that of certain typographical corrections. Project Proponent has submitted the revised questionnaires w.r.t. details of land.

The Committee noted that PP will use 534ha agriculture land for the mining activities which may affect the fertility of the soil. The Committee noted that a representation was received from the Society for Awareness and Development which *inter-alia* has cited the Report of Haryana Agricultural University, Hissar (2006) which was relied upon by the Hon'ble High Court of Punjab and Haryana requiring the Environmental Impact Assessment Authorities to examine the issues prior to grant of

environmental clearances. The Committee noted that the provision of the EIA Notification, 2006 entails prior examination of issues before the proposals are recommended for EC. However, the present proposal is for District Karnal but the impact being of similar nature, the Committee is of the view that all necessary precautions to prevent the degradation of the surrounding eco-system shall be put in place. In case any degradation is noticed, the affected fertile land shall be duly compensated for loss in productivity. HAU in their summary have concluded with respect to three Districts namely Sonapat, Panipat and Yamuna Nagar that, *"the sand mining has disturbed the natural soil profile, land degradation due to soil erosion, formation of gullies at the junction of mined and un-mined fields and drifting of fine dust particles causing air pollution; the depleted soil fertility and low water holding capacity of the soil as a result of sand mining, the inputs of requirement in terms of fertilizers and water will be high resulting in high cost of crop production and less net profit".* Representation has also been received requesting the EAC to consider sand mining cases in the meetings to be held during the next few months. Accordingly, the issue of mining over agricultural land should be considered in a broader prospective and views of various Expert Institutions that have carried out detailed studies and research, should be taken before any sand mining or mining of any mineral which is otherwise abundantly available elsewhere, be allowed over agriculture land.

Proponent reported that no ecologically sensitive area such as National Parks, Wildlife Sanctuaries, Tiger Reserves falls within the study area (10 km radius of the mine boundary). However, one Reserved Forest exists within the study area. The Conservation Plan for Schedule-I species namely Monitor Lizard, Black Buck and Peacock has been approved by Chief Wildlife Warden of the State Govt. The total water requirement is 14 KLD including water demand for domestic purpose, dust suppression & green belt development which shall be met by tanker supply.

Baseline studies were carried out during summer season i.e. March-2014 to May-2014). All parameters for air, water, soil & noise quality were within the permissible limits. The Public Hearing was held on 02.12.2014 at District-Karnal, Haryana. The Public Hearing was presided over by Shri Girish Arora, Additional Deputy Commissioner, Karnal. The representative from Haryana Pollution Control Board was also present. The issues raised during Public Hearing were discussed during the meeting.

The total cost of the Project is Rs 1.94 Crores. The cost on environment protection measures will be Rs. 19.5 Lakhs (capital cost) and Rs. 16 Lakhs per annum as recurring cost. It is proposed to incur Rs 15 Lakhs on CSR activities. One case CWP No.27700 of 2013 filed by Shri Rajbeer Singh is pending before Hon'ble Punjab and Haryana High Court. The letter of intent issued by State Govt. is subject to the outcome of this CWP. The Committee suggested that the Ministry may stipulate a condition that, "Environmental Clearance is subject to final outcome of Hon'ble High Court of Punjab and Haryana on the above cases".

Further to the information cited above, the Committee desired that Project Proponent should submit the following documents/clarifications, **where after, the Committee will take up the matter for further appraisal of the Project, without calling the Project Proponent:-**

- (i) Detailed Report regarding likely increase in productivity of Agricultural land after mining as informed by the PP on the basis of Reports of some Institutes; The Expert may also sent Report in this regard;
- (ii) Onsite disaster management plan with complete mitigation measures for disaster management;
- (iii) Details of compensation proposed to be given to farmers as per R&R Policy of the State Govt. alongwith pert chart showing acquisition, and returning land for cultivation after mining activity;
- (iv) A Plan for providing potable drinking water in villages namely Chandrown, Gharpur, Tapu, Nagal, Kamalpur, Garhi-Birbal and Others having high fluoride in water;
- (v) Proposed Plan with map for 7.5 m green belt as proposed by the PP between mining land and adjacent Agricultural land; and
- (vi) Proposed Protective measures in respect of Project located in seismic zone-III as part of Disaster management plan.

Reconsideration of Environmental Clearance Proposals

(2.5).Mining at Sand (Minor Mineral) in "Karnal Unit-4" with proposed production capacity of 8.0 million TPA of Sand (ROM) by M/s. Jai Yamuna Ji Developers, located at village(s)- Lalupura, Pir Badauli, Sadarpur, Mundogarhi, Bhaholpur, Barsat & Faridpur, Tehsil- Gharaunda District-Karnal, Haryana (1199ha) (Consultant: Perfact Enviro Solutions Pvt. Ltd., New Delhi)-Reconsideration of EC

The proposal of M/s. Jai Yamuna Ji Developers is for mining of sand in the Mines of "Karnal Unit-4" with production capacity of 8.0 million TPA of Sand (ROM) in mine lease area of 1199ha. The mine lease area is located at village(s)-Lalupura, Pir Badauli, Sadarpur, Mundogarhi, Bhaholpur, Barsat & Faridpur, Tehsil-Gharaunda, District-Karnal, Haryana. The lease area lies in the bed of River Yamuna & outside the river bed too. The Latitudes and Longitudes of the lease area in river bed are 29°34'48"N to 29°30'54" N and 77°06'08" E to 77°05'43E". In agricultural land they are 29°32'20" N to 29° 28'05" E and 77° 03'50" E to 77° 03'13" E on Toposheet No. 53G/2, 53G/3, 53C/14, 53C/15 with highest RL 241 m and lowest RL 235.50 m. The

Project is located in seismic zone-III and the Haryana-UP Border falls adjacent to the ML area.

The Proposal of EC was earlier appraised in the EAC meeting held during November 13-14, 2014 wherein the Committee deferred the proposal and sought information/clarifications. PP vide letter dated 20.11.2014 has submitted the information online; accordingly, the proposal is considered in this Meeting.

The Proposal was considered by the Expert Appraisal Committee in its Meeting held during March 20-21, 2014 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/58/2014-IA.II (M) dated 6th May 2014. The Proponent submitted the EIA/EMP Report to the Ministry on 18.09.2014.

The present Proposal pertains to mining of river sand. The rate of production will be 8.0 million TPA (ROM). Project Proponent reported that the Sand from the dried river bed will be excavated at the rate of 2.0 million TPA (ROM) and outside the river bed @ 6.0 million TPA (ROM). Total mine lease area is 1199 ha, out of which, river bed area is 302.9 ha, agricultural land area is 628.20 ha and restricted area for mining is 267.90 ha (Bridges, roads, anicuts, 7.5m lease boundary, 25% river bank sides etc., 50m strip after each km). PP reported that the total mining lease area is to be acquired. The Letter of Intent has been issued to M/S Jai Yamuna Ji Developers by Director of Mines & Geology, State Govt. of Haryana, Chandigarh vide letter no. DGM/Hy/Karnal Unit-4/2013/121 dated 03.01.2014. Mine Plan has been approved by Department of Mining & Geology, Haryana vide letter no. DMG/HY/Auction/KNLUNT-4/MP/4206 on 17.09.2014.

The method of mining adopted will be opencast manual mining in river bed and mechanized in agricultural land. No drilling and blasting shall be adopted. There will be no mining in river bed during monsoon season. Geological Reserves in the mining lease are estimated to be 150,520,000 MT whereas Mineable Reserve is estimated to be 118,686,000 MT. The life of the mine is estimated to be 9 years in river bed & 16 years in agricultural land. Depth of mining will be upto 3m in river bed and 9m in agriculture land as per LoI. The Committee viewed that as per existing guidelines regarding depth of mining in River bed will be upto 3m or at least a meter above the water level whichever is less. Similarly, depth of mining shall be 9m in Agricultural land or upto the depth above existing layer of the soil whichever comes first. Water table will not be intersected. Total water requirement shall be 70 KLD which will be used in sprinkling, plantation and drinking purposes. Water shall be supplied with the help of water tankers from existing bore wells/ tube wells from nearby villages as the mining will be carried out in 4 villages at a time. The machinery for the mining will be excavators, dumpers and tractors trolleys etc. No waste shall be generated from dried river bed mining; however, 1m topsoil generated from agricultural land mining shall be backfilled, simultaneously.

Project Proponent reported that there is no Wildlife Sanctuary, National Park, Habitat for Migratory Birds, Tiger Reserve and Critically Polluted Area etc. located within 10 km radius of the mine lease. There is one Schedule-I species namely *Monitor Lizard* and Schedule-II species namely Jackal, Wild dog, Cobra and Rat Snakes found in buffer zone. The species specific Conservation Plan has been prepared. The Committee noted that the Conservation Plan is not approved by the Chief Wildlife Warden. PP mentioned that the Conservation Plan is under approval.

The baseline data was generated for the pre-monsoon period during March 2014 to May 2014. The Committee noted that the base line data collection commenced prior to the issuance of TORs. The Committee deliberated the reasons and clarifications for the same and was of the opinion that the base line data could be accepted. PP has monitored the Ambient Air Quality at nine locations, out of which, two locations viz. Barsat and Faridpur villages are reporting concentration of PM₁₀ i.e. 116.2 to 154.7 microgram/m³ at Barsat village and 110.1 to 146.6 microgram/m³ at Faridpur village. The Committee observed that these concentrations of PM₁₀ are much higher than the prescribed standards and was of the view that we may not allow the mining activities in these locations i.e. Barsat and Faridpur villages till the above parameters are brought down within permissible limits and duly certified by the Haryana State Pollution Control Board.

The Public Hearing was conducted on 10th September 2014 and presided over by Shri Balraj Singh, Dy. Commissioner, Karnal. The representative of Haryana State Pollution Control Board was also present. The major issues raised during Public Hearing were related to effect on the agricultural land due to mining activity, accidents due to transportation of mineral, effect on children, students & local people, employment and adoption of control measures to prevent pollution. The Committee deliberated the issues and was of the view that PP needs to submit the revised Action Plan on the issues raised during Public Hearing with adequate budgetary provisions. PP reported that Employment preference shall be given to local people as there shall be 1602 workers. There will be increase in substantial numbers of indirect workers.

The Committee noted that PP will use 628.20ha agricultural land for the mining activities which may affect the fertility of the soil. PP informed that the proposed mining activity is temporary as the lease period is only for 8 years whereas land will be available in perpetuity. The agricultural land will be reclaimed and put to agricultural use after backfilling and till such time, appropriate and mutually agreed compensation will be paid to land owners depending upon the present yield from land.

The Committee noted that a representation was received from the Society for Awareness and Development which *inter-alia* has cited the Report of Haryana Agricultural University, Hissar (2006) which was relied upon by the Hon'ble Court of Punjab and Haryana requiring the Environmental Impact Assessment Authorities to examine the issues prior to grant of environmental clearances.

The Committee noted that the provision of the EIA Notification, 2006 entails prior examination of issues before the proposals are recommended for EC. Though the present Proposal is for District Karnal, but the impacts being of similar nature as recorded in other neighbouring Districts, the Committee is of the view that all necessary precautions to prevent the degradation of the surrounding eco-system shall be put in place. In case of any degradation noticed, the affected fertile land shall be duly compensated for loss in productivity.

It is relevant to note that the HAU in their summary, have concluded with respect to three Districts namely Sonapat, Panipat and Yamuna Nagar that, *"the sand mining has disturbed the natural soil profile, land degradation due to soil erosion, formation of gullies at the junction of mined and un-mined fields and drifting of fine dust particles causing air pollution; the depleted soil fertility and low water holding capacity of the soil as a result of sand mining, the inputs of requirement in terms of fertilizers and water will be high resulting in high cost of crop production and less net profit"*.

The total cost of the Project is Rs. 4 Crores. The cost on environment protection measures will be Rs. 15 Lakhs. It is proposed to incur Rs. 15 Lakhs on CSR activities. Project proponent has mentioned in s.no. 50 of the Questionnaire that there is no court case / litigation pending against the proposed Project, however para-5 of the LoI states that there is a case CWP no. 27700 of 2013, which is pending before Hon'ble High Court of Punjab and Haryana.

Based on the information furnished and discussions held in the EAC meeting held during **November 13-14, 2014**, the Committee deferred the proposal and was of the view that PP has to submit the following documents for further decision on the matter by the Committee: -

- (i) Compliance of TOR No. 18 w.r.t. detailed R&R plan need to be submitted as lot of Agricultural land will be used for mining activities, types of crop affected, details of compensation and details of families affected etc.;
- (ii) The Committee noted that the provision of the EIA Notification, 2006 entails prior examination of issues before the proposals or recommended for EC. However, the present proposal is for District Karnal but the impacts being of similar nature as reported in HAU for three other Districts, the Committee is of the view that all necessary precautions to prevent the degradation of the surrounding eco-system shall be put in place. In case of any degradation noticed, the affected fertile land shall be duly compensated for loss in productivity.
- (iii) PP has monitored the Ambient Air Quality at nine locations, out of which two locations viz. Barsat and Faridpur villages are reporting concentration of PM₁₀ i.e. 116.2 to 154.7 microgram/m³ at Barsat village and 110.1 to 146.6 microgram/m³ at Faridpur village. The Committee observed that these concentrations of PM₁₀

are much higher than the prescribed standards and was of the view that mining activities in these locations i.e. Barsat and Faridpur villages shall not be undertaken till the above parameters are brought down within permissible limit and duly certified by the Haryana State Pollution Control Board.

- (iv) Compliance of TOR No. 29 w.r.t. impact due to transportation has not been covered for its impact on the surroundings adequately;
- (v) There is one Schedule-I species namely *Monitor Lizard* and Schedule-II species namely Jackal, Wild dog, Cobra and Rat Snakes are found in buffer zone. The species specific Conservation Plan has been prepared. The Committee noted that the Conservation Plan is not approved by the Chief Wildlife Warden;
- (vi) Separate budget of Occupational Health, Public Health and CSR budget needs to be provided;
- (vii) Updated status of outcome of the court case in CWP No. 27700 of 2013 before the Hon'ble High Court of Punjab & Haryana as mentioned in the LoI letter issued by the Mines & Geology Department of State Govt. of Haryana;
- (viii) Updated status of outcome of the court case in CWP No. 8470 of 2004 titled Ajeet Singh & Ors Vs. State of Haryana & Ors.; and
- (ix) Details of alternate road for transportation of minerals need to be provided.

Project Proponent vide letter dated 20.11.2014 has submitted the above requisite information which were sought in EAC Meeting held during November 13-14, 2014. The Point wise explanation of the queries is given by the Project Proponent as below:

- (i). With regard to detailed R&R plan, Project Proponent has reported that the R&R plan prepared for the Project is inculcated from National R&R Policy, 2007 as per the land holdings present in the area. There are mainly three components in the said policy (a) land compensation (b) Economic rehabilitation of project affected families and (c) development of skills for the displaced persons. Total area of lease is as per LoI is 1199ha but due to condition mentioned in LoI 267.90ha is considered restricted and cannot be mined out in both river bed land and agriculture land. River bed land considered for mining is 302.9ha and Agriculture land is 628.20ha. To assess the losses to the project affected people due to the mining a survey was done and it was found that there are no ST population as well as there are no hutments in the lease area. Thus no compensation on account of resettlement shall apply. PP has committed that they will provide employment to one person from each land owner on priority basis; to give annual compensation Rs.1,87,500 per ha till the end of lease period for agriculture land; to pay to give annual compensation Rs.37,500 per ha till the end of lease period for barren land; with the help of soil which has been stacked

separately, the flattened land will be made fertile and will be returned to the original land owners; the development of skills of the youth of the nearby villages, vocational training will be imparted to them through nearby ITI or private institutes. Towards this, an amount of Rs. 3.5 Lakh per annum has been earmarked in the CSR including scholarship to the students.

(ii). With regard to prevent the degradation of the surrounding eco-system, PP has informed that all precautions to prevent land degradation of the surrounding ecosystem shall be taken. In case any degradation is noticed in the fertile land of surrounding areas, PP committed that they will pay due compensation for loss in productivity.

(iii). With regard to concentrations of PM₁₀, PP has informed that three ambient air quality monitoring was done from March to May 2014, which is the season of wheat harvesting, hence the ambient air quality shows that PM₁₀ is exceeding the regulatory limit at village Faridpur and Barsat. Fresh Ambient Air Quality Monitoring has been done for one week (January 2015). The ambient air quality shows the values at village Barsat 84-106 µg/m³ and Village Faridpur 81-96 µg/m³. Separate transport route has been explored to avoid passage of transport from the villages. PP has informed that they are not proposing any mining at village Barsat, hence no impact will be there from the project. PP have a plan to do mining in the agricultural area near Faridpur but the activity area is very far from village habitation and as per dispersion modelling given in the EIA report. Green belt development shall be done along the haul roads and in villages. The green belt boundary which was earlier 7.5 m will now be 20 m.

(iv). With regard to concentrations impact due to transportation, PP has informed that PP has changed a transportation route which will not pass through the villages. The load limit of trucks shall be kept as per Indian Road Congress Standard. There will be trucks (25 tonner) deployed for carrying sand. They will make 1067 trips/day or Max. 89 trips/hr. The lease area stretches upto 10 Km and existing road have very small traffic density. Thus there will be negligible impact on roads. The roads shall be maintained in good condition and any wear and tear to the road due to proposed Project shall be repaired. Total number of trucks per day are 1067 which is equivalent to 4801 PCU/ day .

(v). With regard to Conservation Plan, PP has informed that Conservation Plan has been prepared for three Schedule I species namely *Varanus bengalensis Daudin (Varanus)*, *Pavo cristatus (Peacock)* & *Antelope cervicapra (Black buck)* which is duly approved by the Chief Wildlife Warden. The Proponent has proposed a sum of Rs 29.5 Lakhs for conservation of all Schedule I & II species.

(vi). With regard to Separate budget of Occupational Health, Public Health and CSR budget, PP has informed that Rs 5.7 Lakhs has been earmarked to Occupational Health; Rs. 9.5 Lakhs for CSR and Rs. 2.5 Lakhs for Public Health Safety.

(vii). With regard to updated status of outcome of the court case in CWP No. 27700 of 2013 before the Hon'ble High Court of Punjab & Haryana as mentioned in the LoI letter issued by the Mines & Geology Department of State Govt. of Haryana, PP has informed that a Case CWP 27700 of 2013 filed by Sh. Rajbeer Singh is pending before Hon'ble Punjab and Haryana High Court. The letter of Intent issued by State Govt. is subject to the outcome of this CWP. The status of the case is pending.

(viii). With regard to updated status of outcome of court case in CWP No. 8470 of 2004 titled Ajeet Singh & Ors Vs. State of Haryana &Ors, PP has informed that the case is disposed of.

(ix). With regard to details of alternate road for transportation of minerals, PP has informed that the transportation shall be done as per Indian Road congress; No transportation of mineral shall be done through villages and alternate route suggested shall be strictly followed during transportation of the mineral; The roads shall be maintained in case of any wear and tear due to proposed transportation; Other dust mitigation techniques shall be followed such as covering tarpoulin on trucks, water sprinkling of Haul roads etc.; Green belt development shall be done along the haul roads and in villages. The green belt boundary which was earlier 7.5 m will now be 20 m.

The Committee noted that Mine Plan has been approved by Department of Mining & Geology, Haryana vide letter dated 17.09.2014 and the Public Hearing was held on 10.09.2014 i.e. prior to approval of the Mine Plan. Thus the Public was informed about the Mining Proposal with a draft Mine Plan only. In this context, PP vide letter dated 15.01.2015 has submitted that draft mine plan and approved plan are the same except certain typographical correction. Mining & Geology Department of State Govt. vide letter dated 13.01.2015 has also confirmed that the contents of mine plan are by and large same except that of certain typographical corrections.

The Committee deliberated at length the information submitted by PP and **recommended** the Proposal for environmental clearance for **Mining Sand** (Minor Mineral) in "Karnal Unit-4" with proposed production capacity 8.0 million TPA of Sand (ROM).

The Committee **recommended** additional specific conditions viz. (i) Transport of mineral will not be done through Barasat and Faridpur villages as existing AAQ level is exceeding the average annual PM₁₀ standard; (ii) Project Proponent shall provide the potable water to the villagers namely Lalupura, Pir Badauli, Sadarpur, Mundogarhi, Bhaholpur, Barsat & Faridpur which are having high fluoride concentration; (iii) Project Proponent shall plant native plant species of Amla, Tamarind, Neem, Arjun, Bauhinia and other local species as suggested by villagers/specialist; (iv) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project

and records maintained; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Implementation of the Recommendations of National Institute for ensuring good occupational environment for mine workers; All the old age people of the surrounding villages may be provided medical facilities; (v) An independent study be organised during peak activity, to understand how the actuals compare with the carrying capacities and further decisions taken to maintain sustainability of this essential sand extraction and supply activity. Project Proponent shall ensure that the road may not be damaged due to transportation of the sand; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density; (vi) Implementation of Action Plan on the issues raised during the Public Hearing. The proponent shall complete all the tasks as per the action plan submitted with the budgetary provisions during the Public Hearing held on 10.09.2014; (vii) The mining operations shall be restricted to above ground water table and it should not intersect groundwater table; (viii) The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centre; (ix) There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board; (x) Washing of all transport vehicle should be done inside the mining lease; (xi) Proposed Protective measures in respect of Project located in seismic zone-III as part of Disaster management plan; and (xii) "Environmental Clearance is subject to final outcome of Hon'ble High Court of Punjab and Haryana on the mentioned case".

**(2.6). Panch Pahari Mine for enhancement of production capacity from 0.013 million TPA to 0.40 million TPA (ROM) of marble & limestone (minor mineral) by M/s Sanjay Mangal, Vijay Mangal and Akshay Mangal, located near Village Panch Pahari, Tehsil– Kotputli, Distt Jaipur, Rajasthan (248.65 ha)(Consultant: Perfect Enviro Solutions Pvt. Ltd., New Delhi)-
Reconsideration of EC**

The proposal of M/s Sanjay Mangal, Vijay Mangal and Akshay Mangalis for enhancement of production capacity from 0.013 million TPA to 0.40 million TPA (ROM) of marble & limestone (minor mineral). The mine lease area is located near Village-Panch Pahari, Tehsil– Kotputli, Distt-Jaipur, Rajasthan. The Latitudes and Longitudes of the mine lease area are 27°30'53.42" N & 27°32'46.40" N and 76°09'28.89" E & 76°12'50.43" E respectively on Toposheet no. 54 A/2.

The proposal of EC was earlier appraised in the EAC meeting held during March 20-21, 2014 wherein the Committee deferred the proposal and sought information/clarifications. PP vide letter dated 20.11.2014 has submitted the information; accordingly the proposal is considered in this meeting.

The proposal was considered by the Expert Appraisal Committee (Mining) in its meeting held during October 19-21, 2011 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by the Ministry vide letter no. J-11015/206/2011.IA.II (M) dated 28.12.2011. The Proponent submitted the EIA/EMP report to the Ministry seeking environmental clearance after conducting Public Hearing. The Committee noted that the TORs were issued for 268.2757ha and the Public Hearing & EIA/EMP report was prepared for 268.2757ha, however the mine plan is for 248.65 ha. The Committee was of the view that the PP has to submit the revised EIA/EMP report for the 248.65 ha mine lease area;

The total mining lease area is 248.65 ha, out of this, only 4 ha is Government land, 244.65 ha is private land. No forest land is involved with in lease area. The Scheme of Mining along with progressive mine closure plan has been approved by Department of Mines and Geology, Jaipur, Rajasthan, vide letter no. SME/JP/MP/229/12 dated 10th January, 2014. PP reported that 114.86 ha area will be used for excavation, 5.00ha for overburden/dumps, 5 ha for Mineral/Sub-grade stack, 2.2 ha for storage of top soil, 0.20 ha for infrastructure development, 2.20 ha for road, 13.87 ha for Green belt development and 105.33 ha area will be the undisturbed area. The mineable reserves are 73.52 million tonnes and Life of mine is 183 years. The Proponent informed that mine lease does not fall under Aravalli hill range and submitted letter from the Department of Mines and Geology, State Govt. of Rajasthan vide letter no. Sa Kha A/Kot/CC/Apra/Kha Pa-(590/93) 137/03 (R)/2604 dated 03.07.2013.

Mining is by semi mechanized opencast method. The mining process involves drilling & blasting, loading and transportation of the excavated material. The proposed working will be by putting 115 mm dia DTH holes by Wagon Drill Machine & blasting by ANFO & Booster charge with raydet detonator. Overall pit slope will be 45°. The blasted material will be loaded by 1.0 m³ excavator to dumpers of 30 MT & 10MT capacity and transported to customers. At the end of the life of mine, out of total mining lease area, excavated area will be 114.86 ha. As per approved scheme of mining, total waste generation will be 14.7 million meter cube at the end of the life of the mine. It was reported by the PP that Ground water will not be intersected during scheme period. The average daily water requirement for the project will be 22 KLD, whereas peak water demand will be 34 KLD. Fresh water (Ground water) will be used for drinking purpose. PP reported that out of 34 KLD, about 80% (14 KLD for sprinkling and 13 KLD for green belt development) will be used for pollution control. The remaining 7 KLD will be used for drinking (4KLD) and mining operations (3 KLD).

Project Proponent reported that there is no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant Reserves etc. within the study area (10 km radius of the mining lease boundary). There are two Reserved Forests & six Protected Forests within the study area. No Schedule-I species were reported within buffer zone.

The baseline data was generated for the period during October 2011 to December 2011. All the parameters for water and air quality were within permissible limits. The Committee noted that the baseline data has been generated during October-December 2011 i.e. before issuance of TORs. In this context, PP needs to submit clarification.

The Public Hearing was held on 31.10.2012 under the chairmanship of Mr. Ramji Lal Varma, Additional District Collector of Jaipur at Village Panch Pahari, Tehsil Kotputli in District Jaipur (Rajasthan). The representative of Regional Office from the Rajasthan State Pollution Control Board was present. Major issues raised during public hearing were related to employment, adequate compensation for purchase of land and Environmental Protection Measures. The issues raised during the Public Hearing were discussed during the meeting.

The total cost of the project is Rs. 0.50 Crores. The PP has earmarked Rs. 1.0 Lakh towards Environmental Protection Measures and Rs. 3.0 Lakh per annum towards recurring expenses. The Proponent informed that Rs. 5.0 Lakhs per year have been earmarked towards CSR activities. The Proponent reported that there is no court case/litigation pending against the Project.

After deliberations in the EAC meeting held during **March 20-21, 2014**, the Committee **deferred** the proposal and sought the following information/ clarification:-

- (i) The Committee noted that the TORs validity was up to 27.12.2013, however the PP has not requested for extension of validity of TORs;
- (ii) The Committee noted that the TORs were issued for 268.2757ha and the Public Hearing & EIA/EMP report was prepared for 268.2757ha, however the mine plan is for 248.65 ha. Therefore, the PP has to submit the revised EIA/EMP report for the 248.65 ha mine lease area;
- (iii) Details of compliance of TORs no. 5,6,8 & 16 w.r.t. environment policy, R&R issues etc. now submitted are not covering all details. In this context, PP need to submit the revised compliance of TORs for the above mentioned 4 items;
- (iv) Revised Questionnaire with respect to sl. no. 4,16,29& 34 and details of precautions to be taken against the known seismicity of the area, need to be furnished;

- (v) Details of occupational health and the status of medical health reports of workers with special reference to TB should also be covered;
- (vi) Detailed Action plan needs to be provided with budgetary provision on issues raised during the public hearing;
- (vii) Details of first order stream, Information on quantity of water available in the mine pit and details about requirement of water in the project; Ground water level inventory details around mine lease area are required to be furnished;
- (viii) PP need to submit the Action Plan for using sub grade limestone and dolomite;
- (ix) The Committee noted that the base line data has been generated during October-December 2011 i.e. before issuance of TORs. In this context, PP needs to provide clarification; and
- (x) The Committee noted that it is a violation case as the Proponent has exceeded the approved production capacity up to 14,546 TPA in 1996-98 without the approval of MoEF. MoEF may take actions on violations as per OM dated 12.12.2012 and 27.06.2013.

PP vide letter dated 20.11.2014 has submitted the information; accordingly the proposal is considered in this meeting. The Committee deliberated on the issues raised during earlier Meeting. Following are the clarifications submitted by the PP: -

- (i) With regard to TORs validity, PP has informed that after Public Hearing on 31.10.2012, Final EIA Report was submitted to MoEF vide letter dated 05.02.2013 about 10 months prior to the expiry date of TORs i.e. 27.12.2013.
- (ii) With regard to revised EIA report for the 248.65 ha mine lease area, PP has informed that the original lease area was 268.2757 ha but since the lease is under renewal and DMGR has approved mining for 248.6534ha. PP had to revise the lease area as some area was in Aravalli hills. Therefore the lease area is now considered as 248.6534 ha and accordingly, the revised EIA/EMP report of 248.6534 ha has been submitted to Ministry.
- (iii) With regard to details of compliance of TORs no. 5,6,8 & 16 w.r.t. environment policy, R&R issues etc., PP has informed that the environment policy of the firm is prepared and submitted. The procedure to bring any infringement/deviation/violation to environmental norms/conditions has been made part of environmental policy. The firm will have a well carved system of reporting of non-compliances/violation of environmental norms to the owner. The violation, if any, will be brought to the notice of the owner through the mine manager for taking action.

- (iv) With regard to R&R plan / compensation details for the project affected people, PP has informed that the project Proponent had already initiated the process of land acquisition and approached the District Administration (Additional District Magistrate, Kotputli) two years back and ADM had issued the Notices of land acquisition to the Khatedars as per the Land Acquisition Rules and R&R Policy of the GoI. At present in the agricultural land, the main crops grown are Jawar, Bajara, Wheat and Sarson are also grown in patches.
- (v) PP has submitted revised Questionnaire with respect to Sl. no. 4, 16, 29 & 34 as per approved conceptual plan.
- (vi) With regard to details of occupational health and the status of medical health reports of workers, the PP has informed that Presently, mine is closed for want of EC, however whenever production commences (after all the permissions/clearances are obtained), half yearly medical checkup shall be carried out for mine workers in accordance to mines act and medical examination report will be submitted to DGMS & MoEF periodically. Time to time guidelines of DGMS applicable to the project shall be followed and adhered too. A capital budget of Rs 5.0 Lakhs on Occupational health and safety equipment's has been kept. Since inception of this mining project, no case has been reported of any occupational disease which may be attributed to mining activities such as silicosis and TB etc. However, The proponent has proposed periodical health checkup camps and a financial allocation of Rs. 50,000 per annum for this purpose has been kept.
- (vii) PP has submitted detailed Action plan with budgetary provision on issues raised during the Public Hearing.
- (viii) With regard to details of first order stream, Information on quantity of water available in the mine pit and details about requirement of water in the project; Ground water level inventory details around mine lease area, PP has informed that as per the Topo sheet map of Survey of India, there are seven number of first order streams within the lease area. However as per the latest google image the local development and changes in the area has caused severe change in the drainage of the area (after survey of India GT Sheet, Publication year 1972). At present there is only one first order stream exists in the area which will not be disturbed during the course of mining. At present, one pit has been developed towards north western part of the lease, named as Pit No.1. Total capacity of water accumulation (Rain Water) in pit is assumed 1058.4 million liter after bottoming of the mineral. At present, Rain water is available in pit measuring 60x35x3 meter in length, width and depth. Water accumulated in the existing pit is assumed to be about 6300m³ or say 6.3 million liters. The total annual requirement is about 6.6 million liters i.e. approximately sufficient to meet the water requirement. The mine pits shall serve as natural rain water harvesting structures during mining and post mining scenario.

- (ix) With regard to Action Plan for using sub grade limestone and dolomite, PP has informed that as per the IBM Circular No.T-5031/CGBM/2007 (PF), dated 16th October 2009 for Limestone of Rajasthan the Threshold values prescribed by the IBM is CaO–34% (Min), MgO-4% (Max) and MgO 16-20% with silica 6% Max. Accordingly limestone of low grade beyond threshold limit will be stacked separately for the use in future, whenever the technology permits. The Dolomite which will be mined incidental to mining of Limestone, will be sold to the end users after due permissions from the competent authorities.
- (x) With regard to the base line data, PP has informed that they had submitted the application on 22nd August 2011 and the proposal was appraised for TOR during October, 19-21, 2011. During the appraisal for TOR, PP had already informed the EAC that they had started the collection of Baseline data and the Committee had agreed to consider the same.
- (xi) With regard to violation case, the matter was examined in the Ministry and it is observed that it is not a case of violation as the Mining of Minor Minerals were not covered under the purview of the EIA Notification, 1994.

The Committee deliberated at length the information submitted by Proponent and based on the discussion held, the Committee **recommended** the proposal for environmental clearance for **enhancement of production capacity from 0.013 million TPA to 0.40 million TPA (ROM) of marble and limestone (minor mineral)**.

The Committee **recommended** additional specific conditions viz. (i) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Implementation of the Recommendations of any Reputed National Institute for ensuring good occupational environment for mine workers; (ii) Implementation of Action Plan on the issues raised during the Public Hearing. The proponent shall complete all the tasks as per the action plan submitted with the budgetary provisions during the Public Hearing held on 31.10.2012; (iii) The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, Forests and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; (iv) The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate

from all the vehicles from authorized pollution testing center; (v) There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board; (vi) Washing of all transport vehicle should be done inside the mining lease; and (vii) PP to submit a plan within 03 months for utilization of quartzite, siliceous limestone waste including immediate use for machinery stone purpose, thus avoiding significant pollution due to solid waste dumping.

(2.7). Enhancement of production capacity of China Clay from 0.025 million TPA to 0.24 million TPA (ROM and production of Red Ochre with a capacity of 0.045 million TPA (ROM) by M/s Bhilwara Mines & Minerals, located at Village(s) Itawa & Kesarpura, Tehsil-Kotri, District Bhilwara, Rajasthan (278.69ha) (Consultant: JM EnviroNet Pvt. Ltd., Haryana)-Reconsideration of EC

The proposal is of M/s. Bhilwara Mines & Minerals for enhancement of production capacity of China Clay from 0.025 million TPA to 0.24 million TPA and production of red ochre with a capacity of 0.045 million TPA. The mine lease is located at Village(s) Itawa & Kesarpura, Tehsil: Kotri, District: Bhilwara, Rajasthan. The Latitudes & Longitudes of the site are 25° 22' 56.71"N to 25° 24' 17. 26"N and 74°59'54.61" E to 75° 01'12.9" E respectively & part of study area falls within the Survey of India Toposheet No.45 O/3, 45 K/15.

The Proposal for EC was earlier appraised in the EAC meeting held during December 16-17, 2013 wherein the Committee deferred the proposal and sought information/clarifications. PP vide letter dated 18.11.2014 has submitted the information; accordingly the proposal is considered in this meeting.

The proposal was considered by the Expert Appraisal Committee in its meeting held during 16th-18th April, 2012 to determine Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no J-11015/41/2012-IA.II (M) dated 6th June, 2012. The Proponent submitted the EIA/EMP Report to the Ministry for seeking environmental clearance after conducting Public Hearing. The Project Proponent made a presentation with regard to the compliance of TORs.

The mine lease area is 278.69 ha, out of this, 98.06ha is waste land, 28.31ha is grazing land and 152.32ha is Agricultural land. No forest land is involved. The Mining Lease for mineral China Clay (M.L. no 34/95, M.L Area 278.69 ha) was granted vide Government order no. F.2 (52) Gr.3/80, dated 28.06.1980 for 20 years. Mining lease was renewed for further twenty years, from 28.06.2000 to 27.06.2020. Mining Plan & Progressive Mine Closure Plan has been approved by the IBM vide letter no. 584(4)(3)(1117)/10-RCM-AJM, dated 21.09.2010. Total mineable reserves are (China Clay: 64, 10,431 tonnes, Red Ochre: 2,48,429 tonnes). The life of the mine is 27

years for China Clay and 6 Years for Red Ochre. NOC from Gram Panchayat w.r.t gaucher land has been obtained vide letter no. Pra.P.Ga.2012/6-21, dated 05.04.2012. The Committee noted that the original mine lease is for china clay and further the mineral Red Ochre was included vide Rider agreement dated 16.03.2000.

Mining is by semi-mechanized opencast method to produce China Clay @ 0.24 million TPA and Red Ochre @ 0.045 million TPA by digging, sorting of minerals & transportation by trucks/dumpers. Mineral will be sorted and graded manually and transported through trucks. Total water requirement for the project is 25 KLD which will be sourced from Ground water purchased from nearby villages & mine sump water. Water table will not intersect during mining operation.

Proponent reported that there is no National Park, Wildlife Sanctuary, Biosphere Reserve, Wildlife corridors, Tiger/Elephant Reserves/Schedule-I species, within 10 km radius of the mining project site. Three Reserved Forest and Three Protected Forest exist within 10 km radius of mine site. The baseline data was generated for the period during post monsoon seasons i.e. October to December 2012. The Committee deliberated on the baseline data and found that the principle environment parameters are well within the permissible limits as prescribed by the CPCB.

The Public Hearing was conducted on 9th May, 2013 at village Itawa, Tehsil: Kotri, District: Bhilwara (Rajasthan) in the Chairmanship of Shri Tikam Chand Bohra, Additional District Collector, Bhilwara. The issues raised during public hearing were discussed during the meeting, which inter-alia, included, local employment and socio economic development i.e. drinking water facilities, medical and education etc. As per the villager's requirements, it was informed by the Proponent that they would prefer to take care of local employment, assistance in medical, drinking water and education facilities etc. These have been incorporated in the action plan with budgetary provisions.

The total capital cost of the Project is Rs. 1.25 Crores. The Proponent has earmarked Rs. 2.0 Lakhs towards Environmental Protection Measures and Rs. 6.25 Lakh per annum towards recurring expenses. Proponent informed that Rs. 3.0 Lakhs have been earmarked towards socio-economic welfare measures for the nearby villages. Proponent has informed that no court case/litigation is pending against the mining project.

Based on the presentation made and discussions held in the EAC meeting held during December 16-17, 2013, the Committee deferred the proposal and sought the following information/ clarifications: -

- (i) The Committee noted that it is a violation case as the Proponent had mined out red ochre during 2001-2006 without requisite environmental clearance. In this context, the Committee was of the view that Ministry to take actions on violation as per prescribed procedures;

- (ii) The Committee noted that the proponent has not circulated the certified copy of compliance report of earlier EC. In this context, PP mentioned that they have downloaded the compliance report from the RO of MOEF Lucknow website and presented the same. The Committee was of the view that the PP needs to submit the certified copy of compliance report;
- (iii) Details of TORs compliance for the conditions no. 6-9 are not adequate and needs to augmented;
- (iv) The Committee noted that the details of land use plans as mentioned in the earlier EC and TOR prescribed are not consistent with the Mining Plan. The Committee was of the view that PP has to submit modified/detailed land use plan and Revised Questionnaire;
- (v) Compliance of TOR no. 26 w.r.t. details of water Table before mining and impact of mining on the same are not brought out adequately and needs to be resubmitted with requisite details; and
- (vi) Monitoring of ground water has not been undertaken as per the earlier EC condition no. ix. This needs to be rectified.

Project Proponent vide letter dated 18.11.2014 has submitted the above requisite information which were sought in EAC Meeting held during December 16-17, 2013. The Committee deliberated the issues and was satisfied. The Committee noted that it is a violation case as the Proponent had mined out red ochre during 2001-2006 without requisite environmental clearance. The Ministry has initiated actions on violation as per OM dated 12.12.2014 & 27.06.2013. Project Proponent has mentioned that the matter relating to violation was taken up by their Managing Committee for consideration of the environment related policy. The written commitment in the form of resolution to ensure that violation of the Environment (Protection) Act, 1986 will not be repeated was submitted to MoEF&CC on 16.04.2014. Rajasthan State Pollution Control Board, vide letter no. F12(8-119)/RPCB/Bhilwara/Mines/835-836, dated 04.12.2014 has informed that a criminal case has been filed against the Project Proponent in court of Judicial Magistrate, Kotri (Bhilwara) under Section 19 of the Environment (protection) Act, 1986 for the period for which the unit had operated without obtaining the requisite prior environmental clearance. Thus, the actions on violation are completed.

The Committee deliberated at length the information submitted by Proponent and the Compliance report of earlier EC and based on the discussion held, the Committee **recommended the Proposal for environmental clearance for enhancement of production capacity of China Clay from 0.025 million TPA to 0.24 million TPA (ROM) and production of Red Ochre with a capacity of 0.045 million TPA (ROM).**

The Committee **recommended** additional specific conditions viz. (i) Proponent shall appoint the Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Implementation of the Recommendations of any Reputed National Institute for ensuring good occupational environment for mine workers; (ii) Implementation of Action Plan on the issues raised during the Public Hearing. The proponent shall complete all the tasks as per the action plan submitted with the budgetary provisions during the Public Hearing held on 09.05.2013; (iii) The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, Forests and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; (iv) The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate from all the vehicles from authorized pollution testing centre; (v) There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board; (vi) Washing of all transport vehicle should be done inside the mining lease.

However, the Committee observed with serious note that the PP has not yet established piezometers for real time monitoring of fluctuation in ground water level in violation of the EC condition stipulated earlier. The EC may be considered only after installation of piezometers at specified locations as per Geo-Hydrological situation and implementation of suggestion made by the Regional Office in the Compliance Report of earlier EC conditions.

Day 2: January 16, 2015 (Friday)

Consideration of Environmental Clearance Proposals

(2.8).Chilhati Lime Stone Mine of M/s SKS Cement Limited (A subsidiary of SKS Ispat & Power Ltd.) located at village Semradih & Pakaidih, Tehsil Masturi, Bilaspur District, Chhattisgarh 299.751 ha, 2.25 MTPA.(consultant: Vimta Labs Limited).

The proposed Chilhati Limestone mine of M/s SKS Cement Limited is located at village Semradih & Pakaidih, Tehsil Masturi, Bilaspur District, Chhattisgarh. The

proposal is for limestone mining of 2.25 MTPA from 299.751 ha. The Proponent received TOR from the MoEF vide letter no. J-11015/120/2011-IA. II (M) dated 29.07.2011, which was valid up to 28.07.2013. Further the PP requested extension of validity of TOR, the proposal was considered in the EAC meeting held during July 22-24, 2013. The validity of TOR was extended from 29.07.2013 to 28.07.2014. However, the EIA report was submitted by the PP on 07.01.2015. The Committee suggested the PP to apply for extension of validity of TOR as per MoEF circular no. No. J-1013/41/-IA-II(I) dated 07.11.2014. The Committee therefore **deferred** the proposal.

RE-CONSIDERATION OF EC PROPOSAL

(2.9) Kukurdih Limestone Mine of M/s UltraTech Cement Ltd. Village Kukurdi, Distt. Raipur Chhattisgarh (251.527ha) (5.0 MTPA) (Consultant: J.M. Environ Net Pvt. Ltd.)

The proposal is for Kukurdih Limestone Mine (ML Area: 251.527 ha., Limestone Production Capacity: 5.0 MTPA) by M/s UltraTech Cement Ltd., located at Village Kukurdi, Taluka– Balodabazar, District- Balodabazar–Bhatapara (Chhattisgarh). The Latitudes and Longitudes of the site are 21°39´ N to 21°40´ N and 82° 05´ E to 82° 07´ E. The proposal was considered by the Expert Appraisal Committee in its meeting held during 24-26th November, 2010 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/274/ 2010-IA.II(M) dated 28th March, 2011 and 30th August, 2011. The proponent submitted their EIA/EMP to the Ministry for seeking environmental clearance on 25th March, 2013.

The mine lease area is 251.527 ha, which is non forest land. The Mining Plan is approved by IBM vide Letter No. 314(3)/2008-MCCM(CZ)/MP -24 dated 18th December, 2008. It is reported by the Project Proponent (PP) that the mine working will be by Mechanized Opencast Method, utilizing heavy earth moving machines and with deep hole drilling and controlled blasting techniques, with proper benching of deposit to exploit the available limestone reserves. Bench Height is 8 m to 10 m, Width – more than 30 m (working bench), Stripping ratio (t:m3) - 1:0.14. It is reported by the PP that Total Geological Reserves are about 120.23 million tonnes. Total reserves under Proved Mineral Reserves are about 96.01 million tonnes. Life of the mine is 19 years.

The total quantity of overburden is 9.22 Mm³. During initial five years it is proposed to dump all OB in the form of embankment along lease boundary. interburden amounting to 13.09 million m³ will be stacked as a dump in the North-Western area of the lease. The dump will be spread over an area of 8.05 ha and will have height of 14 m to 15 m. The interburden / waste material in stacks will be analyzed to find out, if it can be blended with limestone being dispatched to Cement Plant. The balance material will be backfilled. Mineral Rejects are estimated at 9.36 MT.

The water requirement is estimated as 215 KLD, Water will be sourced initially from ground water and later, on development of mine sump, water requirement will be fulfilled from both ground water and water accumulated in mine sump. Permission for drawl of ground water has been obtained from CGWA (combined for Kukurdih mine and proposed new Cement Plant near Kukurdih mine) vide their letter no. 21 – 4(57)/NCCR/CGWA/2009-540 dated 4.09.2009.

Mine Working will intersect the Ground Water Table. Detailed Hydrogeological study has been carried out for the Project. Prior permission for the same will be obtained from the concerned Govt. Authority. Limestone will be crushed within mining lease area (crusher will be installed within mining lease area) and transported to fulfil the limestone requirement for the new Cement Plant and existing operating Plants at Rawan Cement Works and Hirmi Cement Works of M/s UltraTech Cement Ltd.

It was reported by the PP that the no Ecologically Sensitive Areas (National Park, Wild Life Sanctuaries, Tiger Resaves, Elephant Corridors, Biosphere Reserves etc exist within 10 km radius from mining lease boundary. Dabadih Reserved Forest is at a distance of ~2.5 km South; Mohtara reserved forest at ~8.5 km NE and Sonbarsa & Latwa Reserved Forest is at ~5.5 km NE.

Baseline studies were carried out during winter season 2011-2012. All the parameters for water and air quality were within permissible limits. The Public Hearing for the Proposed Project was conducted at Piprahi Village on 30.11.2012. The PH was chaired by Shri M. Kalyani, Addl. District Magistrate, District Balodabazar – Bhatapara. The Proponent informed that the Chairman of the Public Hearing is of the level of ADM as per EIA Notification, 2006. The issues raised during Public Hearing were also considered and discussed during the meeting, which infrastructure facility i.e. ITI, Medical & Engineering College for education along with electricity, drinking water, road etc. will be provided by the Project Proponent, employment will be given to local people as per their qualification and proper training will also be given. Air pollution control measures will be adopted, raising of plantation, sprinkling of water etc will also be done. As per the villagers' requirements, it was informed by the PP that they would give preference to locals for employment; health issues, providing education, and assistance in vocational training etc. These have been incorporated in the Project Plan with budgetary provisions. It was reported by the PP that there is no court case/litigation pending against the Project and no violation either.

The cost of the Project is Rs 150 crores. Cost for EMP: Capital Cost – 1.5 crores and recurring cost for EMP Rs. 10 Lakhs/annum. It was suggested by the Committee that plantation of green belt should be based on the requirement of local people and native species should be selected for plantation and a detailed list of endemic species shall be provided in the EIA Report.

The Committee had sought the following information in the meeting held during May 15-17th 2013:

- (i) The Annexures mentioned in the list in EIA report were not enclosed.
- (ii) Mine plan is in the name of M/s Grasim Industries Ltd instead of M/s Ultra Tech Cement Ltd.
- (iii) Coordinates of mine plan and EIA report are not consistent.
- (iv) Chapter 11 states that no R&R plan is applicable whereas the lease area involves, around 224 land owners to be affected. Details to be submitted as per point 9 of TOR along with sample survey.
- (v) The EIA Report submitted to the Ministry and that circulated to the EAC members were different.
- (vi) Cumulative impact of water availability in the area shall be obtained from Central Ground Water Authority.

On submission of information, the proposal was placed in the meeting held during January 27-28, 2014. The PP submitted the Annexure mentioned in EIA report. It was informed by the PP that lease deed for Kukurdih Limestone Mine has been executed in the name of UltraTech Cement Limited on 4th November 2010, the mine plan was prepared in year 2008 before execution of lease deed. Procedure for change of name (for Mining Plan approval) from Grasim Industries Ltd. to UltraTech Cement Limited is under process with IBM, Nagpur. PP informed that correct Coordinates of the mining lease area given in the Approved Mining Plan are Latitudes: 21°39´ N to 21°40´ N and Longitudes: 82° 05´ E to 82° 07´E. The detailed action plan for R&R was prepared for the project and submitted. PP informed that a request letter to CGWA, New Delhi has been submitted for cumulative impact of water availability in the area as per discussion held during final technical presentation; however no response has been received till now from CGWA regarding the same.

The Committee in the meeting held during January 27-28, 2014 sought the status of NOC for grazing land by the concerned Panchayat and an alternate road for the people of the area in lieu of existing road inside the lease area, is needed. The PP submitted the NOC for grazing land from the Panchayat and an affidavit that alternative road to the villagers will be provided. The proposal was considered in the EAC meeting held during May 28-30, 2014 wherein the Committee recommended the proposal for environmental clearance with additional specific condition that alternate road for the villagers shall be constructed and commissioned at the earliest but not later than 3 years from date of issue of EC as a measure to mitigate significant social impact.

The matter was examined in the Ministry and following queries were raised:

- (i) The livelihood assurance by PP to 99 persons losing 100% of their land.
- (ii) What is the alternative scheme to provide facilities in lieu of acquiring 3.679 ha of Government land having roads, land under water and grassland. A plan clearly defining alternatives proposed for the communities in lieu of using this land for mining may be submitted

- (iii) Likely impact of the mining activity on the Kukurdih Pond and Mahanadi Canal located respectively within 400 m and 500 m from the lease boundary.

In reply the PP submitted the following:

- (i) Total Mining Lease area of Kukurdih Limestone Mine at Kukurdih, Bhatapara, Chhattisgarh is 251.527 ha, of which 3.679 ha is owned by government and 247.848 ha land is private land. Out of 247.848 ha of privately owned land, 99 persons are losing their 100% land which is barren, non-irrigated, rocky land with low productivity and is being acquired by UltraTech Cement Ltd. by the process of "willing buyer-willing seller" and through mutual discussion & direct negotiation. The livelihood assurance by UTCL to the persons losing their land will be ensured.
- (ii) As per mining plan approved by IBM vide letter No. 314(3)/2008- MCC(of acquiring 3.679 ha of government land having roads, land underwater and grassland has been covered in the mining plan. The PP has also submitted alternative scheme to provide facilities for roads, Underwater, Grassland.
- (iii) Mining plan was prepared and approved by IBM vide letter No. 314(3)/2008-MCCM (CZ) MP/MS/PMCP-24, Dated-18/12/08, & mining will be carried out as per approved mining plan and all mitigation and safeguard measures for the protection of Kukurdih pond and Mahanadi Canal have been covered in the approved mining plan & the same will be implemented.

The matter was referred back to the EAC for re-examination. The EAC emphasised that the protective measures for Kukurdih pond and Mahanadi canal and nalas are to be taken, after deliberations EAC suggested additional specific condition that:

- (i) To safeguard proper functioning of Kukurdih pond and Mahanadi canal, regular monitoring of bunds may be ensured;

The EAC decided that the proposal be **deferred** and that the Proponent shall furnish the following information for further consideration without calling the Proponent.

- (i) The compensation paid to land losers by the PP and compliance to R&R policy of Chhattisgarh State. A copy of R&R policy of the Chhattisgarh State may be submitted.
- (ii) Livelihood assurance by PP to 99 persons losing 100% their land as per the R&R policy of the Chhattisgarh State.

(2.10) Srikurmam Mineral Sand Mine of M/s Trimex Sands Pvt. Ltd., Village Vatsavalasa, Mandal Gara, District Srikakulam, Andhra Pradesh (59.27ha) (2.0MTPA to 6.0 MTPA)(Consultant Bhagavathi Ana labs Ltd. Hyderabad)

The proposal is for expansion of Mineral Sand Mining from 2 MTPA to 6 MTPA & Mineral Sand production from 0.63 MTPA to 0.93 MTPA. Mine lease area is 720 ha for mining of heavy mineral sand having Ilmenite, Rutile, Zircon, Garnet, Sillimanite & 59.27 ha Plant Area located at Vatsavalasa & Tonangi Villages, Gara Mandal, Srikakulam District, Andhra Pradesh. The area is covered under Survey of India Toposheet No. 74B/3, B/4, B/7 and lies between Latitudes from 18°15'56" N to 18°19'19" N and Longitudes from 84°02'39" E to 81°07'44" E.

The State Govt of Andhra Pradesh has granted a mining lease for mining of heavy mineral sand having Ilmenite, Rutile, Zircon, Garnet, Sillimanite minerals from 23.02.2004 to 22.02.2034 in 720 ha area at Vatsavalasa & Tonangi Villages, Gara Mandal, Srikakulam District, Andhra Pradesh. The Ministry of Environment & Forest has granted Environmental and CRZ clearance for the project for 2.0 MTPA. The PP has submitted application for expanding mining capacity from 2.0 MTPA to 8.0 MTPA, in July 2011. The proposal was considered by the Committee to determine TOR in the Meeting during 21 – 23rd September 2011. It was decided that a sub-Committee of EAC may undertake a site visit before making recommendations for TOR.

The project was further considered by EAC in Meeting held during January 23 – 25th 2012 wherein the PP made a request to allow them to start collecting environmental data for the purpose of preparing the EIA / EMP Report pending visit of sub-Committee. The matter was placed before the EAC for their consideration. After deliberating the matter, the Committee agreed that the proponent may be allowed to collect baseline data for preparation of EIA/EMP report for the forthcoming pre-monsoon season 2012.

A duly constituted sub-Committee of the EAC from MoEF visited the project site on 17th March 2012 and inspected the project activities and also looked in to the compliance status of the existing Environmental Clearance conditions submitted by the Project Proponent. MoEF issued the TOR for undertaking detailed EIA study vide letter No J-11015/175/2011–IA.II(M) dated 6th July 2012.

The Project Proponent decided to reduce the capacity of expansion from 8.00 MTPA to 6.00 MTPA due to technical and market issues involved. In this regard, the PP was permitted for downscaling the earlier proposal of expansion from 8.0 MTPA to 6.0 MTPA vide letter No. J-11015/175/2011-IA.II (M) dated 09.09.2013.

The Mine lease area is 720 ha & Plant area is 59.27 ha situated outside ML area. There is no forest land in the lease area. Scheme of Mining for a further period of five years from 2009-2010 to 2013-2014 was approved by the Indian Bureau of

Mines vide letter no AP/SRK/MP/Garnet-2/Hyd dated 18/6/2009 and by Atomic Minerals Directorate for Exploration and Research (AMD) vide letter no. AMD/MPA/3M/TSPL/720Ha/2009 dated 17.08.2009.

The mine is opencast and will be worked by mechanized method involving dry mining and dredging. No drilling and blasting are involved or sorting of the material at the mine site. Run-off mine ore will be mined and concentrated with advanced environment friendly equipment and technology, wherein ore mining, concentration, backfilling and afforestation on reclaimed land takes place simultaneously, thus limiting the gap between mining and rehabilitation to pre-mining stage to only a few months.

Mined/dredged heavy mineral sand is screened, slurried and pumped to a pre-Concentration Plant (CP) to concentrate minerals in the ROM into three to four mineral rich concentrates. The concentrates from this Plant will be further transported to a Mineral Separation Plant (MSP) for separation of individual minerals. Heavy mineral sand from lower layers having high slime content will be additionally cleaned in a slime cleaning Plant before it is pumped to the pre-Concentration Plant. The excavated area will be simultaneously refilled with tailings generated from pre-Concentration Plant and afforested with local suitable plant species to restore the ecological balance of the area. Total Mineral Reserves are about 27.98 million tonnes with mineral resources of 37.45 million tonnes. Life of the mine is about 8 years.

It was reported by the PP that solid waste generation will be about 22.958 million tonnes of silica sand which form the reject quantity during the first five years when 27.65 million tonnes of ROM will be handled. The plant waste/tailings contain shells, silica & silt/slime and this waste sand will be dewatered by cyclones. The tailings which form about 83% of ROM will be transported/pumped back for refilling the mined out areas and subsequent afforestation.

The total water requirement for the project is estimated as 15,000 KLD. The PP already holds permission to draw 500 m³/hr from the Vamsadhara River. It was reported by PP that mining (dredging) will be carried out below the ground water table, however, there is no mine dewatering involved. A comprehensive hydro geological study carried out by Andhra University was submitted.

It was reported by the PP that there is no wildlife sanctuary/tiger reserve/national park, etc within the 10 km radius area around the mine lease. Schedule I species i.e Olive Ridley Turtle is found in the study area.

Baseline studies were carried out during summer season 2012 (March –May). All the parameters for air, water, and noise quality were reported to be within prescribed standards. The study on the impact of the mining on olive riddley turtles, traffic, ground water, flora & fauna etc. are also carried out and submitted along with

final EIA. HTL/LTL demarcation by authorised agency has also been carried out and report submitted.

It was informed by the PP that the Public Hearing for the project was conducted on 29.12.2012 near Project site. The PH was chaired by District Collector, Srikakulam. The issues raised during Public Hearing are considered and discussed in the final EIA. It was informed by Project Proponent that as per the villager's requirements, they would give preference to locals for employment; health issues, providing education and assistance in vocational training etc. The estimated cost of the project is Rs 140 Crores. It was reported by the PP that there is no court case pending against the project.

The Proposal was considered by EAC in its meeting during May 28-30, 2014. The Committee recommended the proposal for grant of EC subject to submission of following information:

- (i) Production details of each mineral along with ROM.
- (ii) Detailed plan and commitment for establishment of Turtle conservation centre/cell.
- (iii) Details of R&R plan for the people displaced and entering into agreement with the Company.
- (iv) Report on replenishment of sand.
- (v) Revised Questionnaire of the proposal.
- (vi) The species specific Conservation Plan duly approved by Chief Wildlife Warden shall be submitted.
- (vii) An affidavit that mining plan approved by AMD used for Public Hearing and the Mine plan approved by the IBM are the same.

On submission of information the proposal was referred back to the EAC as the information involved was of technical nature. The EAC deliberated on the information submitted and **recommended** the proposal with additional specific conditions:

- (i) The 325 dunes recorded in the TSPL area of which, 13 dunes exist beyond 100m from the high tide, shall be protected and maintained. All effort should be made to ensure that existing natural vegetation of these dunes are fully protected.
- (ii) Rs. 1.80 corers proposed for Wildlife Conservation plan should be deposited within one month of issue of EC letter for implementation of Wildlife Conservation plan by the Department.

CONSIDERATION OF TOR PROPOSALS

(2.11) Roadmetal and Building Stone Mine of M/s Venkateswara Stone Crushers located at Village- Ponugodu, Mandal-gudur, District-Warangal, Telangana (2.000ha).

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

(2.12).Meghare Bauxite Mine of M/s. Manohar V. Daryanani located at Village Meghare, Taluka Shrivardhan, District Rigad Maharashtra (55.06ha)(0.075 MTPA to 0.130MTPA).

The proposal is of Manohar V. Daryanani for Expansion of Production Capacity of Bauxite from 0.075 MTPA to 0.13.0 MTPA. The mine lease is located at Village-Meghare, Taluka-Shrivardhan, District-Raigad (Maharashtra). The Latitudes & Longitudes of the site are 18° 06' 03.3"N to 18° 06' 55.8"N and 73° 01' 30.7"E to 73° 01' 52.8"E Respectively & on Toposheet No. 47E/14&47B/16.

It was reported by PP that there is no Wildlife Sanctuary, National Parks, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves/(existing as well as proposed) within 10 km of the mine lease. Arabian sea is located at a distance of 5km in West direction. Environment Clearance letter for exiting capacity of 0.075 MTPA was issued to M/s. Manohar V. Daryanani for Bauxite over an area of 55.06 ha by MoEF vide letter no. J-11015/156/2007-IA.II(M) dated 24th July, 2007.

Total Mining Lease Area is 55.06ha, out of which 51.82 ha is Pvt. Land & 3.24ha is Govt. land, no Forest land exists within the M.L. Area. Scheme of Mining along with Progressive Mine Closure Plan for the mine has been approved by IBM, vide letter no. RGH/BX/MPLN-866/NGP dated 19.12.2013. Mining method will be mechanized open cast by drilling, excavation, hauling, crushing, screening, sizing, loading & transportation. Mineral will be transported by trucks/dumpers.

Total water requirement for the project is 16.5 KLD will be sourced from nearby village. Total cost of the Project is Rs. 33 Lakhs/annum as Recurring cost Towards Environment Protection Measures. No Court case is pending against the project.

Based on the information furnished and presentation made by the PP and discussions held, the Committee **prescribed** the TORs as per Annexure-I along with additional TOR as following:

- (i) A road map for evacuation of ore from the site to stock yard/dispatch station may be provided in EIA report.

- (ii) PP to provide details on measures to be adopted for slope stability along with reclamation plan of existing dumps.
- (iii) The PP to submit a study report on suitable species which can be taken up for transplantation from the existing natural vegetation of the lease area proposed to be opened.
- (iv) EIA report to mention proposal to use mix of local species for plantation having utility to marginal people of the area.

(2.13).Quartz and Feldspar Mine of M/s C. Shashi Kumar located at Village-Gollapalli, Mandal- Ghegunta, District- Medak, Telangana (2.134ha).

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

RECONSIDERATION OF TOR PROPOSAL

(2.14).Bahilampur Limestone and Dolomite Mine of M/s Rajakhjanderao Deshmukh located at Village-Bahilampur, Tehsil Zarijamni, district-Yavatamal , Maharashtra (0.05 MTPA; 47.12ha).

The proposal is of Bahilampur Limestone & dolomite Mine for mining limestone and dolomite over the area of 47.12 ha in Bahilampur Village, Zarijamni Tahsil, Yavatmal district, Maharashtra. The proposal is Category 'A' as interstate boundary of Maharashtra and Andhra Pradesh is located at a distance of 1.5 km. The mine lease is covered within the Survey of India toposheet No. 56 I/13 within Latitudes 19°46'08.5"N to 19°46'47.5"N Longitudes 78°49'38.6"E to 78°50'1.2"E.

The Mining lease area is categorized as Government wasteland and agricultural land. Project Proponent has initiated all the necessary steps for implementation of Limestone/Dolomite ore Mining Project in Bahilampur, Yavatmal District, Maharashtra. The proposed Limestone/Dolomite ore production is 0.05 MTPA. Total mineable reserves of limestone & Dolomite are 16.0mt. the rate of production is 0.05 MTPA thus, the life of mine is 30 years. The proposed method of Mining is opencast mechanized with shovel dumper combination and 6m high benches. It was reported by the PP that there is no National Park, Wildlife sanctuary, defense installation or sensitive area located within 10 km radius of the proposed mine.

The total water requirement for the mine would be 23 KLD. Estimated project cost is approximately Rs. 85.05 Lakhs. The capital budget for environmental protection measure is estimated to be Rs. 5.0 Lakhs.

Based on the information furnished and presentation made by the PP and discussions held, the Committee **prescribed** the TORs as per Annexure-I.

(2.15).Rasuli Iron Ore Deposit Mine of M/s Navbharat Fuse Co. Ltd. located at Village Kanker, Tehsil Bhanupratappur District Kanker, Chhattisgarh (220 ha)(45,000TPA)

The proposal is for mining of Iron Ore (Float Ore) @ 45,000 TPA of M/s Navbharat Fuse Co. Ltd. located at Village Kanker, Tehsil Banupratappur District Kanker, Chhattisgarh over mine lease area of 220 ha. The mine lease area is located in Khargaon P.F which is in the jurisdiction of Forest range of Bhanupratappur Division, District Kanker (CG).

The coordinates of Mine Lease area are:

20° 26' 22.51" N, 80° 56' 40.93" E

20° 25' 48.58" N, 80° 56' 43.93" E

20° 25' 12.05" N, 80° 55' 36.20" E

20° 25' 24.77" N, 80° 55' 12.71" E

The Proposal was earlier considered by EAC during the meeting held on 28 – 30th September 2010 and issued TOR vide Lr No J-11015/243/2010-IA.II (M) dated 26th October, 2010. Since the EIA/EMP preparation could not be completed the PP had applied for fresh TOR. Mine Plan along with mine closure plan is approved vide Lr no KNK/FE/MPLN-1058/NGP dated 22.12. 2011. The complete mine lease is forest land, application for Forest diversion is submitted and its Registration Number is 2010/086.

The proposed opencast Rasuli Iron Ore mine will be worked by mechanized operations. Drilling and blasting is not required for float ore. However, blasting will be required for primary iron ore proposed to be mined later during next mining scheme period. The mineral will be manually loaded into 10 tonnes capacity tippers and will be dispatched to the sponge iron plant of the Company. Part of the area of float ore mining i.e. 9.784 Ha will be backfilled after obtaining prior permission from IBM. The backfilled pits will be afforested with local plants. About 8 KLD of water will be required which will be sourced through ground water.

It was reported by the PP that there is no wildlife sanctuary/tiger reserve/national park, etc. within 10 km radius area around the mine lease. However, it was reported that the mine lease area is located in Khargaon Protected Forest. The estimated cost of the Project is Rs 3.50 Crores. It was reported by the PP that there is no court case/litigation pending against the Project.

The proposal was considered in the EAC meeting held during August 26-27, 2014 wherein the Committee observed that the proposed 220 ha area is dense forest having high diversity. The ecological value of this natural forest may be far higher than the economic returns by collecting 45,000 TPA of float

ore. Further, the viability of the Project has to be established by taking into account Environmental cost of felling of natural forests, NPV and CA money to be paid and alternate compensatory land of 220 ha to be given to Government in-lieu of forests land diverted. Based on the recommendation of the EAC in its meeting held during August 26-27, 2014 the proposal was rejected and the same was communicated to the PP vide letter no. J-11015/191/2014.IA-II(M) dated 11.11.2014.

The PP vide letter dated 30.12.2014 requested re-consideration of the proposal with justification that the project is economically viable as capital investment for Mining and Environmental Management would be Rs. 55.22 Crores and the value of the mineral to be extracted would be higher than that of the cost incurred.

Based on the information furnished and presentation made by the PP and discussions held, the Committee **prescribed** the TORs as per Annexure-I with explicit recommendation to collect float ore only with least disturbance to natural vegetation including ground flora and without cutting the trees by the PP.

EXTENSION VALIDITY OF TOR

(2.16). Minmina & Satara Dolomite Mine of M/s Bijay Aditya Mines, village Minmina & Satara, Hatibari P.S., District Sundargarh, Orissa (33.492ha) (300300TPA).

The Proposal is for opening of a new mine for production of 3,00,300 TPA of dolomite. Mine lease area is 33.492 ha. It was considered as category 'A' because of inter-state boundary at a distance of 6 km. Mine working will be opencast semi-mechanised involving drilling and blasting. Life of mine is 14 years. No forestland is involved.

The Proponent received TOR from the MoEF vide letter no. J-11015/196/2011-IA. II (M) dated 28.12.2011, which was valid up to 27.12.2013. Further the PP requested for extension of validity of TOR and also submitted the EIA/EMP Report. The proposal was considered in the EAC meeting for extension of validity of TOR. The Committee **recommended** extension of validity of TOR as per MoEF circular no. No. J-1013/41/-IA-II(I) dated 07.11.2014 from 28.12.2014 to 27.12.2015. The aforesaid circular dated 07.11.2014 provides for outer limit of four years for the validity of TOR.

The Committee also suggested that as per the amendment to EIA Notification dated 25.06.2014 the Project falls in Category 'B', therefore the proposal may be transferred to the SEIAA, Odisha.

(2.18). Mining of Sand (Minor Mineral) in the Mine of "Karnal Unit-2" with production capacity of 80 Lakhs TPA (ROM) of Sand by M/s Shri Devender Nagpal, S/o Shri Ramdass, located at villages-Shergarh Tapu, Mohiddinpur, Jharauli, Nabipur, Khirajpur, Mohammadpur & Khuda Kalan (Block/Knl-3), Ghir (Block/Knl-8) & Nalvipur (Block/Knl-9), District-Karnal, Haryana (974.10ha)-(Consultant: Grass Roots Research & Creation India (P) Ltd.)-EC

The Committee **deferred** the proposal as the Project Proponent did not attend the Meeting.

The meeting ended with a vote of thanks to the Chair.

Annexure-I

S. No.	Terms of Reference (TORs)
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 ₁₀ , SO ₂ and NO _x), 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 ₁₀ , particularly for free silica, should be given.
21)	Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
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

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| 1. Shri M. S. Nagar | Chairman |
| 2. Dr. S. Subramaniyan | Member |
| 3. Dr. L. Ajay Kumar | Member |
| 4. Shri P.K. Verdia | Member |
| 5. Prof. G.S. Roonwall | Member |
| 6. Dr. S.K. Peshin | Member |
| 7. Prof. A.K. Bhatnagar | |
| 8. Dr. V.P. Upadhyay, Director (Scientific), MoEF&CC | Member Secretary |
| 9. Dr. R. B. Lal, Joint Director(S), MoEF&CC | |
| 10. Dr. Sonu Singh, Deputy Director (S), MoEF&CC | |
| | |
| 11. Representatives of M/s Haryana State Industrial and Infrastructure Development Corporation Ltd. | |
| 12. Representatives of M/s UltraTech Cement Ltd | |
| 13. Representatives of M/s Shri Rajvir Chauhan | |
| 14. Representatives of M/s Shri Vipin Gupta | |
| 15. Representatives of M/s M/s. Jai Yamuna Ji Developers | |
| 16. Representatives of M/s M/s Sanjay Mangal | |
| 17. Representatives of M/s M/s Bhilwara Mines & Minerals | |
| 18. Representatives of M/s SKS Cement Limited | |
| 19. Representatives of M/s Trimex Sands Pvt. Ltd | |
| 20. Representatives of M/s. Manohar V. Daryanani | |
| 21. Representatives of M/s Rajakhjanderao Deshmukh | |
| 22. Representatives of M/s Navbharat Fuse Co. Ltd | |
| 23. Representatives of M/s Bijay Aditya Mines | |
