

**Ministry of Environment and Forests  
(IA Division)**

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**SUMMARY RECORD OF 6<sup>th</sup> MEETING OF THE RECONSTITUTED COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF MINING PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.**

The 6<sup>th</sup> Meeting of the Reconstituted Expert Appraisal Committee for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment and Forests was held during April 16<sup>th</sup>-18<sup>th</sup>, 2013. The list of participants is annexed.

After welcoming the Committee Members, the Minutes of the 5<sup>th</sup> Meeting of EAC held during 13<sup>th</sup>-15<sup>th</sup> March, 2013 were confirmed. Discussion on each of the Agenda Items was taken up ad-seriatim.

**Item No. 1:**

General Manager-cum-Mining Officers, District Industries Center (DIC), Department of Industries & Commerce, Government of Punjab submitted Fifty Five (55 nos.) proposals for River Bed Mining Projects. All these proposals are "A" Category as they are interstate boundary/within 10 Km from the Wild Life Centuries. These projects are from four districts of Punjab namely Pathankot/Gurdaspur (19), Rupnagar (19), Patiala(4) & S.A.S. Nagar(13) for mining of sand/gravel (minor minerals). The TOR was accorded to these projects from MoEF/SEIAA, Punjab. Out of these 55 proposals, 16 are located within 10 km from the boundary of Protected Areas notified under the Wild Life (Protection) Act, 1972. Therefore these 16 proposals require clearance from the Standing Committee of National Board for Wild Life (NBWL).

2. The representatives of the State Government (GM-cum-Mining Officers of respective districts DIC & Geologist) and Member Secretary of Punjab Pollution Control Board were present and the need for the projects and the grim condition in the State for infrastructure development particularly for the last two years was stated. They informed the Committee that the various developmental activities like construction of roads, bridges, buildings, etc are at halt and price of construction material is very high due to unavailability of sand and stones in the State. The State Govt. also informed that they have recently published Punjab Minor Mineral Rule, 2013 and submitted a copy of same.

3. The proposals were presented in clusters, district wise by the consultant. The lists of proposals are as follows:

<b>Cluster 1- District Pathankot on Chakki River</b>				
<b>S. No.</b>	<b>Project Name</b>	<b>TOR Issued By</b>	<b>TOR Awarded Date</b>	<b>Area (ha)</b>
1	River Bed Mining project at Gandhran	MoEF	03-04-2011	70

2	River Bed Mining project at Mamoon	MoEF	03-04-2011	88
3	River Bed Mining project at Karoli	SEAC Punjab	27-2-2010	35
4	River Bed Mining project at Jandroi	SEAC Punjab	27-2-2010	16.6
5	River Bed Mining project at Gho	SEAC Punjab	27-2-2010	22.7
6	River Bed Mining project at Nalunga	SEAC Punjab	27-2-2010	7.3
7	River Bed Mining project at Tarheti Narangpur	SEAC Punjab	27-2-2010	8
8	River Bed Mining project at Barsoon	SEAC Punjab	27-2-2010	12.4
9	River Bed Mining project at Beli Changa	SEAC Punjab	27-2-2010	9.7
10	River Bed Mining project at Talwara Jattan	SEAC Punjab	27-2-2010	27
11	River Bed Mining project at Talwara Gujran	SEAC Punjab	27-2-2010	11.7

**Cluster 2- District Pathankot/Gurdaspur on Ravi River**

<b>S. No.</b>	<b>Project Name</b>	<b>TOR Issued By</b>	<b>TOR Awarded Date</b>	<b>Area (ha)</b>
1	River Bed Mining project at Bherian	MoEF	28/02/2011	158.4
2	River Bed Mining project at Shehar	SEAC Punjab	27-2-2010	9.8
3	River Bed Mining project at Jaswan	SEAC Punjab	27-2-2010	45
4	River Bed Mining project at Chhan	SEAC Punjab	27-2-2010	9.7
5	River Bed Mining project at Raji Beli	SEAC Punjab	27-2-2010	7.2
6	River Bed Mining project at Dulpat	SEAC Punjab	27-2-2010	11.6
7	River Bed Mining project at Chak Hari Rai	SEAC Punjab	27-2-2010	47.2
8	River Bed Mining project at Chak Ram Sahai	SEAC Punjab	27-2-2010	19.2

**Cluster 3- District Rupnagar on Satluj River**

<b>S. No.</b>	<b>Project Name</b>	<b>TOR Issued By</b>	<b>TOR Awarded Date</b>	<b>Area (ha)</b>
1	River Bed Mining project at Belaramgarh	MoEF	03-04-2011	105.22
2	River Bed Mining project at Raipur Sani	MoEF	03-04-2011	18.71
3	River Bed Mining project at Chandpur	MoEF	03-04-2011	61.44
4	River Bed Mining project at Baihara	MoEF	27/02/2010	26.01
5	River Bed Mining project at Manguwal	MoEF	03-04-2011	16.48
6	River Bed Mining project at Diwarhi	MoEF	03-04-2011	17.83
7	River Bed Mining project at Majri Sarsa	MoEF	03-04-2011	11.78
8	River Bed Mining project at Kiratpur	MoEF	28/02/2011	32.05
9	River Bed Mining project at Barhi Haveli	SEAC Punjab	27/02/2010	25.51
10	River Bed Mining project at Lodhipur	SEAC Punjab	27/02/2010	10.97
11	River Bed Mining project at Plassi	SEAC Punjab	27/02/2010	19.45

<b>Cluster 4- District Rupnagar on Soan River</b>				
<b>S. No.</b>	<b>Project Name</b>	<b>TOR Issued By</b>	<b>TOR Awarded Date</b>	<b>Area (ha)</b>
1	River Bed Mining project at Surewal	MoEF	28/02/2011	73.12
2	River Bed Mining project at Dyapur	MoEF	03-04-2011	51.92
3	River Bed Mining project at Algran	MoEF	03-04-2011	19.74
4	River Bed Mining project at Bhallrhi	MoEF	03-04-2011	41.69
5	River Bed Mining project at Nangran	MoEF	28/02/2011	32.39
6	River Bed Mining project at Swarha	MoEF	03-04-2011	62.69
7	River Bed Mining project at Bhallan	SEAC Punjab	27/02/2010	5.77
8	River Bed Mining project at Harsabela	MoEF	03-04-2011	79.29

<b>Cluster 5- District Rupnagar Patiala on Ghaggar River</b>				
<b>S. No.</b>	<b>Project Name</b>	<b>TOR Issued By</b>	<b>TOR Awarded Date</b>	<b>Area (ha)</b>
1	River Bed Mining project at Tepla	MoEF	03-04-2011	17.07
2	River Bed Mining project at Rajgarh	MoEF	03-04-2011	11.73
3	River Bed Mining project at Nanheri	MoEF	03-04-2011	11.28
4	River Bed Mining project at Kapoori	MoEF	03-04-2011	6.63

<b>Cluster 6- District S.A.S. Nagar on Ghaggar River</b>				
<b>S. No.</b>	<b>Project Name</b>	<b>TOR Issued By</b>	<b>TOR Awarded Date</b>	<b>Area (ha)</b>
1	River Bed Mining project at Tiwana	MoEF	28/02/2011	17.97
2	River Bed Mining project at Sarangpur	MoEF	28/02/2011	29.3
3	River Bed Mining project at Sundran	MoEF	28/02/2011	29.72
4	River Bed Mining project at Bahourhi	MoEF	28/02/2011	42.91
5	River Bed Mining project at Ibrahimpur	MoEF	28/02/2011	13.29
6	River Bed Mining project at Bhankharpur	MoEF	28/02/2011	20.26
7	River Bed Mining project at Mubarikpur	MoEF	28/02/2011	27.78
8	River Bed Mining project at Kakrali	MoEF	28/02/2011	32.53
9	River Bed Mining project at Chharh-barh	SEAC Punjab	27-02-2010	5.59
10	River Bed Mining project at Bhagwanpur	SEAC Punjab	27-02-2010	5.73
11	River Bed Mining project at Salempur	SEAC Punjab	27-02-2010	6.35
12	River Bed Mining project at Hansala	MoEF	03-04-2011	21.56
13	River Bed Mining project at Jhajon	MoEF	03-04-2011	26.97

4. The sixteen proposals requiring the NBWL clearance, as these are located within 10 km from the boundary of Protected Areas notified under the Wild Life (Protection) Act, 1972.

<b>S. No.</b>	<b>Project Name</b>	<b>Protected Area</b>	<b>Distance &amp; Direction</b>
1	River Bed Mining project at Chak Hari Rai	Kathlaur Kaushlian Wildlife Sanctuary	About 6 km in SW Direction
2	River Bed Mining project at Dulpat	Kathlaur Kaushlian Wildlife Sanctuary	About 3 km in S Direction
3	River Bed Mining project at Jaswan	Kathlaur Kaushlian Wildlife Sanctuary	Next to the Project Site
4	River Bed Mining project at Raji Beli	Kathlaur Kaushlian Wildlife Sanctuary	About 8 km in NE Direction
5	River Bed Mining project at Chak Ram Sahai	Kathlaur Kaushlian Wildlife Sanctuary	About 9.5 km in NE Direction
6	River Bed Mining project at Belaramgarh	Jhajjar Bachauli Wildlife Sanctuary	About 9.5 km in E Direction
7	River Bed Mining project at Baihara	Jhajjar Bachauli Wildlife Sanctuary	About 8 km in NE Direction
8	River Bed Mining project at Lodhipur	Jhajjar Bachauli Wildlife Sanctuary	About 6 km in NE Direction
9	River Bed Mining project at Raipur Sani	Jhajjar Bachauli Wildlife Sanctuary	About 6 km in NW Direction
10	River Bed Mining project at Chandpur	Jhajjar Bachauli Wildlife Sanctuary	About 8 km in N Direction
11	River Bed Mining project at Harsabela	Jhajjar Bachauli Wildlife Sanctuary	About 8.5 km in NE Direction
12	River Bed Mining project at Manguwal	Ropar Wetland	About 9 km in SW Direction
13	River Bed Mining project at Diwarhi	Ropar Wetland	About 8 km in SW Direction
14	River Bed Mining project at Majri Sarsa	Ropar Wetland	About 6.5 km in SW Direction
15	River Bed Mining project at Barhi Haveli	Ropar Wetland	Next to the site
16	Kapoori Sand Mining Project	Bir Bhunarheri Wildlife Sanctuary	About 4 km in W Direction

5. The fifty five proposals were presented and discussed with regard to method of mining, production details, mine plan, baseline data, transportation,

socioeconomic status of the area, major issues raised during public hearing etc. The details of all the proposals are as follows:

**5.1 River Bed Mining of Sand/gravel from River Chakki, located in Village Gandhran, Tehsil Pathankot, District Pathankot, Punjab (70 ha)- (Consultant: Grass Roots Research and Creations (P) Ltd.) Environmental clearance regarding**

The proposal is for environmental clearance for Gandhran Sand/Gravel Mining Project from the bed of River Chakki in Village Gandhran, Tehsil Pathankot, District Pathankot, Punjab for a production of 4.2 Lakhs TPA. The mine lease area is of 70 ha. The proposed mining area is reported lying between Latitude - 32° 07' 36.17"N to 32° 08' 22.64"N and Longitude - 75° 35' 37.45"E to 75° 36' 04.42" E in topo sheet No. 43P/8 & 43P/12. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10 Km radius of the mine lease area. No forestland is involved. Nehar Ki Bir Reserved Forest lies within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 3.19 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Gandhran. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 3.2 Crore and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/340/2010-IA.II (M)) on 4.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 7.03.2012 at Village Gandhran, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2912-*ghi* dated 08-02-2013.

**5.2 River Bed Mining of Sand/gravel from River Chakki, located in Village Mamoon, Tehsil Pathankot, District Pathankot, Punjab (88 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Mamoon Sand/Gravel Mining Project from the bed of River Chakki in Village Mamoon, Tehsil Pathankot, District Pathankot, Punjab for the production of 5.28 Lakhs TPA. The mine lease area is of 88 ha. The proposed mining area is reported lying between Latitude - 32° 15' 46.75" to 32° 16' 23.18" N and Longitude - 75° 41' 35.82" to 75° 42' 38.41" E in

Topo sheet No. 43P/11. An Interstate Boundary between Punjab and Himachal Pradesh lie within 10 Km radius of the mine lease area. No forestland is involved. Sugar nal Laran PF, Lodhwan PF, Agra Da Van RF, Bagnal PF, Samun PF, Malkot Karar PF, Damtal RF, Nehar Kabir R.F., Indpur PF and Nagwal PF lie within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 2.8 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Mamoon. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.3.80 Crore and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/337/2010-IA.II(M)) on 4.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 09.03.2012 at Village Mamoon, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4427-ghi dated 08-03-2013

### **5.3 River Bed Mining of Sand/gravel from River Ravi, located in Village Bherian, Tehsil Pathankot, District Pathankot, Punjab (158.4 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding**

The proposal is for environmental clearance for Bherian Sand/Gravel Mining Project from the bed of River Ravi in Village Bherian, Tehsil Pathankot, District Pathankot, Punjab for the production of 14.4 Lakhs TPA. The mine lease area is of 158.4 ha. The proposed mining area is reported lying between Latitude - 32°20' 56.94"N to 32°21' 42.77"N and Longitude - 75°33' 04.16"E to 75°34' 21.17" E in topo sheet No. 43P/11. An Interstate Boundary between Punjab and Jammu & Kashmir lie within 10 Km radius of the mine lease area. No forestland is involved. Dhano Reserved Forest lies within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground

level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 7.65 KLD which will be sourced from nearby villages, NOC from the Gram Panchayat has been procured for the utilization of water from the village Bherian. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 10.36 Crore and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by MoEF (Ref. No.: J-11015/160/2010-IA.II (M)) on 28.02.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 29.03.2012 at Village Bherian, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2747-ghi dated 06-02-2013.

#### **5.4 River Bed Mining of Sand/gravel from River Phungi, located in Village Karoli, Tehsil Pathankot, District Pathankot, Punjab (35 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Karoli Sand/Gravel Mining Project from the bed of River Phungi in Village Karoli, Tehsil Pathankot, District Pathankot, Punjab for the production of 2.70 Lakhs TPA . The mine lease area is of 35 ha. The proposed mining area is reported lying between Latitude - 32° 18' 18.29"N to 32° 18' 53.10" N and Longitude - 75° 41' 21.51" E to 75° 41' 57.66" E in topo sheet No. 43P/11. An Interstate Boundary between Punjab, Jammu & Kashmir and Himachal Pradesh lie within 10 Km radius of the mine lease area. No forestland is involved. Sugar Nal Laran PF, Lodhwan PF, Agra Da Van RF, Bagnal PF, Samun PF, Malkot Karar PF, Damtal RF lie within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.7 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Karoli. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 20 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within

permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 12.03.2012 at Village Karoli, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 1482-A dated 01-02-2013.

### **5.5 River Bed Mining of Sand/gravel from River Phungi, located in Village Jandroi, Tehsil Pathankot, District Pathankot, Punjab (16.6 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding**

The proposal is for environmental clearance for Jandroi Sand/Gravel Mining Project from the bed of River Phungi in Village Jandroi, Tehsil Pathankot, District Pathankot, Punjab for the production of 2.0 Lakhs TPA. The mine lease area is of 16.6 ha. The proposed mining area is reported lying between Latitude - 32° 18' 54.72" to 32° 19' 23.55" N and Longitude - 75° 41' 21.28" to 75° 42' 22.67" E in topo sheet No. 43P/11. An Interstate Boundary between Punjab, Jammu & Kashmir and Himachal Pradesh lies within 10 Km radius of the mine lease area. No forestland is involved. Sugar Nal Laran PF, Lodhwan PF, Agra Da Van RF, Samun PF and Damtal RF lie within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.88 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Jandroi. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 15 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 13.03.2012 at Village Jandroi, Pathankot by Punjab Pollution Control Board chaired by Sh. Sibin C. Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 1478-A dated 01-02-2013.

**5.6 River Bed Mining of Sand/gravel from Darang Khad (tributary of Chakki River), located in Village Gho, Tehsil Pathankot, District Pathankot, Punjab (22.7 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding**

The proposal is for environmental clearance for Gho Sand/Gravel Mining Project from the bed of Darang Khad (tributary of Chakki River) in Village Gho, Tehsil Pathankot, District Pathankot, Punjab for the production of 2.70 Lakhs TPA. The mine lease area is of 22.7 ha. The proposed mining area is reported lying between Latitude - 32° 19' 5.42" to 32°19' 21.83" N and Longitude - 75° 40' 26.95" to 75°40' 54.54" E in topo sheet No. 43P/11. An Interstate Boundary between Punjab, Jammu & Kashmir and Himachal Pradesh lie within 10 Km radius of the mine lease area. No forestland is involved. Sugar Nal Laran PF, Lodhwan PF, Agra Da Van RF, Samun PF and Damtal RF lie within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.1 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Gho. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 15 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 13.03.2012 at Village Gho, Pathankot by Punjab Pollution Control Board chaired by Sh. Sabin C., Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2749-B dated 06-02-2013.

**5.7 River Bed Mining of Sand/gravel from River Ravi, located in Village Shehar, Tehsil Pathankot, District Pathankot, Punjab (9.8 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Shehar sand/gravel mining project from the bed of River Ravi in Village Shehar, Tehsil Pathankot, District Pathankot, Punjab for the production of 1 Lakh TPA. The mine lease area is of 9.8 ha. The proposed mining area is reported lying between Latitude - 32°20' 39.45" to 32°20'54.44"N and Longitude - 75°33'24.61" to 75°33'39.43"E in topo sheet No. 43P/7 & 43P/11. An Interstate Boundary between Punjab and Jammu & Kashmir lie

within 10 Km radius of the mine lease area. No forestland is involved. Dhanor Reserved Forest lies within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.5 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Shehar. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 70 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 21.03.2012 at Village Shehar, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4439-ghi dated 08-03-2013.

**5.8 River Bed Mining of Sand/gravel from River Ravi, located in Village Jaswan, Tehsil Pathankot, District Pathankot, Punjab (45.0 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Jaswan Sand/Gravel Mining Project from the bed of River Ravi in Village Jaswan, Tehsil Pathankot, District Pathankot, Punjab for the production of 6.0 Lakh TPA. The mine lease area is of 45.0 ha. The proposed mining area is reported lying between Latitude - 32° 15' 55.16" N to 32° 16' 28.71" N and Longitude - 75° 27' 40.02" E to 75° 28' 5.85" E in topo sheet No. 43P/8. An Interstate Boundary between Punjab and Himachal Pradesh and international boundary between India & Pakistan lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Kathlaur Kaushlian Wildlife Sanctuary lies within buffer zone of the mine just next to the mine site. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 2.30 KLD which will

be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Jaswan. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.2.0 crore and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 22.03.2012 at village Jaswan, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4437-ghi dated 08-03-2013.

**5.9 River Bed Mining of Sand/gravel from River Ravi, located in Village Chhan, Tehsil Pathankot, District Pathankot, Punjab (9.7 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding**

The proposal is for environmental clearance for Chhan Sand/Gravel Mining Project from the bed of River Ravi in Village Chann, Tehsil Pathankot, District Pathankot, Punjab for the production of 1 Lakh TPA. The mine lease area is of 9.7 ha. The proposed mining area is reported lying between Latitude - 32°20' 31.70" to 32°20'44.53"N and Longitude - 75°33'06.32" to 75°33'22.57"E in topo sheet No. 43P/7 & 43P/11. An Interstate Boundary between Punjab and Jammu & Kashmir lie within 10 Km radius of the mine lease area. No forestland is involved. Dhanor Reserved Forest lies within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.5 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Chhan. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 70 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 22.03.2012 at Village Chann, Pathankot by Punjab Pollution Control Board Chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank

protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2735-*ghi* dated 06-02-2013.

**5.10 River Bed Mining of Sand/gravel from River Chakki, located in Village Nalunga, Tehsil Pathankot, District Pathankot, Punjab (7.3 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding**

The proposal is for environmental clearance for Nalunga Sand/Gravel Mining Project from the bed of River Chakki in Village Nalunga, Tehsil Pathankot, District Pathankot, Punjab for the production of 1 Lakh TPA .The mine lease area is of 7.3 ha. The proposed mining area is reported lying between Latitude - 32°07' 06.04" to 32°07'22.71"N and Longitude - 75°35'47.46" to 75°35'54.47"E in topo sheet No. 43P/8 & 43P/12. An Interstate Boundary between Punjab and Himachal Pradesh lie within 10 Km radius of the mine lease area. No forestland is involved. Also, no Protected Forest lies within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.5 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Nalunga. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 70 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 7.03.2012 at Village Nalunga, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2737-*ghi* dated 06-02-2013.

**5.11 River Bed Mining of Sand/gravel from River Chakki, located in Village Tarheti Narangpur, Tehsil Pathankot, District Pathankot, Punjab (8.0 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding**

The proposal is for environmental clearance for Tarheti Narangpur Sand/Gravel Mining Project from the bed of River Chakki in Village Tarheti Narangpur, Tehsil Pathankot, District Pathankot, Punjab for the production of 1 Lakh TPA. The mine lease area is of 8.0 ha. The proposed mining area is reported lying between Latitude - 32° 17' 46.95"N to 32° 18' 0.49" N and Longitude - 75° 46' 46.65"E to 75° 46' 57.54" E in topo sheet No.43P/15. An Interstate Boundary between Punjab and Himachal Pradesh lie within 10 Km radius of the mine lease area. No forest land is involved. Also, Haral, Thora, Aund and Sugal Naland Laran Protected Forest and Lhani Reserved Forest lies within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.46 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Tarheti Narangpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 70 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 14.03.2012 at Village Tarheti Narangpur, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2739-ghi dated 06-02-2013.

**5.12 River Bed Mining of Sand/gravel from River Chakki, located in Village Barsoon, Tehsil Pathankot, District Pathankot, Punjab (12.40 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Barsoon Sand/Gravel Mining Project from the bed of River Chakki in Village Barsoon, Tehsil Pathankot, District Pathankot, Punjab for the production of 1 Lakh TPA. The mine lease area is of 12.40 ha. The proposed mining area is reported lying between Latitude - 32° 15' 41.96" to 32°15' 52.49" N and Longitude - 75° 41' 5.97" to 75° 41' 28.36" E in topo sheet No.43P/11. An Interstate Boundary between Punjab and Himachal Pradesh lie within 10 Km radius of the mine lease area. No forest land is involved. Indur, Malkot Karar, Samu, Nagwal, Damtal, Nehar ki Bir, Sugar nal & Laran, Odhwan and Agra da ban Protected Forest lies within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed.

Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.66 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Barsoon. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 45 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 16.03.2012 at Village Barsoon, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot . Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 1480-A dated 01-02-2013.

**5.13 River Bed Mining of Sand/gravel from River Masto, located in Village Raji Beli, Tehsil Pathankot, District Pathankot, Punjab (7.2 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Raji Beli Sand/Gravel Mining Project from the bed of River Masto in Village Raji Beli, Tehsil Pathankot, District Pathankot, Punjab for the production of 67,000 TPA. The mine lease area is of 7.2 ha. The proposed mining area is reported lying between Latitude - 32° 12' 3.13" N to 32° 12' 15.59" N and Longitude - 75° 24' 27.32" E to 75° 24' 40.57" E in topo sheet No. 43P/8. An international boundary between India and Pakistan lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Kathlaur Kaushlian Wildlife Sanctuary lies within buffer zone of the mine at a distance of 8 km in North East direction. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.48 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Raji Beli. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.20 lakh and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported

to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 28.03.2012 at village Raji Beli, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2441-ghi dated 31-01-2013.

**5.14 River Bed Mining of Sand/gravel from River Masto, located in Village Dalpat , Tehsil Pathankot, District Pathankot, Punjab (11.6 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Dalpat Sand/Gravel Mining Project from the bed of River Masto in Village Dalpat, Tehsil Pathankot, District Pathankot, Punjab for the production of 1 Lakh TPA. The mine lease area is of 11.6 ha. The proposed mining area is reported lying between Latitude - 32°16' 55.85" to 32°17'11.13"N and Longitude - 75°27'33.72" to 75°27'48.11"E in topo sheet No. 43P/8. An Interstate Boundary between Punjab and Jammu Kashmir lies within 10km radius of the mine lease area. No forestland is involved. There is Nehar ki Bir Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Kathlaur Kaushlian Wildlife Sanctuary lies within buffer zone of the mine at a distance of 3 km in South West direction. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground water level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.71 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Dalpat. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.70 lakh and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 03.04.2012 at village Dalpat, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4429-ghi dated 08-03-2013.

**5.15 River Bed Mining of Sand/gravel from River Ravi, located in Village Chak Hari Rai , Tehsil Pathankot, District Pathankot, Punjab (47.2 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Chak Hari Rai Sand/Gravel Mining Project from the bed of River Ravi in Village Chak Hari Rai, Tehsil Pathankot, District Pathankot, Punjab for the production of 3.34 lakhs TPA. The mine lease area is 47.2 ha. The proposed mining area is reported lying between Latitude - 32°18'19.26" N to 32°18'47.46"N and Longitude - 75°28'46.66" E to 75°29'16.41"E in topo sheet No. 47P/7. An Interstate Boundary between Punjab and Jammu & Kashmir lies within 10km radius of the mine lease area. No forestland is involved. There are Kali Bari PF, Nanglot PF, Pakhjalphar RF, Dhanor PF and Nehar ki Bir PF, Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Kathlaur Kaushlian Wildlife Sanctuary lies within buffer zone of the mine at a distance of 6 km in South South West direction. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5-7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 2.26 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Chak Hari Rai. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.70 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate .The Public hearing was held on 3.04.2012 at village Chak Hari Rai, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2743-*ghi* dated 06-02-2013.

**5.16 River Bed Mining of Sand from River Ravi, located in Village Chak Ram Sahai , Tehsil Gurdaspur, District Gurdaspur, Punjab (19.20 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Chak Ram Sahai Sand Mining Project from the bed of River Ravi in Village Chak Ram Sahai, Tehsil Gurdaspur, District Gurdaspur, Punjab for the production of 1.7 lakhs TPA. The mine lease area is 19.20 ha. The proposed mining area is reported lying between Latitude - 32° 11' 5.23" to 32°11' 15.51" N and Longitude - 75° 21' 46.06" to 75° 22' 21.37" E in topo sheet No. 43P/8. An international boundary between India and Pakistan lies

within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Kathlaur Kaushlian Wildlife Sanctuary lies within buffer zone of the mine at a distance of 9.5 km in North West direction. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5-7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.06 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Chak Ram Sahai. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.20 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 26.03.2012 at village Chak Ram Sahai, Gurdaspur by Punjab Pollution Control Board chaired by Sh. Tajinder Pal Singh, Sub-Divisional Magistrate, on behalf of deputy Commissioner, Gurdaspur. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2745-ghi dated 06-02-2013.

**5.17 River Bed Mining of Sand/Gravel from River Chakki, located in Village Beli Changa, Tehsil Pathankot, District Pathankot, Punjab (9.7 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Beli Changa Sand/Gravel Mining Project from the bed of River Chakki in Village Beli Changa, Tehsil Pathankot, District Pathankot, Punjab for the production of 1 Lakh TPA. The mine lease area is of 9.7 ha. The proposed mining area is reported lying between Latitude - 32°11' 33.86" to 32°11'53.79"N and Longitude - 75°38'32.13" to 75°38'52.78"E in topo sheet No.43P/11 & 43P/12. An Interstate Boundary between Punjab and Himachal Pradesh lie within 10 Km radius of the mine lease area. No forest land is involved. Indpur, Malkot Karar, Samu, Damtal, Nehar ki Bir Protected Forest and Damtal Reserved Forest lies within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water

requirement will be 0.66 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Beli Changa. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 10 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 1.03.2012 at Village Beli Changa, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2439-*ghi* dated 31-01-2013.

**5.18 River Bed Mining of Sand/Gravel from River Chakki, located in Village Talwara Jattan Tehsil Pathankot, District Pathankot, Punjab (27.0 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Talwara Jattan Sand/Gravel Mining Project from the bed of River Chakki in Village Talwara Jattan, Tehsil Pathankot, District Pathankot, Punjab for the production of 3.67 Lakh TPA. The mine lease area is of 27.0 ha. The proposed mining area is reported lying between Latitude - 32°10'37.12"N to 32°10'56.11"N and Longitude - 75°37'02.75"E to 75°37'32.51"E in topo sheet No.43P/11 & 43P/12. An Interstate Boundary between Punjab and Himachal Pradesh lie within 10 Km radius of the mine lease area. No forest land is involved. Nehar ki Bir and Damtal Reserved Forest and Malkot Karar Protected Forest lies within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.43 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Talwara Jattan. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 45 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 02.04.2012 at Village Talwara Jattan, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner,

Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2741-Bdated 06-02-2013.

**5.19 River Bed Mining of Sand/Gravel from River Chakki, located in Village Talwara Gujran Tehsil Pathankot, District Pathankot, Punjab (11.7 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Talwara Gujran Sand/Gravel Mining Project from the bed of River Chakki in Village Talwara Gujran, Tehsil Pathankot, District Pathankot, Punjab for the production of 1.34 Lakh TPA. The mine lease area is of 1.7 ha. The proposed mining area is reported lying between Latitude - 32°10' 24.57"N to 32°10'36.59"N and Longitude - 75°37'03.47"E to 75°37'20.46"E in topo sheet No.43P/11 & 43P/12. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10 Km radius of the mine lease area. No forest land is involved. Nehar ki Bir and Damtal Reserved Forest and Malkot Karar Protected Forest lies within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.68 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Talwara Gujran. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 50 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 02.04.2012 at Village Talwara Gujran, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 1485-A dated 01-02-2013.

**5.20 River Bed Mining of Sand from River Ghaggar, located in Village Tepla, Tehsil Rajpura, District Patiala, Punjab (17.07 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Tepla Sand Mining Project from the bed of River Ghaggar in Village Tepla, Tehsil Rajpura, District Patiala, Punjab for a production of 2.52 lakh TPA. The mine lease area is of 17.07 ha. The proposed mining area is reported lying between Latitude - 30°26'11.86" to 30°27'13.26" N and Longitude - 76°44'41.51" to 76°44'58.92" E in topo sheet No. 53 B/11. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. There is Gir Hansala Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. The mine working will be opencast by semi-mechanized method without involving drilling and blasting. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4-6 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.7 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Tepla. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.35 lakh and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/39/2010-IA.II(M)] on 4.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 26.03.2012 at Village Tepla, Patiala by Punjab Pollution Control Board chaired by Ms. Anindita Mitra, I.A.S, Additional Deputy Commissioner. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 1271-ghi dated 21-01-2013.

### **5.21 River Bed Mining of Sand from River Ghaggar, located in Village Rajgarh, Tehsil Rajpura, District Patiala, Punjab (11.73 ha) (Consultant: Grass Roots Research and Creations (P) Ltd.)-Environmental clearance regarding**

The proposal is for environmental clearance for Tepla Sand Mining Project from the bed of River Ghaggar in Village Rajgarh, Tehsil Rajpura, District Patiala, Punjab for a production of 2.52 lakh TPA. The mine lease area is of 11.73 ha. The proposed mining area is reported lying between Latitude - 30° 24' 54.44" to 30° 25' 27.38" N and Longitude - 76° 44' 05.76" to 76° 44' 25.40" E in topo sheet No. 53 B/11. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. The mine working will be opencast by semi-mechanized method without involving drilling and blasting. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and

after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4-6 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.78 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Rajgarh. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.75 lakh and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/41/2010-IA.II(M)] on 4.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 30.03.2012 at village Rajgarh, Patiala by Punjab Pollution Control Board chaired by Sh. Anil Garg, Sub Divisional Magistrate, Patiala. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22729-ghi dated 28-12-2012.

**5.22 River Bed Mining of Sand from River Ghaggar, located in Village Nanheri, Tehsil Rajpura, District Patiala, Punjab (11.28 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Tepla Sand Mining Project from the bed of River Ghaggar in Village Nanheri, Tehsil Rajpura, District Patiala, Punjab for a production of 2.24 lakh TPA. The mine lease area is of 11.28 ha. The proposed mining area is reported lying between Latitude - 30° 22' 26.84" to 30° 22' 51.06" N and Longitude - 76° 41' 32.87" to 76° 41' 52.57" E in topo sheet No. 53 B/11. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. The mine working will be opencast by semi-mechanized method without involving drilling and blasting. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4-6 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.69 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Nanheri. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.70 lakh and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/44/2010-IA.II(M)] on 4.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The

PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 30.03.2012 at village Nanheri, Patiala by Punjab Pollution Control Board chaired by Sh. Anil Garg, Sub Divisional Magistrate, Patiala. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22731-*ghi* dated 28-12-2012.

**5.23: River Bed Mining of Sand from River Ghaggar, located in Village Kapoori, Tehsil Patiala, District Patiala, Punjab (6.63 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance Kapoori Sand Mining Project from the bed of River Ghaggar in Village Kapoori, Tehsil Patiala, District Patiala, Punjab for the production of 98,889 TPA. The mine lease area is of 6.63 ha. The proposed mining area is reported lying between Latitude - 30° 10' 51.80" N to 30° 11' 8.20" N and Longitude - 76° 30' 34.04" E to 76° 30' 52.83" E in topo sheet No. 43K/12. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease boundary. No forestland is involved. There is Bir Majal Protected Forest and Gogpur Miranpur RF present within 10 km radius from mine lease boundary. It was reported by the project proponent that Bir Bhunarheri Wildlife Sanctuary lies within buffer zone of the mine at a distance of about 4 km in West direction. The mine working will be opencast by semi-mechanized method without involving drilling and blasting. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4-6 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.39 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Kapoori. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.38 lakh and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/295/2010-IA.II(M)] on 4.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 19.03.2012 at village Kapoori, Patiala by Punjab Pollution Control Board chaired by Ms. Anindita Mitra, I.A.S, Additional Deputy Commissioner, Patiala. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22733-*ghi* dated 28-12-2012.

#### **5.24 River Bed Mining of Sand/gravel from River Soan, located in Village Surewal, Nangal, District Rupnagar, Punjab (73.12 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) -Environmental clearance regarding**

The proposal is for environmental clearance for Surewal Sand Mining Project from the bed of River Soan in Village Surewal, Tehsil Nangal, District Rupnagar, Punjab for a production of 78,161 TPA. The mine lease area is of 73.12 ha. The proposed mining area is reported lying between Latitude 31°20'6.99"N to 31°20'49.44"N and Longitude - 76°18'37.65"E to 76°19'10.64"E in topo sheet No. 53A/07. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4-5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 3.15 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Surewal. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.90 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref. No. J-11015/172/2010-IA.II(M)) on 28.02.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 03.02.2012 at village Dyapur, Rupnagar by Punjab Pollution Control Board chaired by Sh. Sucha Singh (ADC). Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4431-*ghi* dated 08-03-2013.

#### **5.25 River Bed Mining of Sand/gravel from River Soan, located in Village Dyapur, Nangal, District Rupnagar, Punjab (51.92 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) -Environmental clearance regarding**

The proposal is for environmental clearance for Dyapur Sand Mining Project from the bed of River Soan, in Village Dyapur, Tehsil Nangal, District Rupnagar, Punjab, for production of 63,000 TPA. The mine lease area is of 51.92 ha. The proposed mining area is reported lying between Latitude 31°18'7.90"N to 31°18'49.57"N and Longitude - 76°19'46.06"E to 76°20'15.80"E in topo sheet No. 53A/07. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of mine lease area. No forestland is involved. There is no Protected Forest within

10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4-5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 2.21 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Dyapur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.51 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/348/2010-IA.II(M)) on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 9.03.2012 at village Dyapur, Rupnagar by Punjab Pollution Control Board chaired by Sh. Sukhwinder Pal Singh Marar (ADC). Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4470-ghi dated 11-03-2013.

**5.26 River Bed Mining of Sand/gravel from River Chakki, located in Village Belaramgarh, Nangal, District Rupnagar, Punjab (105.22 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding:**

The proposal is for environmental clearance for Belaramgarh Sand Mining Project from the bed of River Satluj in Village Belaramgarh, Tehsil Nangal, District Rupnagar, Punjab for a production of 1.76 Lakhs TPA. The mine lease area is 105.22 ha. The proposed mining area is reported lying between Latitude - 31°16'29.33"N and Longitude - 76°24'37.88"E in topo sheet No. 53A/7. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10 km radius of the mine lease area. No forestland is involved. There is Katarthar Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Jhajjar Bachauli Wildlife Sanctuary lies within buffer zone of the mine at a distance of 9.5 km in East direction. The mine working will be opencast by semi-mechanized method without involving drilling and blasting. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 4.43 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Belaramgarh. It was reported by the project proponent that

there is no court case pending against the project. Cost of the project is Rs.144 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/369/2010-IA.II(M)) on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 21.03.2012 at village Belaramgarh, Rupnagar by Punjab Pollution Control Board chaired by Sh. Hari Singh (*Tehsildar*) Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4433-*ghi* dated 08-03-2013.

**5.27 River Bed Mining of Sand from River Soan, located in Village Algran, Nangal, District Rupnagar, Punjab (19.74 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) -Environmental clearance regarding:**

The proposal is for environmental clearance for Algran Sand Mining Project from the bed of River Soan, in Village Algran, Tehsil Nangal, District Rupnagar, Punjab for a production of 22,548 TPA. The mine lease area is 19.74 ha. The proposed mining area is reported lying between Latitude 31° 15' 27.82" to 31° 15' 48.92" N and Longitude - 76° 21' 50.52" to 76° 22' 11.92" E in topo sheet No. 53A/07. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. Ultimate working depth will be 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4-5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.95 KLD which will be sourced from nearby villages, NOC from the Gram Panchayat has been procured for the utilization of water from the village Algran. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.58.08 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued on by MoEF (Ref No.: J-11015/347/2010-IA.II(M) )04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 14.03.2012 at village Algran, Rupnagar by Punjab Pollution Control Board chaired by Sh. Sukhwinder Pal Singh. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4468-*ghi* dated 11-03-2013.

**5.28 River Bed Mining of Sand/ Gravel from River Soan, located in Village Harshabela, Nangal, District Rupnagar, Punjab (79.29 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)-Environmental clearance regarding:**

The proposal is for environmental clearance for Harshabela sand/gravel mining project from the bed of River Soan in Village Harsabela, Tehsil Nangal, District Rupnagar, Punjab for a production of 93,000 TPA. The mine lease area is 79.29 ha. The proposed mining area is reported lying between Latitude - 31°13'30.74"N to 31°13'57.02"N and Longitude - 76°25'28.90"E to 76°26'28.22"E in topo sheet No. 53A/8. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of mine lease area. No forestland is involved. There are Nimawali PF, Balwal PF and Suwaina PF, Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Jhajjar Bachauli Wildlife Sanctuary lies within buffer zone of the mine at a distance of 8.5 km in North East direction. The mine working will be opencast by semi-mechanized method without involving drilling and blasting. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 3.31 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Harshabela. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.129 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/346/2010-IA.II(M)) on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 14.03.2012 at village Harsabela, Rupnagar by Punjab Pollution Control Board chaired by Sh. Harminder Singh (ADC). Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4466-*ghi* dated 11-03-2013.

**5.29 River Bed Mining of Sand from River Soan, located in Village Bhallrhi, Nangal, District Rupnagar, Punjab (41.69 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) -Environmental clearance regarding:**

The proposal is for environmental clearance for Bhallrhi Sand Mining Project from the bed of River Soan in Village Bhallrhi, Tehsil Nangal, District Rupnagar, Punjab for a production of 49,000 TPA. The mine lease area is 41.69 ha. The proposed mining area is reported lying between Latitude - 31°17'34.20"N to 31°18'8.04"N and Longitude - 76°20'8.87"E to 76°20'35.03"E in topo sheet No.

53A/07. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10 km radius of mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.97 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Bhallrhi. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs .40.10 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.:J-11015/365/2010-IA.II(M)) on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 12.03.2012 at village Bhallrhi, Rupnagar by Punjab Pollution Control Board chaired by Sh. Hari Singh (*Tehsildar*) Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4425-*ghi* dated 08-03-2013.

**5.30 River Bed Mining of Sand from River Soan, located in Village Nangran, Nangal, District Rupnagar, Punjab (32.39 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) -Environmental clearance regarding:**

The proposal is for environmental clearance for Nangran Sand Mining Project from the bed of River Soan in Village Nangran, Tehsil Nangal, District Rupnagar, Punjab for a production of 11,542 TPA. The mine lease area is 32.39 ha. The proposed mining area is reported lying between Latitude 31°17'0.20"N to 31°17'30.75"N and Longitude - 76°20'41.11"E to 76°21'1.49"E in topo sheet No. 53A/07. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4-5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.41 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Nangran. It was reported by the project proponent that there is no court case pending against the

project. Cost of the project is Rs.18 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/135/2010-IA.II(M)) on 28.02.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 12.03.2012 at village Nangran, Rupnagar by Punjab Pollution Control Board chaired by Sh. Harphool Singh Gill, (*Tehsildar*). Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4670-*ghi* dated 14-03-2013.

**5.31:River Bed Mining of Sand from River Satluj, located in Village Raipur Sani, Anandpur Sahib, District Rupnagar, Punjab (18.71 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)-Environmental clearance regarding:**

The proposal is for environmental clearance for Raipur Sani Sand Mining Project from the bed of River Satluj, in Village Raipur Sani, Tehsil Anandpur Sahib, District Rupnagar, Punjab, for a production of 22,300 TPA. The mine lease area is 18.71 ha. The proposed mining area is reported lying between Latitude - 31°13'22.41"N to 31°13'46.10"N and Longitude - 76°33'50.92"E to 76°34'8.48"E in topo sheet No. 53A/12. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Jhajjar Bachauli Wildlife Sanctuary lies within buffer zone of the mine at a distance of 6 km in North West direction. The mine working will be opencast by manual method without involving drilling and blasting using hand tools like shovel, pan, sieve etc. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.88 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Raipur Sani. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.59.0 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/362/2010-IA.II(M)) on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 23.03.2012 at village Raipur Sani, Rupnagar by Punjab Pollution Control Board

chaired by Ms. Hargunjit Kaur (SDM). Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22316-*ghi* dated 21-12-2012.

**5.32:River Bed Mining of Sand from River Satluj, located in Village Chandpur, Anandpur Sahib, District Rupnagar, Punjab (61.44 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)-Environmental clearance regarding**

The proposal is for environmental clearance for Chandpur Sand Mining Project from the bed of River Satluj in Village Chandpur, Tehsil Anandpur Sahib, District Rupnagar, Punjab for a production of 81,000 TPA. The mine lease area is 61.44 ha. The proposed mining area is reported lying between Latitude - 31°11'7.54"N to 31°11'35.61"N and Longitude - 76°30'32.11"E to 76°31'14.25" E in topo sheet No. 53A/12. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of mine lease area. No forestland is involved. There is Raipur Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Jhajjar Bachauli Wildlife Sanctuary lies within buffer zone of the mine at a distance of 8 km in North direction. The mine working will be opencast by semi-mechanized method. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 2.91 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Chandpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.67.04 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/367/2010-IA.II(M)) on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 19.03.2012 at village Chandpur, Rupnagar by Punjab Pollution Control Board chaired by Ms. Hargunjit Kaur (SDM). Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4435-*ghi* dated 12-03-2013.

**5.33:River Bed Mining of Sand from River Satluj, located in Village Baihara, Tehsil Anandpur Sahib, District Rupnagar, Punjab (26.01ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) -Environmental clearance regarding**

The proposal is for environmental clearance for Baihara Sand Sand Mining Project from the bed of River Satluj in Village Baihara, Tehsil Anandpur Sahib, District Rupnagar, Punjab for a production of 29,500 TPA. The mine lease area is 26.01 ha. The proposed mining area is reported lying between Latitude - 31°12'57.08"N to 31°13'24.83"N and Longitude - 76°26'39.31"E to 76°27'3.41"E in topo sheet No. 53A/08. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Jhajjar Bachauli Wildlife Sanctuary lies within buffer zone of the mine at a distance of 8 km in North East direction. The mine working will be opencast by manual method without involving drilling and blasting using hand tools like shovel, pan, sieve etc. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.26 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Baihara. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.51.22 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/352/2010-IA.II(M)) on 27.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 26.03.2012 at village Baihara, Rupnagar by Punjab Pollution Control Board chaired by Harbajan Singh (*Tehsildar*). Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22318-*ghi* dated 21-12-2012.

**5.34: River Bed Mining of Sand from River Soan, located in Village Swarha, Anandpur Sahib, District Rupnagar, Punjab (62.69 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)-Environmental clearance regarding**

The proposal is for environmental clearance for Swarha Sand Mining Project from the bed of River Soan in Village Swarha, Tehsil Anandpur Sahib, District Rupnagar, Punjab for a production of 69,500 TPA. The mine lease area is 62.69 ha. The proposed mining area is reported lying between Latitude 31°14'54.95"N to 31°15'27.03"N and Longitude - 76°22'57.10"E to 76°23'37.39"E in topo sheet No. 53A/07. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mchanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3

m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4-5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 2.7 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Swarha. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.69.06 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued on 04.03.2011 by MoEF (Ref No.: J-11015/355/2010-IA.II(M)). Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 26.03.2012 at village Swarha, Rupnagar by Punjab Pollution Control Board chaired by Harbajan Singh (*Tehsildar*). Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22739-*ghi* dated 28-12-2012.

**5.35 River Bed Mining of Sand from River Satluj, located in Village Manguwal, Tehsil Rupnagar, District Rupnagar, Punjab (16.48 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Manguwal Sand Mining Project from the bed of River Satluj in Village Manguwal, Tehsil Rupnagar, District Rupnagar, Punjab for the production of 20,000 TPA. The mine lease area is of 16.48 ha. The proposed mining area is reported lying between Latitude - 31° 3'36.03"N to 31° 3'59.18"N and Longitude - 76°37'11.45"E to 76°37'28.77"E in topo sheet No. 53A/12. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forestland is involved. There are Palasi PF, Khor Nalagarh PF, Khor PF, Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Ropar Wetland lies within buffer zone of the mine at a distance of 9 km in North West direction. The mine working will be opencast by manual method. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.86 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Manguwal. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.8.2 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/356/2010-IA.II(M)) on 4.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>.

The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 10.02.2012 at village Manguwal, Rupnagar by Punjab Pollution Control Board chaired by Sh. Sucha Singh Mast, Additional Deputy Commissioner, Rupnagar. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22043-*ghi* dated 18-12-2012.

**5.36 River Bed Mining of Sand from River Sirsa, located in Village Diwarhi, Tehsil Rupnagar, District Rupnagar, Punjab (17.83 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Diwarhi Sand Mining Project from the bed of River Sirsa in Village Diwarhi, Tehsil Rupnagar, District Rupnagar, Punjab for the production of 15,000 TPA. The mine lease area is of 17.83 ha. The proposed mining area is reported lying between Latitude - 31° 3'11.42"N to 31° 3'37.03"N and Longitude - 76°36'25.86"E to 76°36'59.50"E in topo sheet No. 53A/12. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forestland is involved. There are Palasi PF, Himmatpur PF, Hatra PF, Protected Forests within 10 km radius from mine lease boundary. It was reported by the project proponent that Ropar Wetland lies within buffer zone of the mine at a distance of 8 km in South West direction. The mine working will be opencast by manual method. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.85 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Diwarhi. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.7.0 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/358/2010-IA.II(M)) on 4.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 10.02.2012 at village Diwarhi, Rupnagar by Punjab Pollution Control Board chaired by Sh. Sucha Singh Mast, Additional Deputy Commissioner, Rupnagar. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The

proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22031-*ghi* dated 18-12-2012.

**5.37 River Bed Mining of Sand from River Sirsa, located in Village Majri Sarsa, Tehsil Rupnagar, District Rupnagar, Punjab (11.78 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)-Environmental clearance regarding**

The proposal is for environmental clearance for Majri Sarsa Sand Mining Project from the bed of River Sirsa in Village Majri Sarsa, Tehsil Rupnagar, District Rupnagar, Punjab for the production of 10,300 TPA. The mine lease area is of 11.78 ha. The proposed mining area is reported lying between Latitude - 31° 3'5.02"N to 31° 3'18.67"N and Longitude - 76°35'6.39"E to 76°35'33.23"E in topo sheet No. 53A/12. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forestland is involved. There is Himmatpur Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Ropar Wetland lies within buffer zone of the mine at a distance of 6.5 km in South West direction. The mine working will be opencast by manual method. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.7 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Majri Sarsa. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.11.06 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/368/2010-IA.II(M)) on 4.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 21.03.2012 at village Majri Sarsa, Rupnagar by Punjab Pollution Control Board chaired by Sh. Ramvir, Sub Divisional Magistrate, Rupnagar. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22029-*ghi* dated 18-12-2012.

**5.38 River Bed Mining of Sand from River Soan, located in Village Kiratpur, Tehsil Anandpur Sahib, District Rupnagar, Punjab (32.05 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding**

The proposal is for environmental clearance for Kiratpur Sand Mining Project from the bed of River Soan in Village Kiratpur, Tehsil Anandpur Sahib, District Rupnagar, Punjab for the production of 37,300 TPA. The mine lease area is of 32.05 ha. The

proposed mining area is reported lying between Latitude 31° 9'43.93"N to 31°10'19.84"N and Longitude - 76°33'37.94"E to 76°33'59.73"E in topo sheet No. 53A/12. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forestland is involved. Raipur Protected Forest lies within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4-5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.58 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Kiratpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.31.12 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/131/2010-IA.II(M)) on 28.02.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 14.02.2012 at village Kiratpur, Rupnagar by Punjab Pollution Control Board chaired by Sh. Harminder Singh, Additional Deputy Commissioner (Dev), Hoshiarpur. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22314-ghi dated 21-12-2012.

**5.39:River Bed Mining of Sand from River Satluj, located in Village Barhi Haveli, Tehsil Rupnagar, District Rupnagar, Punjab (25.51 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding**

The proposal is for environmental clearance for Barhi Haveli Sand Mining Project from the bed of River Satluj in Village Barhi Haveli, Tehsil Rupnagar, District Rupnagar, Punjab for the production of 27,078 TPA. The mine lease area is of 25.51 ha. The proposed mining area is reported lying between Latitude - 30°58'26.90"N to 30°58'47.27"N and Longitude - 76°29'59.21"E to 76°30'57.33"E in topo sheet No. 53B/09. No Interstate Boundary lies within 10km radius from mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Ropar Wetland lies within buffer zone just next to the mine. The mine working will be opencast by semi-mechanized method without involving drilling and blasting. Ultimate working depth will be 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.11 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village

Barhi Haveli. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.17.10 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 28.03.2012 at village Bari Haveli, Rupnagar by Punjab Pollution Control Board chaired by Sh. Ramvir, IAS, Sub Divisional Magistrate, Rupnagar. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22037-*ghi* dated 18-12-2013.

**5.40: River Bed Mining of Sand from River Satluj, located in Village Lodhipur, Tehsil Anandpur Sahib, District Rupnagar, Punjab (10.97 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding.**

The proposal is for environmental clearance for Lodhipur Sand Mining Project from the bed of River Satluj in Village Lodhipur, Tehsil Anandpur Sahib, District Rupnagar, Punjab for the production of 17,000 TPA. The mine lease area is of 10.97 ha. The proposed mining area is reported lying between Latitude - 31°12'51.11"N to 31°13'8.40"N and Longitude - 76°29'1.51"E to 76°29'12.50"E in topo sheet No. 53A/08. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forest land is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Jhajjar Bachauli Wildlife Sanctuary lies within buffer zone of the mine at a distance of about 7 km in North East direction. The mine working will be opencast by manual method without involving drilling and blasting using hand tools like shovel, pan, sieve etc. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.58 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Lodhipur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.15.3 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire

catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 28.03.2012 at village Lodhipur, Rupnagar by Punjab Pollution Control Board chaired by Sh. Ramvir, IAS, Sub Divisional Magistrate, Roopnagar. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4435-*ghi* dated 08-03-2013.

**5.41 River Bed Mining of Sand from River Satluj, located in Village Plassi, Tehsil Nangal, District Rupnagar, Punjab (19.45 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding.**

The proposal is for environmental clearance for Plassi Sand Mining Project from the bed of River Satluj in Village Plassi, Tehsil Nangal, District Rupnagar, Punjab for the production of 22,000 TPA. The mine lease area is of 19.45 ha. The proposed mining area is reported lying between Latitude 31°18'25.02"N to 31°18'45.73"N and Longitude - 76°22'11.57"E to 76°22'26.20"E in topo sheet No. 53A/07. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4-5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.0 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Plassi. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.18.24 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 9.03.2012 at village Plassi, Rupnagar by Punjab Pollution Control Board chaired by Sh. Sukhwinder Pal Singh Marar, Additional Deputy Commissioner, Rupnagar. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 1631-*ghi* dated 24-01-2013.

**5.42 River Bed Mining of Sand from River Soan, located in Village Bhallan, Tehsil Nangal, District Rupnagar, Punjab (5.77 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Bhallan Sand Mining Project from the bed of River Soan in Village Bhallan, Tehsil Nangal, District Rupnagar, Punjab for the production of 12,240 TPA. The mine lease area is of 5.77 ha. The proposed mining area is reported lying between Latitude 31°16'21.49"N to 31°16'28.63"N and Longitude - 76°21'38.37"E to 76°21'52.69"E in topo sheet No. 53A/07. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4-5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.401 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Bhallan. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.14.3 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 3.02.2012 at village Bhallan, Rupnagar by Punjab Pollution Control Board chaired by Sh. Sucha Singh Mast, Additional Deputy Commissioner, Rupnagar. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4668-ghi dated 14-03-2013.

#### **5.43 River Bed Mining of Sand from River Ghaggar, located in Village Tiwana, Tehsil Dera Bassi, District SAS Nagar, Punjab (17.97 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Tiwana Sand Mining Project from the bed of River Ghaggar in Village Tiwana, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 8,170 TPA. The mine lease area is of 17.97 ha. The proposed mining area is reported lying between Latitude - 30°27'41.83"N to 30°28'1.89"N and Longitude - 76°44'50.48"E to 76°45'26.67"E in topo sheet No. 43K/11 and 43K/15. An Interstate Boundary between Punjab and Haryana lies within 10 km radius of the mine lease area. No forestland is involved. Bir Bagarpura Protected Forest lies within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from

river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.83 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Tiwana. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.10.2 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/148/2010-IA.II(M)] on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings at one site is exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 10.03.2012 at village Tiwana, SAS Nagar by Punjab Pollution Control Board chaired by Sub Divisional Magistrate, Dera Bassi. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22737-*ghi* dated 28-12-2012.

#### **5.44 River Bed Mining of Sand from River Ghaggar, located in Village Sarangpur, Tehsil Dera Bassi, District SAS Nagar, Punjab (29.30 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding**

The proposal is for environmental clearance for Sarangpur Sand Mining Project from the bed of River Ghaggar in Village Sarangpur, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 44,000 TPA. The mine lease area is of 29.30 ha. The proposed mining area is reported lying between Latitude - 30°24'18.77"N to 30°24'55.57"N and Longitude - 76°54'15.44"E to 76°54'45.81"E in topo sheet No. 43A/15. An Interstate Boundary between Punjab and Haryana lies within 10km radius of mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary/Elephant Reserve within 10 km from the boundary of the mine lease. Mine working will be manual. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.45 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Sarangpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.12 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref. No. J-11015/149/2010-IA.II(M)) on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies

were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 12.03.2012 at village Sarangpur, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Subhash Bhardwaj (*Tehsildar*) Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22727-ghi dated 28-12-2012.

**5.45 River Bed Mining of Sand from River Ghaggar, located in Village Sundran, Tehsil Dera Bassi, District SAS Nagar, Punjab (27.92 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding:**

The proposal is for environmental clearance for Sundran Sand Mining Project from the bed of River Ghaggar in Village Sundran, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 50,000 TPA. The mine lease area is 27.92 ha. The proposed mining area is reported lying between Latitude - 30°36'57.77"N to 30°37'12.77"N and Longitude - 76°54'3.55"E to 76°54'42.92"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bhoj Mattar and Nadlan Protected Forest lies within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. No drilling & blasting is proposed. Ultimate working depth will be 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7-9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.5 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Sundran. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.40.5 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/152/2010-IA.II(M)] on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 24.02.2012 at village Chharh-Barh, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Mahammad Tayyab, IAS, Additional Deputy Commissioner, S.A.S. Nagar. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The

proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22725-*ghi* dated 28-12-2012.

**5.46 River Bed Mining of Sand from River Ghaggar, located in Village Bahourhi, Tehsil Dera Bassi, District SAS Nagar, Punjab (42.91 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding**

The proposal is for environmental clearance for Bahourhi Sand Mining Project from the bed of River Ghaggar in Village Bahourhi, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 1,28,877 TPA. The mine lease area is 42.91 ha. The proposed mining area is reported lying between Latitude - 30°34'5.54"N to 30°34'56.44"N and Longitude - 76°46'29.99"E to 76°46'32.92"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bir Bagarpura, Bir Baraul, Bir Dadrala and Bir Kheri Protected Forest lies within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-Mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.1 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Bahourhi. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.75 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/154/2010-IA.II(M)] on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 26.03.2012 at village Bahourhi, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Subhash Bhardwaj, Tehsildar, Dera Bassi. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22719-*ghi* dated 28-12-2012.

**5.47 River Bed Mining of Sand from River Ghaggar, located in Village Ibrahimpur, Tehsil Dera Bassi, District SAS Nagar, Punjab (13.29 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding**

The proposal is for environmental clearance for Ibrahimpur Sand Mining Project from the bed of River Ghaggar in Village Ibrahimpur, Tehsil Dera Bassi, District SAS

Nagar, Punjab for the production of 30,600 TPA. The mine lease area is of 13.29 ha. The proposed mining area is reported lying between Latitude - 30°35'46.41"N to 30°36'0.46"N and Longitude - 76°47'47.46"E to 76°48'13.76"E in topo sheet No. 43A/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bir Dadrala Protected Forest, and Bir Bagarpura Protected Forests within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.72 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Ibrahimpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.28 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/154/2010-IA.II(M)] on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms at one site because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 26.03.2012 at village Ibrahimpur, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Subhash Bhardwaj, Tehsildar, Dera Bassi. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22721-ghi dated 28-12-2012.

**5.48 River Bed Mining of Sand from River Ghaggar, located in Village Bhankarpur, Tehsil Dera Bassi, District SAS Nagar, Punjab (20.26 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding.**

The proposal is for environmental clearance for Bhankarpur Sand Mining Project from the bed of River Ghaggar in Village Bhankarpur, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 28,000 TPA. The mine lease area is of 20.26 ha. The proposed mining area is reported lying between Latitude 30°36'16.10"N to 30°36'48.35"N and Longitude - 76°49'7.45"E to 76°49'52.50"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bir Dadrala and Bir Bagarpura Protected Forest lie within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated

for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.02 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Bhankarpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.25.2 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/157/2010-IA.II(M)] on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 16.03.2012 at village Bhankarpur, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Paramjit Singh, Naib Tehsildar, Dera Bassi. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4464-ghi dated 11-03-2013.

**5.49 River Bed Mining of Sand from River Ghaggar, located in Village Mubarikpur, Tehsil Dera Bassi, District SAS Nagar, Punjab (27.78 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding.**

The proposal is for environmental clearance for Mubarikpur Sand Mining Project from the bed of River Ghaggar in Village Mubarikpur, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 56,667 TPA. The mine lease area is of 27.78 ha. The proposed mining area is reported lying between Latitude - 30°37'5.79"N to 30°37'29.12"N and Longitude - 76°50'59.98"E to 76°51'45.16"E in topo sheet No. 53B/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius from mine lease area. No forestland is involved. Bir Bagarpura, Bir Dadralla and Bir Kheri Protected Forest lie within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.15 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Mubarikpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.47 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/158/2010-IA.II(M)] on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were

reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 21.03.2012 at village Mubarikpur, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Paramjit Singh, Naib Tehsildar, Dera Bassi. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22735-ghi dated 28-12-2012.

**5.50 River Bed Mining of Sand from River Ghaggar, located in Village Kakrali, Tehsil Dera Bassi, District SAS Nagar, Punjab (32.53 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding.**

The proposal is for environmental clearance for Kakrali Sand Mining Project from the bed of River Ghaggar in Village Kakrali, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 57,000 TPA. The mine lease area is of 32.53 ha. The proposed mining area is reported lying between Latitude - 30°37'52.21"N to 30°38'37.84"N and Longitude - 76°52'7.76"E to 76°52'28.77"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bir Machhela, Khola Raitan Reserved Forest and Dariya and Khoj Reserved Forest lies within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7-9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.44 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Kakrali. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.46.6 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/159/2010-IA.II(M)] on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 24.02.2012 at village Kakrali, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Mohammad Tayyab, IAS, Additional Deputy Commissioner (Dev) S.A.S. Nagar. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted

the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22723-*ghi* dated 28-12-2012.

**5.51 River Bed Mining of Sand from River Ghaggar, located in Village Chharh-Barh, Tehsil Dera Bassi, District SAS Nagar, Punjab (5.59 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding.**

The proposal is for environmental clearance for Chharh-Barh Sand Mining Project from the bed of River Ghaggar in Village Chharh-Barh, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 23,300 TPA. The mine lease area is of 5.59 ha. The proposed mining area is reported lying between Latitude - 30°30'10.77"N to 30°30'23.25"N and Longitude - 76°45'47.10"E to 76°45'53.68"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bir Bagarpura Protected Forest lies within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7-9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.40 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Chharh-Barh. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.14 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms at one location because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 10.03.2012 at village Chharh-Barh, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Rajesh Tripathi, PCS, Sub Divisional Magistrate, Dera Bassi. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4472-*ghi* dated 11-03-2013.

**5.52 River Bed Mining of Sand from River Ghaggar, located in Village Bhagwanpur, Tehsil Dera Bassi, District SAS Nagar, Punjab (5.73 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding.**

The proposal is for environmental clearance for Bhagwanpur Sand Mining Project from the bed of River Ghaggar in Village Bhagwanpur, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 90,000 TPA. The mine lease area is of 5.73

ha. The proposed mining area is reported lying between Latitude - 30°35'2.11"N to 30°35'12.38"N and Longitude - 76°54'0.03"E to 76°54'11.77"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bir Bagarpura, Bir Dadrala and Bir Kheri Protected Forest and Bir Pir Machhela Reserved Forest lies within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7-9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.40 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Bhagwanpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.54 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 21.03.2012 at village Bhagwanpur, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Navpreet Singh shergill, Naib Tehsildar, Banur. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 1211-ghi dated 17-01-2013.

**5.53 River Bed Mining of Sand from River Ghaggar, located in Village Salempur, Tehsil Dera Bassi, District SAS Nagar, Punjab (6.35 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding.**

The proposal is for environmental clearance for Salempur Sand Mining Project from the bed of River Ghaggar in Village Salempur, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 46,600 TPA. The mine lease area is of 6.35 ha. The proposed mining area is reported lying between Latitude - 30°30'22.42"N to 30°30'43.84"N and Longitude - 76°45'48.06"E to 76°45'57.12"E in topo sheet No. 43A/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Hansala Protected Forest, Bir Baraul Protected Forest and Bir Bagarpura Protected Forests within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9

m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.55 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Salempur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.42 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 19.03.2012 at village Salempur, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Navpreet singh shergill, Naib Tehsildar, Banur. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 1209-ghi dated 17-01-2013.

**5.54 River Bed Mining of Sand from River Ghaggar, located in Village Hansala, Tehsil Dera Bassi, District SAS Nagar, Punjab (21.56 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.) - Environmental clearance regarding.**

The proposal is for environmental clearance for Hansala Sand Mining Project from the bed of River Ghaggar in Village Hansala, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 1, 56,000 TPA. The mine lease area is of 21.56 ha. The proposed mining area is reported lying between Latitude - 30°31'26.95"N to 30°32'2.63"N and Longitude - 76°46'5.45"E to 76°46'29.82"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bir Bagarpura, Bir Baraul, Bir Dadrala and Bir Kheri Protected Forest lie within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.1 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Hansala. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.122 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/321/2010-IA.II(M)] on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are

exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 28.03.2012 at village Hansala, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Navpreet Singh shergill, Naib Tehsildar, Banur. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 1207-ghi dated 17-01-2013.

**5.55 River Bed Mining of Sand from River Ghaggar, located in Village Jhajon, Tehsil Dera Bassi, District SAS Nagar, Punjab (26.97 ha)(Consultant: Grass Roots Research and Creations (P) Ltd.)- Environmental clearance regarding.**

The proposal is for environmental clearance for Jhajon Sand Mining Project from the bed of River Ghaggar in Village Jhajon, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 2.26 Lakh TPA. The mine lease area is of 26.97 ha. The proposed mining area is reported lying between Latitude - 30°27'58.65"N to 30°28'43.30"N and Longitude - 76°45'34.34"E to 76°46'17.98"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.1 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Jhajon. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.14 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/319/2010-IA.II(M)] on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 10.03.2012 at village Jhajon, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Rajesh Tripathi, PCS, Sub Divisional Magistrate, Dera Bassi. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2912-ghi dated 08-02-2013.

6 It was noticed by the EAC that the area of some of the sites was modified from the area as mentioned in the ToR granted. This was stated by the State Govt. officials that this was due to District Commissioners' Survey which took place in Punjab in 2011, after issuing ToR. The changes in some cases were marginal, whereas in some cases it was substantial. The Draft EIA was prepared for the modified sites and accordingly Public hearing was held. It was reported that in all the above proposals, the method of mining was semi-mechanised except in sixteen proposals where the project lies near the protected areas, manual mining has been proposed. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. Approved Mine plan details the process along with surface plan and as well as working plan including sections. It has also been mentioned to maintain safety and stability of river banks i.e. 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM10 at few sites. As reported, the PM10 readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt. All other parameters were found well within the permissible limits. The socio-economic status of the areas which were gathered both by primary site survey using questionnaires (household as well as village level) and from Census-2001 were reported. The main points raised during public hearing were discussed which are given below:

- (a). Existing state of haphazard mining, creating deep Trenches/Pit
- (b). Annoyance towards the state of the existing environment.
- (c). Problem of drinking water level having gone very deep and drying up of hand pumps in the homes.
- (d). The dilapidated condition of the roads on which the Dumpers/Trolleys pass through.
- (e). The dust pollution created by the falling dry sand/gravel from the dumpers/trucks/trolleys.
- (f). Annoyance of the dust pollution created from crushers.
- (g). Their children not able to cross or pass through roads because of narrowness of the roads and movement of large 6 to 18 tyres dumpers/trucks.
- (h). The nuisance created by the noise of DJ during night transportation of sand/gravel.
- (i). Petty compensation and its non- availability to owners of land.
- (j). A number of people needing mining activity as it provided them with jobs and livelihood even though under a difficult environment.
- (k). The general opinion of the public was that if it is ensured that the mining will be done in a scientific way, they will support the project.
- (l). Accidents due to trucks, Water sprinkling not being done & Vehicle not properly covered
- (m). Erosion close to bridges due to mining activity.
- (n). Illegal construction of roads through fields without paying compensation

7. Based on the presentation made and discussion held, the Committee sought additional information on the following issues:

- (a). Overlapping air monitoring stations to be detailed.
- (b). Status of traffic on NH-1.

- (c). Land acquired from owners and details of settlement and compensation paid (R&R status).
- (d). Link of metallic and non-metallic road for transportation of the mineral. Status of haul roads for transportation.
- (e). Transportation issues specifically raised for school going children.
- (f). To ensure protection of wildlife due to the proposed sand mining.
- (g). To indicate all other mines operating within 10 km on maps in order to examine cumulative impacts.
- (h). Dandy Bolton formula used for calculating replenishment of sand can not be applied in toto. The State Govt. should utilize the services of reputed Institution/ concerned State Department.
- (i). EMP cost need to be enhanced to take care of the measures for environment protection.

8. The above mentioned issues were again discussed on the next day i.e. 17<sup>th</sup> April, 2013 on the request of the State Govt. The presentation was made by Project Proponent to address the above mentioned points.

- (a) It was brought to the notice of the Committee that around 20% of the air monitoring stations were overlapping due to proximity of mine sites with one another.
- (b) The cumulative traffic analysis report was given for the highways, where the trucks carrying the minor minerals are proposed to be transported through various highways. The PP informed that the condition of roads for proposed transportation of the minerals is good. The Level of Service (LoS) as per Indian Road Congress (64-1990) at Patiala, Rupnagar & S.A.S. Nagar is at present Category 'A' and after the proposed transportation it would result in to be 'Category B' i.e. very good. However, the LoS at Pathankot at present is Category A and will result into Category 'B' i.e. very good but on Jammu Road & Gurdaspur Road (NH-1) the LoS would become Category 'C' i.e. average.
- (c) It is informed that an amount equal to one third of the contract amount will be paid to the land owners, by the contractor as compensation as per the provisions of the Punjab Minor Mineral Rule, 2013. No rehabilitation and resettlement is involved.
- (d) Haul road for the mines have been proposed to be made for entering the mining area with proper slope stability for easy movement of trucks.
- (e) The State Govt. informed that they shall setup a committee to check truck movements within the village limits involving the members from respective Panchayat/Gramsabha. The State Government has proposal to provide "warning signboards" and "speed-breakers" wherever the same are necessary for the safety of the school children.
- (f) It was ensured that care will be taken to minimize sound generated during mining operation. Only well-tuned machines will be allowed to operate. Drilling and blasting will not be permitted. Only manual mining is proposed for the projects, near the Protected Areas. Awareness will be created among the workers involved in the mining activity.
- (g) The study has been done in the 10 km area surrounding the mine in respect of Baseline Data Generation, Flora and Fauna Study as well as Socio-Economic Study. The entire study also includes the area which falls in the neighboring territory of Himachal Pradesh. The Hon'ble Punjab and Haryana High Court in CWP no 22567 of 2012, through an interim order, made the District Magistrate concerned responsible for keeping a proper check on illegal mining. The mining operation will also be carried out

strictly as per the Punjab Minor Mineral Rule 2013, as per Rules 72 to 76 in Chapter VII which states about transportation of minerals and prevention of illegal mining.

- (h) State Government will carry out sediment replenishment study through authorised agencies once a year. The status report for the same will be submitted annually after getting certified by the authorized/recognized agency.
- (i) It was informed that the EMP funds would be as per Punjab Minor Mineral Concession Rule 2013, (Rules 69 & 70) which is equal to 10% of the contract money along with the recurring cost annually.

The main points raised during public hearing were discussed and a detailed action plan report has been submitted, which is given below:

S.No	Points Raised in Public Hearing	Action Plan from the Project Proponent
1	Existing state of haphazard mining, creating deep Trenches/Pit.	Mining will be done as per the provisions made and restrictions imposed as covered in the Punjab Minor Mineral Rule, 2013 , EIA report keeping and mitigation measures suggested in view and following the EMP.
2	Annoyance towards the state of the existing environment.	All mitigation, monitoring and management measures made in EC towards preserving the environment will be followed. For this purpose a State Level EMC and Distt. EMC have been constituted under Rule 66 of the Rules 2013. On the direction of Hon'ble High Court, a subcommittee headed by the Environmental Engineer is being setup in all the districts of Punjab for implementation of above environmental stipulations.
3	Problem of drinking water level having gone very deep and drying up of hand pumps in the homes.	The mining will only be done either 3m depth or upto 3 meters above the river water level whichever comes first. Mining upto this depth will have no impact on the underground level of water table which is reported to be a few meters below the flowing water in the river.
4	The dilapidated condition of the roads on which the Dumpers/Trolleys pass through.	The maintenance of the haul road will be the responsibility of the contractor under the overall supervision of the regulator, being carried out by the Environment Management Cell. District Level Environment Management Cell will ensure its compliance.
5	The dust pollution created by the falling dry sand/gravel from the dumpers/trucks/trolleys.	This practice will no longer prevail as the loaded trucks will be made wet at the top before leaving the mine site, kept covered with tarpaulin, water sprinkling on the road for dust suppression and scraping of road off accumulated dust will improve the entire scenario altogether.

6	Annoyance of the dust pollution created from crushers.	This pertains to crushers not related to this, however adopting wet crushing using recirculated water will improve the situation.
7	The nuisance created by the noise during night transportation of sand/gravel.	This practice will be put down administratively.
8	Their children not able to cross or pass through roads because of narrowness of the roads and movement of large 6 to 18 tyres dumpers/trucks.	The State Government has proposal to provide warning signboards and speed breakers where the same are necessary for the safety of school children. Further where it is necessary to widen the road for safety, the State Government will take necessary steps before starting mining activities at sites.
9	The problem faced from the sand/gravel mafia which charges them when any one is mining sand/gravel.	The State Govt. on getting EC of the quarries shall grant their contracts. Thereafter, more and more construction material i.e. sand and gravel shall come to the market to cater to the demand of public at large and consequently their selling rates shall reduce considerably.
10	Petty compensation and its non- availability to owners of land.	The compensation will be paid as per Punjab Minor Mineral Concession Rules, 2013. An amount of one-third of the contract amount shall be paid to the land owners by the Contractor.
11	A number of people needing mining activity as it provided them with jobs and livelihood even though under a difficult environment.	This is positive sign of requiring mining project to come up. The sand and gravel plays a pivotal role in the construction industry and the extraction of the minor minerals shall help to channelize the river bed.
12	Mining during night	Mining during night has been totally banned. Defaulters if any, will be dealt with according to law.
13	The general opinion of the public was that if it is ensured that the mining will be done in a scientific way, they will support the project.	This is positive sign of requiring mining project to come up. The sand and gravel plays a pivotal role in the construction industry and the extraction of the minor minerals shall help to channelize the river bed
14	Accidents due to trucks	Road will be kept in good condition. Provisions like speed breakers, dust suppression and keeping the road leveled fortnightly, provision of electronics weigh bridges to prevent overloading will go a long way to set a right kind of environmentally sound transporting

		activity
15	Water sprinkling not being done	Water sprinkling will be done regularly to prevent dust.
16	Vehicle not properly covered	The practice of covering vehicles with tarpaulin will be strictly followed
17	Erosion close to bridges due to mining activity.	Mining will be confined to from the middle of the river bed and no mining will be done in within a distance of 500m and 250m both on the upstream and downstream sides of high level and other bridges respectively. The defaulters will be dealt with according to the law.
18	Illegal construction of roads through fields without paying compensation	Compensation will be paid as per the mutual agreement between the Contractor and the owner of the land.
19	Concession for sand to villagers	Once the compensation has been paid as per law and provision kept for making payment towards environmental and social responsibility no free sand or at concessional rate will be available

Based on the information provided and commitments by the State Govt. the **EAC recommended the above fifty five Project Proposals (55) for Environmental Clearance with the following additional conditions:**

- i. To submit annual replenishment report certified by an authorized agency. In case the replenishment is low the mining activity / production levels shall accordingly be decreased / stopped.
- ii. To establish a monitoring committee including Local Panchayat, to check on traffic due to transportation and submit an annual report for the same.
- iii. All the provisions made and restrictions imposed as covered in the Punjab Minor Mineral Rule, 2013 are to be complied with, particularly regarding Environment Management Practices and its fund management & Payment of compensation to the land owners.
- iv. The PP shall make arrangement for drinking water, first aid facility along with species specific anti-venom in case of emergency for the workers.

**Item No. 2:**

**2.1 Markhera Pyrophyllite (10,000 MTPA) & Diaspore (400 MTPA) Mine of M/s Rabela Traders & Finance Pvt. Ltd., Village Markhera, Tehsil-Jatara District Tikamgarh Madhya Pradesh (10.834 ha)-TOR**

M/s Rabela Traders, & Finance Pvt. Ltd, is registered under the Indian partnership Act 1932 (9 of 1932) having their registered office at Indra Bhavan, Idgah Hills, Bhopal, Madhya Pradesh. Mining is located in village Markhera, Tehsil Jatara District Tikamgarh in Madhya Pradesh. Nearest interstate boundary (Uttar Pradesh) is at the distance of 6.3 km. Earlier the Mining Lease was sanctioned to M/s Eastern Minerals, Jhansi (U.P.) and the lease has been transferred to M/s

Rabela Traders, & Finance Pvt. Ltd. The Mining lease area is 10.834 ha and validity of lease was 03.12.1984 to 02.12.2004. At present, it is under process of renewal for further 20 years. No National Parks/Sanctuaries are located within 10 km radius. The required water quantity is approximately 12,000 liters per day, which will be taken from the nearby bore wells and accumulated rain water in mine pits. The method of excavation is open cast and semi mechanized by using drilling and blasting. Hand tools such as spades, hammer, crowbar chisel etc. will be used. The finished product will be transported through tractor trolleys. The Diaspore used in the refractory industry while the Pyrophyllite shall be used in ceramic, insecticides / pesticide and handicraft industries. Quartz Phyllite and murrum (by volume about 28%) waste material is likely to be generated during mining. The average height of the dump will be 5.0m. Total estimated initial cost of the project was approx. 27.0 lakhs. The total area of the lease is sectioned by Govt. of Madhya Pradesh and the land is undulating. Reportedly, there is no human settlement or agriculture fields in the mine lease area therefore, no R & R plan is required.

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

## **2.2 Renewal of Mining Lease of Niduzuvvi Limestone Mine with production capacity of M/s The India Cements Ltd at Village Niduzuvvi, District Kadapa, Andhra Pradesh of 1.00 MTPA (335.06 ha)-TOR**

The proposal was considered by the Expert Appraisal Committee in its meeting held during 19-21<sup>st</sup> December, 2012. The proposal was deferred because the Proponent did not attend the meeting. The Proponent is operating Captive Limestone Mine-Niduzuvvi Limestone Mine, spreading in about 335.06 ha having sizeable reserves of limestone. The mine lies adjacent to the Cement Plant. Limestone is produced at the rate of 1 Million tones/annum for meeting the limestone requirement. The mining lease expires on 16.01.2014. First renewal of ML area (for a period of 20 years) from 17.01.1994 to 16.01.2014 was granted vide G.O.MS.No. 522 dated 26.09.2000. The renewed mining lease was transferred to the India Cement Ltd., the Present owner; vide Industry and Commerce Dept. GoAP, G.O.MS.No. 243 dated 23.04.2001. The water requirement of the project is 30 KLD which will be met from the mine pit. The Company proposes to obtain environmental clearance for renewal of mining lease. The Mining operations are carried out by fully mechanized opencast Mining method deploying HEMMs. The lease area is crosscut by seasonal streamlet. 45m safety zone from natural streamlets will be left unmined. No National Park/Sanctuary is located within 10 Km radius of the Mining lease area Pedda vaagu and Niduzuvvi RF is at the distance of 45 m and 1 Km from the ML area respectively.

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

## **2.3 Iron & Manganese Mining Project of Budharaja Iron & Mn Ore Mines, Karanjia Forest Division of Sri Jay Kishore Choubey, District Mayur Bhanj, Orissa (42.958 ha)**

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

#### **2.4 Gold mining by Hutti Gold Mines with production capacity of 250 TPD Company Ltd at Guddada Rangavvana Halli at Survey No. 93.94 & 371 of Gudda Rangavvana Halli Village, Chitradurga District, Karnataka (62.72 ha)-TOR**

Guddada Rangavvana Halli Gold Mines proposed to produce 250 TPD of gold ore by underground mining from 62.72 ha area in the proposed Greenfield Project. The proposal is for new mine. Out of total lease land, 26.3 ha is deemed forest. Approval for forest clearance is under process. No National Park/ Sanctuary is located within 10 km radius of the Project site. The Project is situated in earthquake zone-II. It is proposed to explore the deposit up to 3<sup>rd</sup> level horizon on East reef immediately to establish the potentiality and assess its feasibility for mining. The total exploratory mine development envisaged is around 1,050 m with an estimated cost of 211.2 lakhs, which is planned to be completed in 15 months. The ore raised incidental to development may be around 50 tonnes per day. Total water requirement will be 22,000 lit/day. During underground mining the seepage water will be pumped out to surface and collected in a settling tank. The collected water will be filtered from silt and reused for plantation within the mining lease area. Guheswara Gudda State Forest is at the distance of 4.3 km in East. Total cost of the Project is Rs.20.5 Crores.

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

#### **2.5: Expansion of Bhadanpur Limestone Mine of M/s Maihar Cement from 2LTPA to 9LTPA at Village Bhadanpur South Patti and Umrour, District Satna, Madhya Pradesh (217.681 ha)-TOR**

The proposal is for expansion of Bhadanpur Limestone mine from 2 LTPA to 9 LTPA. The pre-mining land use was 146.299 ha agricultural land, 70.232 ha wasteland and 1.15 ha grazing land. The mine is located between Latitude 24°08'30" to 24°09'52"N and Longitude 80°49'35" to 80°50'41" E. Opencast mechanized mining method is selected. The existing mine is captive to the cement plant. Litigation is pending against the Project at Chief judicial Magistrate, Satna, Madhya Pradesh. One seasonal nallah is flowing between pit C&D. This nallah will be diverted up to 2020 with the permission of Govt. authority. The existing water requirement is 119.83 cum/day and Ground water withdrawal permission has been obtained from CGWA vide letter no. 21-4(57)/NCR/CGWA/2009-44 dated 29.06.2009. Nearest Reserve Forest is Goraja which is at a distance of 6.0 km ESE. No National Park/Sanctuary is reportedly located within 10 km radius of the Project site. Anticipated life of mine is 10.82 years.

The committee **rejected** the proposal as the Form-I and PFR submitted were not in conformity with the presentation made during the meeting.

#### **2.6 Ghatkuri iron ore mines of M/s Nirmal Kumara Pradeep Kumar for expansion of iron ore production from 0.403 MTPA to 10.0 MTPA (ROM) and setting of 4.5 MTPA Beneficiation Plant along with crusher and screening plants within the mine lease area located in Ghatkuri and Karampada reserve forest near village Tativa, Sadar Chaibasa, West Singhbhum, Jharkhand (149.7343 ha) (Creative Engineers and Consultants) -TOR**

Ghatkuri iron ore mines of M/s Nirmal Kumara Pradeep Kumar for expansion of iron ore production from 0.403 MTPA to 10.0 MTPA (ROM) and setting of 4.5 MTPA Beneficiation Plant along with crusher and screening plants within the mine lease area located in Ghatkuri and Karampada reserve forest near village Tativa, Sadar Chaibasa, West Singhbhum, Jharkhand. Mining Scheme approval for expansion of iron ore production from 0.044 MTPA to 0.403 MTPA has been obtained from IBM vide letter No. 314(3)/2010-MCCM(CZ)/S-2/1133 dated 21-07-2010 for a period up to 2012-2013. Forest Clearance has been obtained from MoEF for broken of area of 13.960 ha vide letter No. 10119/FCE dated 20<sup>th</sup> July 1995. Environmental Clearance for expansion of Iron Ore production from 0.044 MTPA to 0.403 MTPA was granted vide letter No. J-11015/15/2010-IA-II(M) dated 21<sup>st</sup> December, 2012. The mining operation in this area has been carried out by adopting mechanized open cast Mining Method. The total water requirement will be 2500 m<sup>3</sup>/day. The entire water required will be sourced from the bore well within the lease premises. The life of the mine is 7.2 years. The Capital cost of the Project is Rs. 120.00 Crores.

Based on the presentation made and discussions held, **the Committee recommended the TORs for undertaking detailed EIA study as per Annexure-I** with additional condition for submission of certified compliance report from the Regional office of Ministry, and as the area falls in the critically polluted area, the comments from JSPCB shall be obtained.

**2.7 Mirzapur Bardha Quartzite Mines with proposed capacity of Minerals 26,346 TPA of M/s Khalsa Stone Works, Village Mirzapur-Bardah, P.S. Munger District Munger, State Bihar (6.64 ha) (Consultant: Grass Roots Research and Creation India (P) Ltd. Bhimbandh Wildlife Sanctuary is present at a distance of 3.2 km-TOR**

Mirzapur-Bardah Quartzite mine is situated near village Mirzapur-Bardah, P.S. Munger, District Munger, Bihar over an area of 6.64 hectares. The mining lease was granted in favor of Gurudayal Singh, for twenty years, from 11.08.1974 to 10.08.1994. The Project is located between Latitude 25° 22' 8.22" – 25° 22' 20.12" (N) and Longitude 86° 31' 56.54" – 86° 32' 18.42" (E). This mining project falls under Category "A" Project due to the location of Bhimbandh Wildlife Sanctuary at a distance of 3.2 km in SW direction from the project site. After the death of Gurudayal Singh the lease has been succeeded to his wife Mahinder Kaur. After the death of Smt Mahinder Kaur in 16.04.1997, the lease has been succeeded to Sri Surender Singh (Proprietor). The proposed rate of production is 26,346 TPA of Quartzite. Method of mining will be opencast Manual. Water requirement for the proposed project for drinking use, dust suppression & plantation, will be 4.25 KLD, which will be taken from nearby villages. During proposed years of mining scheme period, the quarry will not go below the water table of this area and will not intersect water table. The estimated project cost is Rs 1.0 Crores. The anticipated life of mine is 11 years. It is mentioned by the Project Proponent that the total mine lease area is Government waste land and no R&R is applicable. The PP also informed that they propose to surrender 1.79 ha of mine lease area.

Based on the presentation made and discussions held, **the Committee recommended the TORs for undertaking detailed EIA study (Annexure-I)** with additional condition that the mineralogical composition of PM10 particularly for free silica should be given.

**2.8 Sand Mining Project with production capacity of 5.00 Lakh Cum/annum of Singareni Collieries Company Limited (SSCL) in Godavari River Bed near Kollur Village Kotapalli Mandal, Adilabad District, Andhra Pradesh (171 ha)-TOR**

The Sand Mining Project is in Godavari River near Kollur Village in Kottapalli Mandal of Adilabad District. Mining lease is yet to be obtained. Mining lease application is submitted to ADMG, Mancherial on 19.06.2012. Total land is non forest land. Mahadevpur Reserve Forest is at a distance of 0.6 km. No National Park/Sanctuary is located within 10 km radius of the Project site. About 20 KLD of water is required which will be obtained from the nearby river. The sand will be extracted directly from the riverbed. Back hoe shovel is engaged for extraction and loading the sand into the tippers. No National Park/Sanctuary is located within the 10 km radius of the ML area.

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

**2.9 Quartzite Mine with production capacity of 4,00,000 Tons/annum of M/s V. Sudhakar located at Sy. No. 988/P, Velichelamala Village, N.P. Kunta Mandal, Anantapur District, Andhra Pradesh (52.20 ha) (Consultant: Team Labs & Consultants) - TOR**

The Proposal is for mining of quartz production in an area of 52.20 ha. The mine lease was sanctioned by industries and commerce (M-III) Department, Government of Andhra Pradesh vide G.O. Ms. No. 8 dated 05.01.2002 for a period of 20 years in favor of Shri V. Sudhakar. The lease deed was executed by the Asst. Director of mines and Geology Govt. of Andhra Pradesh vide proceedings No. 5017/M1/2002 dated 19<sup>th</sup> December, 2012. The mine operations were commenced on 5.3.2003, the production achieved in last 8 years i.e. upto 2010-11 is 3035 Tons. Now it is proposed to produce quartz with average production of 4,00,000 Tons/annum. Mine lease area is located between Latitude 14°10'46.6" to 14°11'17.2"N and Longitude 78°21'44.8" to 78°22'11.5" E. Velichalamala Reserve Forest is at the distance of 4.0 km in SW direction. No National Par/Sanctuary is located within 10 km radius of the Project site. Mining will be done by semi-mechanized open cast method. Water requirement will be 6KLD for the Project. The required water will be obtained from nearby villages. Capital cost of the Project is Rs. 35 Lakhs. This is a violation case as mine was operating since last 8 years without obtaining prior environmental Clearance.

Based on the information furnished and presentation made by the project proponent and discussions held, the **Committee prescribed the TORs for undertaking detailed EIA study as per Annexure-I** with additional condition that the mineralogical composition of PM10 particularly for free silica, should be given.

**2.10 Iron Ore & Laterite Mine with production capacity of 4,39,320 Tons of Iron Ore and 11,270 Tons of Laterite of M/s E.V. Ranga Reddy at survey no. 172, Pagadalapalli Village, Pendlimarri Mandal, Kadapa District, Andhra Pradesh (201.94 ha) (Consultant: Team Labs & Consultants)-TOR**

E. V. Ranga Reddy obtained mine lease sanction orders from the Department of mines and geology, Govt. of Andhra Pradesh vide G. O. Ms. No. 73 dated 13/03/2006 for a period of 20 years. The Mine lease work orders issued for Iron ore & Laterite for a period of 20 years in an area of 201.914 ha located in Survey No. 172 of Pagadalapalli Village, Pendlimarri Mandal, Kadapa District, Andhra Pradesh by the Asst. Director of Mines and Geology, Kadapa vide proceedings No. 695/MI/06 dated 25.03.06. The proposed Iron ore & Laterite mining is by manual open cast method or by using hired excavator (Occasionally) without drilling and blasting. It was also proposed to use Jackhammer drilling & blasting and excavator to remove the massive ore body. The mine lease area is located between Latitude 14°26' 55"N and Longitude 78°36' 15.3" E. Papagni River is flowing from SW to NW at a distance of 5.8 km from the ML area in NW direction. Ganganapalle reserve forest is located at 4.8 km in south direction. Reportedly, there are no National Parks, Wildlife Sanctuaries within 10km radius from the mine lease area. Water requirement of 15KLD is mainly for wet drilling purpose, domestic purpose, green belt maintaining and for sprinkling on Mine haulage roads. The water will be drawn from nearby village through tankers. The domestic waste water shall be sent to septic tank followed by soak pit. Rainwater Catch Pond of 20 KL capacity will be provided to collect the runoff water for reuse. Domestic effluents of 2.5KLD shall be sent to septic tank followed by soak pit. During the next four years about 4, 92,313 m<sup>3</sup> of waste will be generated from this mine. The below 25% Fe material also goes as rejection in this mine. Remaining waste will be backfilled concurrently. Total cost of proposed project is Rs. 1.0 Crore. Life of the mine is 7 years. This is a violation case as mine was operating without obtaining prior environmental Clearance.

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

### **2.11 Limestone Mining Project of M/s Siddhi Vinayak Cement Private Limited with production capacity of 1.5 MTPA production capacity located at Village Digrana, Tehsil-Jaitaran, District Pali, Rajasthan (100 ha) (Consultant: J.M. Enviro Net Pvt. Ltd)–TOR**

The proposal is for production of limestone @ 1.5 MTPA within an area of 100 ha. The proposal is for conversion of limestone from minor mineral to major mineral. Environmental clearance for (minor mineral) limestone for production capacity of 1.5 MTPA has been recommended by MoEF in minutes of 29<sup>th</sup> meeting of EAC held on 25<sup>th</sup> July, 2012. Letter of intent for conversion of limestone from minor mineral to major mineral has been issued vide DMG, Udaipur (Rajasthan) order dated 15.10.2012. The total water requirement for this Project will be 40 kld. This water will be obtained from nearby villages and also taken from mine sump. The mining lease area is Govt. as well as private land. Out of total area of 100 ha about 97.02 ha will be excavated and 16.94 ha will be backfilled and remaining will be converted into water reservoir. Luni river is at a distance of 8.5 kms. No National Park/Sanctuary is reportedly located within the 15 km radius of the mining lease area. Total cost of the Project is Rs. 15 Crores.

Based on the information furnished and presentation made by the project proponent and discussions held, it was informed that M/s Siddhi Vinayak Cement Pvt. Ltd. had submitted a proposal to MoEF for seeking TOR for renewal of mine lease and enhancement of production of limestone from 0.0146 million TPA to 1.5 million TPA. TOR was granted on 30th July, 2010 for limestone to be used as minor mineral. Accordingly, the PP after conducting public hearing had submitted EIA /

EMP report for seeking EC to MoEF. The proposal was discussed by EAC in July, 2012 wherein, the proposal was recommended for granting EC. While the file was being processed it was noticed that the PP has submitted another application for seeking TOR for the same capacity and in the same mine lease area for major minerals. The Committee was of the view that clarification needs to be obtained from the PP whether they intend to use the limestone mining as minor or major mineral and accordingly one of the application needs to be withdrawn. The Committee deferred the proposal for want of clarification.

**2.12 Color Granite Mine with production capacity of 864m<sup>3</sup>/annum of M/s Shri D.A. Bhaskar at Survey No. 152, Amudala Village, Palasamudram Mandal, Chittoor District, Andhra Pradesh (5.00 ha) (Consultant: Shri Sai Mansa Nature Tech (P) Limited)**

The proposal is for Color Granite Mine with production capacity of 864m<sup>3</sup>/annum at Amudala Village, Palasamudram Mandal, Chittoor District, Andhra Pradesh in an area of 5 ha. The Project site is located within 10 km radius of the interstate boundary of Tamil Nadu and Andhra Pradesh. The Mine Lease area is located around Latitude 13°11'08.5" N and Longitude 79°17'58.4" E. Entire lease area is falling under Government land. Mining will be carried out by opencast semi-mechanized method forming benches of 5 m height. No National Park/Sanctuary is located within 10 km radius of the Project site. Amudala Reserve Forest is at the distance of 0.1 km S. Water requirement for the project is 3 KLD. Water will be supplied from bore wells of the nearby area. The total cost of the Project is Rs. 70 Lakhs.

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

**2.13 Renewal of Captive lime stone mining lease of M/s JK Lakshmi Cement Ltd. with production capacity of 4.8 MTPA at Village Semaria, Ghikuria and Nadini Kundani, Tehsil Dhamadha, District Durg, Chhattisgarh (267.695 ha) (Consultant: J.M. Environet Pvt. Ltd)**

The proposal is for renewal of Captive lime stone mining lease with production capacity of 4.8 MTPA at Village Semaria, Ghikuria and Nadini Kundani, Tehsil Dhamadha, District Durg, Chhattisgarh. The last Environmental Clearance has been obtained from MoEF vide reference No. J-11015/1170/2007-IA-II(M) dated 13<sup>th</sup> May 2009 and amendment dated 27<sup>th</sup> February 2010. The said lime stone mine is still virgin as the integrated Cement Plant is under construction and yet to be commissioned. The likely commissioning of the plant is March, 2014. However the mining lease expiry shall be due barely four months thereafter. The water requirement for the project is 80 KLD, which will be sourced from Shivnath river and mine sump. State Government reinstated the mining lease in favour of JK Lakshmi Cement Ltd. vide letter dated 12.09.2008. No National Park/Sanctuary is reportedly located within 10 Km radius of the mine lease area. The mining lease area comprises 226.595 ha private land and 41.1 ha Government land. Shivnath river is at a distance of 2 Km. The capital cost of the project is Rs. 109 Crores.

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

**2.14 Serka Serangdag Bauxite Mine with proposed production capacity of 3,50,753 TPA of M/s Umesh Prasad Agarwal at Village Serka and**

**Serengdag, P.S. Bhishunpur and Ghagra District Gumla, Jharkhand (63.25 ha) (Consultant: Grass Roots Research and Creations (P) Ltd)-TOR**

The proposal is for Bauxite Mining with proposed production capacity of 3,50,753 TPA at Village Serka and Serengdag, P.S. Bhishunpur and Ghagra, District Gumla, Jharkhand in 63.25 ha. The lease was executed in the name of Shri Anil Kumar Jain S/o. Shri Gyanchand Jain in 29.04.1988 by Government of Bihar for 20 years (from 29.04.1988 to 28.04.2008). Lease was transferred to Shri Umesh Prasad Agarwal on 02.08.1995 by the permission of Government of Bihar vide order no. 3330 M dated 29.07.1995, for rest of the period. Renewal for mine lease was applied 1 year prior to the expiry of the lease on 25.04.2007 for next 20 years. The Mining Plan is approved vide letter no. RAN/GML/BX/MP-90/97-98 dated 28.01.2002. No National Park/Sanctuary is reportedly located within 10 km radius of the Mine lease area. Method of mining will be opencast mechanized. Water requirement will be 16 KLD. The required water will be obtained from natural spring which is 2 km away in SE direction. The estimated cost of the Project is Rs. 2.0 Crores. The expected life of the mine is 11 years. This is a violation case as mine continued to operate without obtaining prior environmental clearance. The mine has stopped working w.e.f. 18.6.2012. 3.37 ha of forest area is proposed to be surrendered.

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

**2.15 Janwa Silica Sand Mine of M/s Munshi Ram Chawla with production capacity of 25,000 TPA at Village Janwa, Tehsil Bara, District Allahabad, Uttar Pradesh (14.57 ha) (Consultant: Grass Roots Research and Creation India (P) Ltd.) -TOR**

Janwa Silica mine is situated near Village Janwa, Tehsil Bara, District Allahabad, Uttar Pradesh over an area of 14.57 ha. The Mining Lease area is located within 10 km radius of the interstate boundary of the Uttar Pradesh and Madhya Pradesh. No National Park/W.L. Sanctuary is reportedly located within 10 km radius of the Project site. Janwa Reserve Forest is adjacent to the ML area. The mining lease over an area of 14.57 ha was granted to Shri Munshi Ram Chawla, for a period of 5 years from 11.09.1978 to 19.09.1983. Further on the request of lessee, the period of lease was extended for next 10 years i.e. 11.09.83 to 10.09.1993. First renewal of mining lease was made for a period of 20 years i.e. 11.09.1993 to 10.09.2013. The Project has been proposed for environmental clearance for the second renewal of mine lease period for next 20 years i.e. 11.09.2013 to 10.09.2033, which was applied for on 03.09.2012. The proposed rate of production is 25,000 TPA of silica sand. Manual method of mining is proposed in the lease area. Total water requirement is 8.57 KLD. It is proposed to obtain the water from dug well/bore well and water collected in the mine pit. The estimated cost of the Project is Rs. 25 Lakhs. The expected life of the mine is 42 years.

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

**2.16 Sand/Moram Mining Project with production capacity of 16,667 Tonnes/annum, of M/s Ram Gopal at Khasra/arazi no.756, lot no. 01,**

**Village-Sindhuria, Tehsil Robertsganj, District - Sonebhadra, Uttar Pradesh (14.17 ha)-TOR**

The proposal was **rejected** on the grounds that the project site is stated in writing to be located at a distance of 0.5 km from Kaimur Wildlife Sanctuary. During the meeting project proponent informed that the distance has been wrongly mentioned and the actual distance is 3.5 km from Kaimur Wildlife Sanctuary. The Committee was of the view that the aforesaid claim needs to be authenticated from Wildlife Warden of the State Govt. before the Proposal is considered afresh.

**2.17 Sand Mining Project of M/s Shri Vijay Kumar at Village Sindhuria, District Sonebhadra, Uttra Pradesh (14.17 ha).**

The proposal was **rejected** on the grounds that the project site is stated in writing to be located at a distance of 0.5 km from Kaimur Wildlife Sanctuary. During the meeting project proponent informed that the distance has been wrongly mentioned and the actual distance is 3.5 km from Kaimur Wildlife Sanctuary. The Committee was of the view that the aforesaid claim needs to be authenticated from Wildlife Warden of the State Govt. before the Proposal is considered afresh.

**2.18 Enhancement of Diken Laterite Mine production capacity from 8,683 MTPA to 1,50,000 MTPA of M/s Pawan Minerals at Village Diken, Tehsil Jawad, District Neemuch, Madhya Pradesh (10.00 ha) (Consultant: Apex Mintech Consultants)-TOR**

This project is for mining of mineral Laterite, [Khasra no. 4336], near village Diken, Tehsil Jawad and District Neemuch (M.P.) over an area of 10.00 ha of M/s. Pawan Minerals (Prop. Shri Bal Krishna Soni). The Environment Clearance is required for enhancement of production from 8,683 MTPA to 1,50,000 MTPA of Laterite. The lease was originally granted for a period of 20 years w.e.f. 24.09.1998 to ~~and~~ 23.09.2018. Mining Scheme & Progressive Mine Closure Plan has been submitted to Regional Controller of Mines, Indian Bureau of Mines, Nagpur on dated 12.3.2012 for approval. Diken Laterite mining lease having an area of 10.0 ha falls in G.T. Sheet No. 45 P/2 between the Latitude 24°41'18.2" to 24°41'25.8" N and Longitudes 75°07'8.8" to 75°07'23.8"E. No National Park/Sanctuary is reportedly located within 10 km radius of the Project site. Mining will be carried out by opencast semi mechanized method. The proposed project is located within 10km from Inter State Boundary of Rajasthan & Madhya Pradesh hence this project falls in 'A' category. The water required (10 kld) at the mine for drinking and domestic purposes is being obtained from a tube / dug well located near the M.L. area. The water for other purposes will be obtained from the sump developed in mine. The waste will be dumped on barren land as approved in the Mining Scheme. Retaining wall will be made on the bottom side to prevent spreading of the waste material. There is no hutment in the lease area. Reportedly, no human settlement is required to be displaced from the Project area, hence no R&R is applicable. The cost of the Project is Rs. 50 Lakhs. This is a violation case as the mine continued to operate from 1998-2006 without obtaining prior Environmental Clearance.

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

**2.19 Expansion of Kirari Limestone mine of M/s Lafarge India Pvt. Ltd. from 0.36 MTPA to 0.72 MTPA at Kirari & Chorbhatti Villages,**

**Akaltara Tehsil, Janjgir-Champa District, Chhattisgarh State (167.048 ha) (Consultant: Anacon Labs)-TOR**

This is a proposed expansion project, environmental clearance for excavating 0.36 MTPA (existing capacity) in 167.048 ha was accorded for Phase I from MoEF vide letter No. J11015/23/2002-IA,II(M) dated 09.12.2003. The proposed Phase II expansion is planned to enhance production of Kirari Limestone Mines (from 0.36 MTPA to 0.72 MTPA) within the existing limestone mine lease of 167.048 ha located in Kirari and Charbhatti Villages, Janjgir Tehsil, Janjgir Champa District. The proposed project is the captive Limestone mines of Arasmeta Cement Plant of Lafarge India Private Limited. The total area is 167.048 ha is already sanctioned mine lease area. The present land use is industrial land. Mining will be done within the lease area by opencast mechanized method to enhance the production. The Government of Chhattisgarh has allotted the proposed mine lease for 20 years. Originally lease was granted to M/s Raymond Ltd, Cement Division as per order no-3-133/95/12/2 dt. 19/4/2000. This has been transferred to M/s Lafarge India Pvt. Ltd, on 17th Jan 2001 from Raymond's Ltd. No forest area is involved in the project site. No Reserve Forest exists within 10 Km radius the site. Reportedly, there are no National Parks, Wild Life Sanctuaries, Eco- sensitive areas within 10 km of the study area. The total water requirement will be about 55 KLD. This will be supplied through bore well. Total cost of the Project is Rs. 510 Lakhs.

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

**2.20 Enhancement of limestone production quantity from 0.6 MTPA to 1.6 MTPA in the existing Mangrol Tilakhera Limestone Mining Project of M/s JK Cement Ltd. located in Village Mangrol, Tehsil Nimbahera, District Chittorgarh, Rajasthan (299.20 ha) (Consultant: Enkay Enviro Services Pvt. Ltd.)-EC**

The proposal is for enhancement of production of limestone from 0.6million TPA to 1.6million TPA. The earlier environmental clearance for 0.6million TPA was granted in May, 2005 involving 299.20ha. The proposal for prescribing TORs was considered by the Expert Appraisal Committee in its meeting held during 28-30<sup>th</sup> November, 2011. MoEF had prescribed TORs to the Project involving 293.2ha vide letter No. J-11015/25/2011-IA.II(M) dated 28<sup>th</sup> December, 2011.

As per the documents provided, it was informed by the PP that mine lease area is 299.20ha. No forestland is involved; 34ha grazing land is included in the project. This is captive mining for the linked cement plant which has waste heat recovery boiler and captive power plant adjacent to the mine. The proponent stated that separate environmental clearance is being obtained for different industrial activities. Mine working will be opencast mechanized. Life of mine is 15 years. Water requirement for the project is 50 kld. It is an interstate boundary proposal with Madhya Pradesh at a distance of 9 km.

The Committee was of the view that there is a need for the PP to clarify the discrepancy in the earlier EC issued and subsequent TOR, specially with respect to the mine lease area. Further, the Committee was also of the view that following additional information/clarifications need to be submitted by PP:

- (i) The different lease area mentioned in earlier EC and present TORs. As prior environmental clearance for 0.6 million TPA was granted in May, 2005 for 299.20ha, however, the TORs for enhancement was prescribed for 293.2ha.

- (ii) The Reason why the PP has not requested for the amendment of mine lease area in the prescribed TOR.
- (iii) Action plan on the issues raised in the Compliance report of Regional Office of MoEF.
- (iv) Action plan with budgetary provisions to be provided for issues raised in the Public Hearing.

Based on the documents submitted and discussion held, the Committee decided to **defer** the proposal and be brought back to the Committee after the information is submitted.

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

The proposal is for underground Lawa Gold Ore Mining with proposed production of 150 TPD (45000 Tonnes /Annum ROM Gold Ore) & Beneficiation of 150 TPD gold ore by M/s Manmohan Mineral Industries Pvt. Ltd., located at village Lawa, Nimdih Block, Saraikela Kharsawan District, Jharkhand. The Latitude and Longitude of the site is 23° 01' 28.3974" N to 23° 01' 53.2398" N and 86° 03' 44.3539" E to 86° 04' 28.8401" E.

The proposal was considered by the Expert Appraisal Committee in its meeting held during 25-27<sup>th</sup> May, 2011 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/71/2011-IA.II(M) dated 27<sup>th</sup> June, 2011. The proponent submitted its application for seeking environmental clearance after conducting public hearing to the Ministry on 4<sup>th</sup> February, 2013.

The project proponent made a presentation with regard to compliance of TOR for mining of gold ore with a capacity of 150 TPD and its beneficiation of the same capacity. The deposits are reported to be worked earlier by British Miners during pre-independence period. The mine lease area is 54.55 ha, which is a forestland. The Mining plan is approved by IBM vide Letter No. KOL/S & K/Gold/MP-755 dated 18.07.2011. It is reported that NOC under Forest Right Act, 2006 has been issued by the Divisional Forest Officer, Saraikela Forest Division dated 18.10.2011. Application for diversion of Forest Land has been submitted to State Forest Department, Ranchi. Forest clearance has not been obtained so far.

It is reported by the Project Proponent (PP) that the mine working will be underground using overhand stoping by cut and fill method, which will be initially, worked using the existing old openings. The gold bearing ore will be treated in a beneficiation plant with gravity separation method, floatation and carbon in pulp method (CIP) for recovering gold. Life of the mine is 16 years. The beneficiation plant is within the lease area. The water requirement is estimated as 80 kld, which will be obtained from sump water. The cost of the project is Rs 3.59 crore.

It is reported by the PP that Total Geological Reserves are about 7,20,684 Tonnes with average grade of 2.3 g/t. The level interval will be 30m in all the

sections. In all the three sections, main adits will serve the purpose of material handling, ventilation and also as travelling roadway for miners. The main drives, cross cuts and winzes will be 2.0m x 2.0m. The blasted muck will be taken through ore chutes only. 2.0m x 2.0m winze/raise will be developed at an angle of 50° following the ore body to form stope blocks of 42.0m x 30.0m x 2.0m. The stoping width will depend upon assay results & the geological data (considering the cut-off grade at 1.6 gm/tonne). For roof and side supports, 2.0 m x 22mm rock bolts with spacing of 1.5m will be used. Ore from the development faces & stopes will be loaded into mine tubs manually and will be trammed up to the nearest hoist/winch. From there it will be taken to the upper adit level by a bucket hoist. At the adit level it will again be loaded in mine tubs through a chute and trammed upto the surface and finally unloaded into the tipper through the chute.

The proponent described the gold beneficiation process and mentioned that the ROM from the mine will be crushed in two stages for getting (-)10 mm size material. Crushed ore would be ground up to 75% passing (-)200 mesh in ball mills. Slurry would be passed through centrifugal concentrator, (imported from Canada). The output from the concentrator will be passed on blanket tables. Gravity circuit would be capable of extracting 55 to 60% of content of gold in the ore. Slurry from gravity concentration section will be passed to the floatation circuit to recover the balance gold and any associated (economic) metal by-products. Slurry from Floatation circuit will be taken to leaching tanks. In leaching tanks, dilute cyanide solution will be added. pH of the solution will be maintained at 10 to 10.5 by adding lime. Carbon in Pulp (CIP) process will be practiced for adsorption of gold in the leachate. Loaded carbon will be subjected to acid wash and neutralisation. The washed carbon is fed in to elution column and hot elutes (0.3% NaCN & 1.5% NaOH) will be circulated through electro winning cells. Elute from the elution tank will be passed through electro winning cells. The gold deposited on the steel wool cathode is dark brown in colour and is in the form of fine sludge and it accumulates at the bottom of the cell. The sludge is dried and smelted to produce gold. ~63% Tailings will be used for backfilling of mined out stopes and remaining will be stacked in surface tailing dump.

It was reported by the PP, that solid waste generation will be 5900 tonne during mining plan period, tailings is 0.552 million tonnes (0.345 Mm<sup>3</sup>), Backfilling of stopes is 0.3465 million tonnes, tailing dump is 0.2054 million tonnes (0.128 Mm<sup>3</sup>), and Tailing dump location is 0.5 km NE of ML area (1.62 Ha).

It was reported by the PP that the Project site is located 8km from the Dalma Wildlife Sanctuary, Dalma Eco-sensitive Zone is at 7.5 km S, Ajodhya Hill Forest is at 9.5 km N; Protected Forest is at a distance of 3.6 km SE; Protected forest at 4.5 km SSW and Protected Forest is at 7.6 km S. The Eco sensitive area i.e. Chandil Reservoir is reported at 1.5 km towards South, Sanka River is 1.3 km N, Bamni River is 5.8 km SE. As the project is located in West Singhbhum District, an identified severely polluted area, comments of SPCB were sought which were received vide letter dated 26.5.2011, wherein it was reported that all the parameters of ambient air, noise level has been found to be within the prescribed limit. This was duly taken on record and considered by the Committee.

In accordance to the TORs issued by MoEF the Proponent has submitted the EIA/EMP Report to the Ministry vide letter dated 19<sup>th</sup> January, 2013. Baseline studies were carried out during post monsoon season 2011. All the parameters for water and air quality were reported to be within permissible limits.

The Public Hearing for the Proposed Project was conducted at Purana Lawa Village on 12.05.2012. The PH was chaired by Shri Bishma Kumar, Project Director (Scheduled Castes and Tribes Development Collector, General Division, Saraikela Kharaswan District). 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 inter-alia, included that there should not be any discharge of effluent from the mine lease area, preventing the silt from ML area flowing into the agricultural lands, air pollution control measures to be adopted, raising of plantation, sprinkling of water etc. As per the villager's requirements, it was informed by the PP that they would take care of local employment; health issues, providing education, and assistance in vocational training etc. 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.

Based on the information submitted, presentation made by the proponent and discussions held the Committee **recommended the proposal for environmental clearance** subject to the submission of Wildlife Conservation plan duly approved from the State Govt. The Committee also recommended to include the additional specific conditions- (i) Follow up the International Cyanide Management Code (ICMC) for the Manufacture, Transport, and Use of Cyanide in the Production of Gold for Safe-guards for handling of cyanide (ii) Training to workers for handling of cyanide, (iii) Names of trained personal to be displayed for the rescue operation, (iv) Monitoring of the management of Cyanide on a regular basis by the Regional Office, MoEF, (v) Monitoring of pH by Piezoelectric system as per ICMC, (vi) There shall not be any contamination by cyanide during beneficiation process, (vii) No effluent shall be discharged outside the mine lease area.

## **2.22 Mining Project of Limestone Mine (Minor Mineral) with proposed production capacity of 10,00,000 TPA of limestone and Installation of crusher capacity 2,000 TPD of M/s Sudha Parihar near Village-Rundiya, Tehsil-Sojat, District Pali, Rajasthan (917.52 ha)- EC**

The proposal was considered by the Expert Appraisal Committee in its meeting held during 19-21<sup>st</sup> January, 2011 for prescribing TORs. MoEF issued TORs vide letter No. J-11015/289/2010-IA.II(M) dated 14<sup>th</sup> February, 2011. The proposal is for renewal of mine lease which fell due in 1995 and enhancement of production of limestone (minor mineral) from 36,025 TPA to 1.0 million TPA and installation of a crusher. Mine lease area is 917.52 ha. It was noted that the mine is located at a distance of 48 km from Pali, the identified critically polluted area. No forestland is involved. In accordance to the TORs the Proponent submitted an EIA/EMP Report to the MoEF vide letter dated 12.02.2013.

The Committee observed that the most of the Members of the Committee have not received the documents. Based on this, the Committee **deferred** the project and mentioned that the project proponent should submit the documents timely for the Committee to examine.

## **2.23 Iron Ore Beneficiation Plant with pelletisation plant of M/s Divyajyothi Steels Ltd. at village Taranagar, Sandur Taluk, District Bellary, Karnataka (Consultant: Global Environment and Mining Services, Hospet)-EC**

The proposal was considered in the Expert Appraisal Committee in its meeting held during May 25-27<sup>th</sup>, 2011; however, due to lack of information with regard to site coordinates, the consideration of the proposal was deferred. Then the proposal was considered by the Expert Appraisal Committee in its meeting held during 21-23<sup>rd</sup> June, 2011 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter No. J-11015/72/2011-IA.II(M) dated 29<sup>th</sup> July, 2011. In accordance to the TORs, the Proponent submitted an EIA/EMP Report to the Ministry vide letter dated 28<sup>th</sup> February, 2013.

The proposal is for setting up of an iron ore Beneficiation Plant with a throughput capacity of 0.6 million TPA along with pelletization plant of 0.4 million TPA. The land requirement for the project is 20.48 ha. No forestland is involved. Narihalla dam is reported to be at 3.5 km. It was stated by the project proponent that the filter press technology will be adopted. It was also stated that tails cake will be stacked in tailing dump area and used in brick manufacturing. The site coordinates are 15° 07' 20.2" – 15° 07' 45.2" N and 76° 38' 01.8" – 76° 38' 34.8" E.

Baseline data has been collected during December 2011 to February, 2012. Public Hearing was held at the Project site at Tarangara Village on 15.12.2012 and chaired by Additional Deputy Commissioner, Bellary. Issues raised during the Public Hearing include dust pollution, crop loss due to dust, dust compensation of Rs. 3000/ per acre to the surrounding 10 km agricultural land, employment to local people, regular employment to locals rather than contract employment etc. It is reported by the proponent that there is no court case/litigation pending against the project.

Based on the presentation made, discussions held and information submitted the Committee desired the proponent to submit the following information:

- 1). Questionnaire to be submitted as per EIA/EMP;
- 2). Details of Land use pattern to be submitted;
- 3). Source of raw material / storage / final transportation of beneficiated ore to be submitted. In flow and out flow details are also to be submitted;
- 4). Details of waste management to be submitted;
- 5). Action plan with budgetary provisions on points raised during public hearing to be submitted;
- 6). Date wise Ambient Air Quality Data to be provided;
- 7). The Compliance of TORs to be submitted.
- 8). Details of disposal and storage of filter cakes to be provided.
- 9). Details of transport of ore to be provided.

The Committee decided that after the proponent collects and collates the above mentioned information and includes all the above mentioned details in the revised EIA/EMP Report, the proposal may be **brought back to the Committee** for further consideration.

#### **2.24 Graphite & Kyanite Mine of M/s Karnataka Mining Industries located at Village Shantipura, Tehsil H. D. Kote, District Mysore, Karnataka (53.01 ha)-EC Reconsideration**

The Proposal was **deferred** on the request of Project Proponent.

**2.25 Graphite & Kyanite Mine with proposed production capacity of 10.000 Tonnes/annum M/s Karnataka mining Industries at Village Hunagahalli, Taluka- Heggadaevanakote, Distt.-Mysore, Karnataka (60.7 ha). (Consultant: Ecomen Laboratories Pvt. Ltd.)– EC**

The Proposal was **deferred** on the request of Project Proponent.

**2.26 Color Granite Quarry of M/s Sanjith Aswath with production capacity of 9,000 m<sup>3</sup>/annum located at Sy. No. 639, Mustikovila Village, C.K. Pally Mandal, Ananthpur District, Andhra Pradesh (5.705 ha) (Consultants: My Vision Labs, Hyderabad)–TOR**

The proposed Color Granite Quarry of M/s Sanjith Aswath with production capacity of 9,000 m<sup>3</sup>/annum is located at Sy. No. 639, Mustikovila Village, C.K. Pally Mandal, Ananthpur District, Andhra Pradesh. The proposed project is categorized under Category 'A' Project because of interstate boundary of Andhra Pradesh and Karnataka at the distance of 1.5 km. The geographical location of the proposed project is between Latitude 14°14'08.70" to 14°14'17.9"N and Longitude 77°30'05.40" to 77°30'19.10"E. The proposed mine lease was allotted to M/s Shri Sanjith Aswath by the Department of Mines and Geology, Govt. of Andhra Pradesh vide ref No. 424/R4-1/2011, dated 06.10.2012. Approval of mining plan for the proposed mine lease was obtained from Department of Mines and Geology, Govt. of Andhra Pradesh vide ref No. 6620/MP-ATP/2012, dated 7.12.2012. The total mine lease area is demarcated as Government non-agricultural land. Life of the mine is 7 years.

The project proponent reported that there are no forest land or water bodies within the project sites and the site is totally Government waste land. No National Park/Sanctuary is located within 10 km radius of the Project site. No court case/litigation is pending against the project. The mining will be done in the lease area by opencast semi-mechanised method. About 6m<sup>3</sup>/day of water is required which will be sourced from storm water or local water supply. The project cost is Rs 50 lakhs.

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

**2.27 Barytes Beneficiation Plant with a throughput capacity of 5.0 LTPA with output of 3.0 LTPA of M/s Gimpex A P Barytes Beneficiation Pvt. Ltd., at village Korlakunta, Mandal Obulavaripalli, YSR Kadapa District, Andhra Pradesh (40.47 ha)-(Consultant: Bhagavathi Ana Labs Ltd.)-TOR**

The proposed Barytes Beneficiation Plant with a throughput capacity of 5.0 LTPA with output of 3.0 LTPA of M/s Gimpex A P Barytes Beneficiation Pvt. Ltd. is located at village Korlakunta, Mandal Obulavaripalli, YSR Kadapa District, Andhra Pradesh (40.47 ha). The proposed project is categorized under Category 'A' Project because of mineral beneficiation is greater than 0.1 MTPA mineral through put as per 2(b) of Schedule of the EIA Notification, 2006. The geographical coordinates of the project site are (i) 14° 1' 31.474" N, 79° 17' 37.607" E (ii) 14° 1' 18.647" N, 79° 18' 8.961" E (iii) 14° 1' 28.334" N, 79° 18' 12.323" E and (iv) 14° 1' 41.929" N, 79° 17' 25.265" E. The project proponent reported that there is no forest land within

the project site (which is Government barren land) and that there are no National Park/Sanctuary located within 10 km radius of the Project site.

The project proponent proposes to set up 5.0 LTPA Baryte Beneficiation Plant for up-gradation of low grade lump Barytes (75.72% BaSO<sub>4</sub>) to Usable Grade Baryte (92.19% BaSO<sub>4</sub>) at Mangampet, AP. The ROM feed to the Beneficiation plant will be over burden mixture (Waste) grade Baryte lumps purchased from Andhra Pradesh Mineral Development Corporation (APMDC). The project objective will be conversion of 5.0 LTPA of waste Baryte lumps into 3.0 LTPA of usable grade Baryte wealth thereby contributing to the mineral availability of country. The beneficiation process involves Crushing & Screening, Jigging Circuit, Spiralling circuit and Flotation Circuit. It is reported that about 2.0 Lakh tonnes of tail cakes will be generated per annum and proposed to dump these tail cakes in tail dump area which consists of 45% BaSO<sub>4</sub>. The tails are proposed to be utilized in the subsequent years. It is reported that 45 m<sup>3</sup>/hr of water is required which will be sourced from accumulated pit water and bore well. The project cost is Rs 80 crores. The project proponent has also reported that there is a Court case vide W.P.10367 of 2012 is pending in the Hon'ble High Court of Andhra Pradesh.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TOR condition (i) details of disposal of filter cake containing Barium sulphate, and (ii) details of disposal methods of Barium sulphate.

**2.28 Manual open cast Literite Mine for production of 95782.33 MTPA of M/s N.C.H.K. Minerals at Village Thattepalli, District Rangareddy, Andhra Pradesh (8.097 ha) – (Consultant: TEAM Labs and Consultants, Hyderabad)- TOR**

The Proposal was **deferred** on the request of Project Proponent.

**2.29 Sand Mining Project with production capacity of 16,667 TPA of M/s Shri Paras at Village Kargara, Tehsil Robertsganj, District Sonebhadra, Uttar Pradesh (12.14 ha)-TOR**

The Proposal was **deferred** on the request of Project Proponent.

**2.30 Black Granite Mine with production capacity of 2699 m<sup>3</sup>/annum of M/s Tirumala Granites located in Sector 217 & 218 Veerasettipalli (B) Reserve Forest, Yadamarri Mandal, Chittoor District, Andhra Pradesh (6.1 ha) (Consultant: Sri Sai Manasa Nature Tech (P) Ltd)–TOR**

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

**2.31 Paldev White Clay Mine of M/s Shri Sandeep Kumar Bansal with proposed production capacity of 25,000 TPA of White Clay at Village Paldev, Tehsil Majhgawan, District Satna, Madhya Pradesh (16.187 ha) (Consultant: Grass Roots Research and Creations (P) Ltd.)–TOR**

The Proposal is for mining of white clay mineral with production capacity of 25,000 TPA at Village Paldev. The methods of mining other than fully mechanized

method without drilling and blasting. The transport from mine head to destination will be done by trucks.

The mine lease area is non-forest barren Govt. land. The ML area is located between Latitude 25°07'34" to 25°07'55"N to Longitude 80°47'46" to 80°48' 05"E. The proposed project is categorized under Category 'A' Project because of interstate boundary of Uttar Pradesh and Madhya Pradesh adjoining to mine lease area within 10 km radius. The Mining Lease has been executed in favour of M/s Bansal and Company, Jaitwara for 30 years period w.e.f. 03.12.2004 to 02.12.2034. The ML area has been transferred to the present lessee vide State Govt. order no. F3-3/2001/12/1 Bhopal dated 31.03.2011. Total water requirement is 16m<sup>3</sup>/day. Water will be sourced from dug wells/bore wells and mine sump. The estimated Project cost is Rs. 1 crore. Life of the mine is 14 years.

The project proponent reported that there is no forest land within the project site and the site is Government waste land. No National Park/Sanctuary/ Tiger – Elephant Reserve as per Wild Life (Protection) Act, 1972 is located within 10 km radius of the Project site. It was reported that there is no court case against the project.

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

### **2.32 Composting Sand Mining with production capacity of 1.00 Million cubic meters per year on Adjoy River Bed of M/s Eastern Coalfields Ltd. at Tehsil Salanpur, Barabani, Jamuria, Pandveshwar, District Burdwan and Birbhum, West Bengal (414.36 ha)- TOR**

The project proponent vide letter no. ECL/GM (ENV)/2013-14/139 dated 15.4.2013 have **withdrawn** the application for obtaining TORs. The Project proponent has cited in the letter that they will re-submit the application after obtaining certain changes in the composite plans for sand mining in the river bed. The Committee discussed the issue and allowed the PP to submit the application as a fresh proposal(s) to the Ministry after the said changes in their composite plan.

### **2.33 Composting Sand Mining with production capacity of 1.00 Million cubic meters per year on Damodar river Bed of M/s Eastern Coalfields Ltd. at District Burdwan and Birbhum, West Bengal (86.58 ha) - TOR**

The project proponent vide letter no. ECL/GM (ENV)/2013-14/139 dated 15.4.2013 have **withdrawn** the application for obtaining TORs. The Project proponent has cited in the letter that they will re-submit the application after obtaining certain changes in the composite plans for sand mining in the river bed. The Committee discussed the issue and allowed the PP to submit the application as a fresh proposal(s) to the Ministry after the said changes in their composite plan.

### **2.34 Mogla Limestone Mine of JSW Cements Ltd. for 10.0 MTPA Limestone capacity at Mogla Village, Chittapur Taluka, Gulbarga District, Kanataka (404.29 ha) (Consultant: Bhagavathi Ana Labs Ltd.)-TOR**

The proposed project of Mogla Limestone Mine of M/s JSW Cements Ltd. is at Mogla Village, Chittapur Taluka, Gulbarga District, Kanataka. M/s JSW Cements has

proposed to set up a 7.0 MTPA cement plant and 3.0 MTPA Clinkers. IBM has approved the mine plan vide letter no. KNT/GLB/Lst-258-SZ/002 dated 28.12.2012. Govt. of Karnataka has recommended a limestone deposit over an extent of 404.29 ha vide letter no. DMG:MLS:1642AML2008:11-12/5107 dated 21<sup>st</sup> July, 2011. The mine is planned for maximum production of 4.51 MTPA of limestone by fully mechanized open cast mining method.

It is reported by the Project Proponent that No forest land is involved. Kagna River is at the distance of 1.6 km. No National Park/Sanctuary is located within 10 km radius of the Project site. The mine lease area is waste land (patta and revenue). Water requirement is 300 m<sup>3</sup>/day which will be obtained from Kagna river and harvesting rainwater. Life of the mine is 57 years. The cost of the project is Rs. 2036 Crores including integrated cement Plant. It is an interlinked project and the project proponent has also submitted the application to the industry sector of MoEF for prescribing TOR. The project proponent has reported that there is no court case against the project.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs condition (i) Cumulative effect of other mines located nearby areas of the proposed site, and (ii) details of precautions to be undertaken for preservation of water bodies.

**2.35 Silica Sand and Agate Mine of M/s All India Minerals with production capacity of 3,00,000 MTPA/annum Silica Sand and 1,000 MTPA of Agate at Village Bhimpur, Taluka Jhagadia, District Bharuch, Gujarat (185.51 ha) (Consultant: Perfect Enviro Solutions Pvt. Ltd.)-TOR**

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

**2.36 Bitma Laterite & Ochre Deposit of Smt. Neetu Singh with production capacity of 1,00,000 TPA of laterite & Ochre in Village Birsinghpur, District-Satna, State-Madhya Pradesh (19.002 ha)(Consultant: Grass Roots Research & Creation India (P) Ltd.)-TOR**

The proposed project is categorized under Category 'A' Project because of interstate boundary of Uttar Pradesh and Madhya Pradesh adjoining to mine lease area within 10 km radius. The proposal is for production of 1,00,000 TPA of laterite & Ochre in 19.002 ha partially Govt. and partially private non-forest and barren land. The mining plan is approved on 11.01.2012. The mining lease has been granted by State Government vide letter No. 3-18/2011/12-1 dated 6.2.2013 in favor of Smt Neetu Singh for 30 years.

The method of mining will be opencast and fully mechanized. Water required for drinking and operations is 29 KLD, which will be sourced from bore wells within the core zone. The project proponent has reported that bauxite occurs as pebble, boulders and granules within lateritic matrix up to maximum thickness of about 1.5m. Open mixed jungle is there at a distance of 4.2 km East. No National Park/Sanctuary is located within 10 km radius of the ML area. Mining will not intersect groundwater table. About 1700 MT/month of OB and waste will be backfilled in the worked out mine pit. Cost of the Project is Rs. 1 Crore. Life of the mine is 13 years. It is reported by the project proponent that there is no litigation or court case pending against the project.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs condition (i) details of management plan that the other minerals like bauxite etc. shall be stacked separately for conservation of minerals and (ii) Detailed plans that the bauxite is not disturbed during the mining operation for laterite & ochre.

**2.37 Kilapaluvur Limestone Mine of M/s Chettinad Cement Corporation Ltd. at Village Karuppur Senapathy and Kilapaluvur, District – Ariyalpur, T.N. (26.145 ha) (Consultants: Environmental System Consultants & Ambient Lab Solutions Pvt. Ltd., Chennai)-TOR**

The proposed project is categorized under Category 'A' Project because of boundary of Karaivetti Bird Sanctuary is at a distance of 8 KM in southwest direction. It is reported by the Project Proponent that No forest land is involved and that no National Park/Biosphere Reserves/Elephant Corridor is located within 10 km radius of the Project site.

Chettinad Cement is operating its Cement Plants at Puliur in Karur District, Karikkali in Dingigul District, Kilapaluvur (Keelapalur) in Ariyalur District of Tamil Nadu and Kallur in Gulbarga District of Karnataka. The Kilapaluvur Cement Plant near Ariyalur is in operation since 2009 and the existing capacity of the Cement plant is 5.5 MTPA, for which the Plant has been accorded the Environmental Clearances by the Ministry of Environment and forests (MoEF). The Plant requires limestone of about 5.5 MTPA. Presently, the limestone requirement of Kilapaluvur Plant is being met from Pudupalayam, Alanthurailarkattalai, Aminabad, Unjini, Arungal and Olaipadi Limestone Mines. These 6 mine blocks are supplying about 4.8 MPTA limestones. In order to meet the additional limestone demand, Chettinad Cement has proposed to open up the new Mine Block in Ariyalur area. Karuppur Limestone Mine is one of the new Leases (< 50 ha) proposed by CCCL for the captive use of Kilapaluvur Cement Plant. It is a new Mine over an extent of 26.145 ha. The entire lease area falls in Company owned Patta Lands (25.20 ha) and Govt. Poromboke lands (0.495 ha) and no forests land is involved.

The Project Proponent proposed to operate the mine for production of 0.76 MTPA viz. limestone (6,57,112 TPA) and Marl (1,01,405 TPA) @ 2,530 Tons / day. Mining will commence from 73 m RL and the ultimate pit limit will be 58 m RL (15 m below ground level). Out of the ML area of 26.145 ha, the total excavated area will be around 20.22 ha at the end of mining operations. It is proposed to back fill 5.85 ha and the remaining mined out area of 14.37 ha will be converted as an artificial ponds/reservoir to harvest the rainwater.

It is reported that the domestic sewage generation is 4.5 cum/day which would be treated in a septic tank followed by dispersion trench. The overburden is mainly top soil and soil mixed with Kankar. During the Plant period of the mine 4,01,817 tons of top soil /over burden will be generated which will be stacked in the a dump for backfilling in future. The Mine require about 25 cubic meter per day of raw water which would be met out from own bore well at the mine area and also from mine pit seepage water. It is reported that Project cost is 2.70 crores. Life of mine is 7 years. It was reported that there is no court case pending against the project.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs condition (i) Details of nearby mines and its Cumulative effect and it's management plan and (ii) Details of cumulative impact due to transportation of the mineral by the road.

**2.38 Greenfield Cement Plant (2.5 MTPA clinker, 2.5 MTPA cement, 4.0 MTPA limestone) of M/s My Home Industries Ltd. at Gamalpadu Village along with Captive Limestone Mines at Gamalpadu Village, Dachepalli Mandal, Guntur District, Andhra Pradesh (374.58 ha) (Consultant: B.S. Envi-Tech (P) Ltd.-TOR**

The Proposal was **deferred** on the request of Project Proponent.

**2.39 Pyroxenite mining with production capacity of 0.060 MTPA of M/s Banwarilal Newatia at Village Gopalpur, Dist-Keonjhar, Odisha(49.22 ha) (Consultant: Vision Tek Consultancy Services Pvt. Ltd.)-TOR**

The mining lease of Gopalpur Asbestos and Pyroxenite mines was granted and executed on 26.06.1985 for a term of 20 years in favor of Sri Banwari Lal Newatia. Mining plan was prepared and approved by IBM vide letter no CAL/KJ/Asb & Pyx/MP-565 dated 27.10.1998 for the period of 5 years. Lessee has applied for renewal of mining lease before one year of expiry of the lease. The mining plan is being prepared for the year 2012-13 to 2016-17 under rule 24A of MCR 1960 to facilitate the renewal of mining lease as well as to comply with the violation pointed out under rule 13(1) by IBM vide letter no. T/MCDR/2/BBS-2011/3175 dated 10.01.2012 for non-submission of mining plan.

The ML area contains both forest (29.40 ha) and non-forest land (19.82 ha). The Kanjhari river flows through the ML area. Forest diversion proposal is submitted and is pending at DFO level. Method of mining will be opencast, fully mechanized. Water requirement will be 30 m<sup>3</sup>/day which will be obtained from tube well and river/nallah. Reportedly, there is no human settlement in the ML area and hence no R&R issues are involved. The life of the mine is 43 years. Capital cost of the Project is Rs. 2.00 Crores. It was reported that there is no court case pending against the project.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee suggested that revised Form-1 needs to be submitted and also suggested that additional TOR conditions, viz: (i) Details of management plan that the mining shall be strictly confined to pyroxenite only (which is reported to outcrop) and (ii) There shall not be any mining of Asbestos under any circumstances.

The Proposal was **deferred** as the revised Form 1 was not submitted by Project Proponent.

**2.40 Metabodeli Iron Ore Mining Project with production capacity of 0.20 MTPA of M/s Jayswal Neco Industries Ltd located at Pakhanjur, District Kanker, Chattisgarh (50.00 ha)-EC Reconsideration**

The Proposal was considered by the Expert Appraisal Committee in its meeting held during 3-4<sup>th</sup> February, 2009 for prescribing TOR. The TORs were

issued by MoEF vide letter No. J-11015/512/2008-IA.II(M) dated 25<sup>th</sup> February, 2009. As informed by the PP, the Proposal is for production of 0.20 MTPA iron ore from 50.00 ha mine lease area. The mine lease is located adjacent to another lease of the proponent measuring 25.0 ha, for which environmental clearance has already been obtained. The two leases will be amalgamated in future. The proposal is for iron ore mining for captive consumption for its Siltara Integrated Steel Plant located 250 kms away from the mine. Total lease area is forest land. Out of total lease area 40.00 ha will be excavated, an area of 5.00 ha will be kept for waste dump, 1.00 ha for infrastructure, 2.00 ha for roads etc. Method of mining will be semi-mechanised. The mineable reserve is 3.79 MT. Life of mine is 13 years. The iron ore presence is in highest contour of 540 m MSL and which continues upto contour level of 420 m MSL, hence the ore is continuous i.e. upto a contour level of 420 m. Ground water table is at the 390 m above MSL. There will be no groundwater intersection. Water requirement will be 80 KLD, which will be met from ground and surface water. As stated by PP, there is no National Park/Sanctuary located within 10 km radius of the Project site and also no relocation and rehabilitation of population will be involved. Cost of the Project is Rs. 7.5 Crores.

In accordance to the TOR issued by MoEF, the Proponent submitted an EIA/EMP Report to the Ministry vide letter No. JNIL/SPD/MINE/2010-150 dated 28.07.2010. The Proposal was considered by the Committee in its meeting held during 20-22 October, 2010 for environmental clearance. Based on the presentation made and discussions held Committee sought additional information as follows:

1. The BHQ area should not be used for dumping and accordingly the mine plan should be revised.
2. The Mine Plan/Life of the mine should be supported by adequate exploration/reserve estimates.
3. The EIA should be for the lease period/conceptual period.
4. Detailed biological studies should be carried out.
5. A plan for welfare of tribal population to be submitted.
6. Wildlife Conservation Plan should be provided.
7. Common facilities of the adjoining mine should be integrated in approved mine plan.
8. The impact of the mining on the river near ML area to be provided.
9. Necessary forest clearance should be obtained.

It was decided that the Proposal may be brought back after requisite information as above is submitted.

Vide letter No. JNIL/Mines/2011/28 dated 01.02.2011, the Proponent submitted Compliance Report on the additional information sought by the Committee in its meeting held during 20-22 October, 2010. The Proposal was further placed before the EAC in its meeting held during 25-27<sup>th</sup> April, 2011. The Proposal was deferred because the Proponent did not attend the meeting. It was informed by PP that with regard to Forest clearance the proposal vide letter No F-5-15/2010/10-2 dated 04.01.2013 from Department of Forest, State Govt of Chattisgarh has been forwarded to MoEF for necessary forest clearance.

During the meeting PP clarified/informed:

1. The BHQ area will not be used for dumping waste. The waste material/rejects generated in the mining operation will be back-filled in

the fully excavated float ore area. The mining plan has been revised and approved by IBM accordingly on 10-01-2012.

2. (i) Since the complete leasehold area falls in forest land, therefore minimum exploration has been done by the way prospecting to avoid damages to forest area. However, it is was proposed to drill 27 no. of boreholes and 11 no. of pits confirming to the requirements of UNFC classification as directed by Indian Bureau of Mines during the first year of operation itself.
3. EIA has been prepared for the entire lease period i.e 30 years.
4. Detailed report on the Biological survey and conservation plant prepared by Professor M. L. Naik was submitted.
5. A Tribal Development Plan is included in EIA/EMP report. The company has already taken up the Tribal Developmental Program under the CSR activities such as;
  - (a) ITI training – 24 Tribal Males
  - (b) Nursing Training – 10 Tribal Female
  - (c) Medical Check up and distribution of free medicines
  - (d) Income Generation Programs like bee keeping
  - (e) Road – 28 km
  - (f) Drinking water facility – 12 hand pumps in 5 villages
  - (g) Cultural and Sports programs
6. The Wildlife Conservation Plan prepared in consultation with DFO, West Bhanupratappur Division District Kanker Chhattisgarh has been incorporated in EIA report.
7. The common facilities such as explosive magazine, rest shelter, urinals, approach road, canteen etc. has been is proposed to be used by both the mines. The same has been incorporated in revised approved mining plan.
8. The impact of mining along with mitigating measures on drainages is incorporated in EIA report.
9. The State Govt. of Chattisgarh forwarded application to MoEF for necessary forest clearance.

Based on the information furnished, presentation made and discussions held, the Committee **recommended** the Project for environmental clearance subject to submission of the Wildlife Conservation Plan prepared by State Govt. and the following additional conditions: (i) The PP shall relocate the Over Burden dumping in the mine lease area based on the availability of reserves found on further exploration after the FC is granted. This is to ensure that O.B. is not dumped on mineral bearing area, (ii) Extra care for controlling of storm water shall be done, (iii) Paved drainage management and detailed water management plan shall be worked out before starting any mining activity.

#### **2.41 Enhancement of production from 0.96 MTPA to 5.26 MTPA Birmitrapur Limestone & Dolomite Mine of M/s Bisra Stone Lime Company Ltd. Panposh Sub Division, District Sundargarh, Odisha (793.966 ha)-EC Reconsideration**

The proposal was considered by the Expert Appraisal Committee in its meeting held during 26-28<sup>th</sup> July, 2010 for prescribing TORs. The proposal was earlier considered by the Expert Appraisal Committee during its meeting held on January 23-25, 2012 wherein the Committee had sought additional information/clarifications on various related issues. The proposal is for renewal of mine lease which fell due in March, 2000 and enhancement of production of

limestone to 2.83 million TPA and to 2.43 MTPA of dolomite. Mine is reported to be closed since 11.11.2011. TOR for this project was prescribed on 19.8.2010. Public hearing has been held on 21.9.2011. The mine lease area is 793.966 ha. No forestland is involved. No National Park / Sanctuary is reported within 10 km of the mine lease. The earlier environment clearance for 0.96 million TPA capacity of limestone was granted in August, 1994. Mine working will be opencast involving drilling and blasting. Water requirement is estimated as 160 kld, which will be partly (60 kld) met from mine water and partly (100 kld) from groundwater. The proponent have obtained permission from CGWA vide letter dated 12.10.2011 for drawl of 100 kld of groundwater. As per the post mine land use, plantation will be raised in an area of 38.82 ha. The baseline AAQ data showed the levels within permissible limit, however, it was observed that the entire study area has not been covered for AAQ monitoring. The modeling of the impact on air quality was also observed to be unsatisfactory. The issues raised during public hearing were also considered and discussed during the meeting. It was reported that there is no court case pending against the project. Cost of the Project is 3412 lakhs.

Based on the presentation made and discussions held, the Committee sought information on the following:-

- (i) Compliance of the earlier EC conditions should be provided along with supporting documents.
- (ii) An undertaking by the project proponent owning the documents and the data / information contained therein should be submitted.
- (iii) It was observed that there was no monitoring station beyond 3.8 km. Data should be collected by extending the network beyond 3.8 km so as to give a representative picture of the air quality in the study area.
- (iv) It may be clearly indicated whether the data collection and analysis has been carried out by one of the accredited labs.
- (v) The modelling carried out for assessment of impacts on air environment needs to be rechecked and results furnished.
- (vi) Noise levels needs to be rechecked and reconfirmed.
- (vii) Specific safeguard measures proposed during blasting should be detailed. Based on peak particulate velocity measurements, it may be shown whether the vibrations are within limit or otherwise.
- (viii) Details of the data on biological environment should be furnished and based on the same important wildlife habitats should be identified. The Wildlife Conservation Plan should flow from the baseline data so collected.
- (ix) Action plan to address the issues raised during public hearing along with time frame and financial allocation.

It was decided that the proposal may be brought back before the Committee for its further consideration after the requisite information as mentioned above has been submitted.

Based on the additional information/clarifications submitted by the proponent, the proposal was considered further in the Expert Appraisal Committee in its meeting held during 23-25<sup>th</sup> May, 2012. The compliance of the earlier EC conditions (EC granted on 5.8.1994) was presented and discussed during the meeting. The baseline AAQ data collected was also presented. It was, however, observed that the AAQ data representative of the entire study area has not been collected. The protocols prescribed in this regard have also not been followed. Even the raw data was not given. As such, it was not acceptable. It was observed that there is habitation nearby and the issues relating to vibration due to blasting have

not been adequately addressed in the report. The report was not found to be satisfactory. No biological survey of the core zone was submitted.(The Biological Survey Report needs to properly demarcate as between the Core Zone and the Buffer Zone.)

Based on the presentation made and discussions held, the Committee sought additional information on the following:-

- (i) One season baseline AAQ data of the study area should be collected by proper selection of monitoring stations and following the monitoring protocol and data submitted.
- (ii) The report on blasting should be redone and submitted. It should clearly bring out the impacts on the habitation nearby. The specific type of blasting to be adopted in the project and whether it conforms to various circulars and guidelines issued from DGMS in this regard, should also be brought out.
- (iii) Baseline data on biological environment along with Wildlife Conservation Plan as was requested in the last meeting should be submitted.

It was decided that the proposal be again brought back before the Committee for its further consideration after the requisite information as mentioned above has been received.

The PP submitted information as sought by the committee as per the 27<sup>th</sup> meeting of EAC held on May, 23-25<sup>th</sup> 2012.

1. One season baseline AAQ data of the study area by selecting the monitoring stations following the monitoring protocol.
2. Proposed action to minimize the impact of blasting on nearby habitation:
  - (i) A number of rock breakers have been deployed to do away with secondary blasting.
  - (ii) The Deep-hole blasting has been adopted instead of Short-hole drilling and blasting .
  - (iii) Instantaneous firing of holes has been replaced by adopting Delay Detonators and NONEL.
  - (iv) Orientation of holes is maintained in opposite direction of the locality.
  - (v) Deck charging has been adopted as per requirement.
  - (vi) Blasting time has been displayed in local languages (Odiya and Hindi) at all the vulnerable points intercepting the danger (blasting) zone.
  - (vii) Entry to the Blasting Zone is restricted by installing barriers, waving red flags and posting guards at safe distance from the danger zone.
  - (viii) Adequate no. of blasting shelters have been provided near blasting site.
  - (ix) Mechanical siren and whistle are also blown to warn as additional safety measures.
3. Baseline data on biological environment along with Wildlife Conservation Plan was submitted and it was informed that the fauna of

the core zone is almost nonexistent, represented by field rat, squirrels, monitor lizard, mongoose, pigeon, crow, sparrow, weaver bird and cuckoo etc. The fauna of the buffer zone has resident species like chital, barking deer, jackal, small Indian mongoose, monitor lizard, cuckoo, crow, pigeon, sparrow and parrot etc.

For biological environment the project proponent proposed following additional measures:

- (i) Plantation of indigenous species over 61.274 ha. (43.274 Ha. completed)
- (ii) Grass seeding over 5 Ha.
- (iii) Contour trenches over 10 Ha.
- (iv) Fencing of mining pit with boulder walls.
- (v) Plantation of Banyan trees @ 2000 seedling /annum for 5 yrs.
- (vi) Plantation of qualifier species in barren forest areas with boulder fencing.
- (vii) Digging up of ponds for wildlife.
- (viii) Deployment of Anti-depredation squad.
- (ix) Elephant proof trench in Bungalow Pahar RF
- (x) Signboards and awareness.
- (xi) Corpus fund.
- (xii) SMC measures ( staggered trench, LBCD structure)
- (xiii) Creation of Fire lines & Fire control squad.

Based on the information submitted, presentation made and discussions held the Committee noted that the PP needs to submit the following clarification:

1. The proposal submitted by the PP was for grant of EC for 793.996 hectares, whereas it was noted that the mine lease area is 1099.303 hectares and not 793.996 ha.
2. The lease area includes Forest area of 84.691 hectares for which PP did not mention.
3. Approved 'Wild Life Management Plan' was not submitted
4. Whether it is a violation case or not.

The Committee **deferred** the Project for seeking above mentioned clarification and the proposal be brought back to the Committee after submission of the documents.

#### **2.42 Captive Limestone Mine with limestone production of 3.0 million tonnes per annum (602.054 ha non-forest area) at Itgi, Digaon and Mogla Villages, Chittapur Taluk, Gulbarga district, Karnataka by M/s. Orient Cement located at Village Mogla and Digaon, District Gulbarga, Karnataka (Consultant: B .S. Envi – Tech Pvt. Ltd, Hyderabad)-EC Reconsideration**

The Proposal was considered by the Expert Appraisal Committee in its meeting held during 25-27<sup>th</sup> May, 2011 for prescribing TORs. MoEF issued TORs for the Project vide letter No. J-11015/60/2011-IA.II(M) dated 27<sup>th</sup> June, 2011. The proposal is for opening of a new mine for production of 3.0 million TPA of limestone to meet the requirement of their integrated Cement Plant which will be located adjacent to the mine lease. It was stated that the proponent have submitted a separate application for TOR in respect of the Cement Plant with captive Power Plant to the Industry sector. The mine lease area is 602.054 ha. No forestland is involved. Mine working will be opencast mechanized involving drilling and blasting.

Ultimate working depth will be 60 m. Life of mine is 92 years. Solid waste will be in the form of black cotton soil and lateritic soil 5.05 million m<sup>3</sup>. 0.04 million m<sup>3</sup> will be disposed in 9.35 ha by bund formation along SW of pit, in the safety zone of village to a height of 10 m. 5.01 million m<sup>3</sup> will be backfilled in 18.40 ha of mined out area. 16.2 million m<sup>3</sup> of waste (subgrade limestone) will be Backfilled in 64.44 ha of mined out area. Total cost of the project will be Rs. 120 Crores. 155 m<sup>3</sup>/day (150 m<sup>3</sup>/day recycled water from power plant and 5 m<sup>3</sup>/day is fresh water). In accordance to the TORs, the Proponent submitted EIA/EMP Report to the MoEF vide letter No. ORCEM:PROJ:0267 dated 14<sup>th</sup> August, 2012. The Proposal was considered by the EAC in its meeting held during 19-21<sup>st</sup> December, 2012 for environmental clearance. Baseline data was collected during December 2011 to February 2012. All parameters were found to be within permissible limits. Ground water level is 80 m below the general ground. It is stated that mining activities will not reach the Ground Water Table. Public Hearing for the Integrated Project (Cement Plant and Mine) was conducted on 18.07.2012. Public hearing was conducted successfully and issues raised by public were addressed by the project proponent with commitment for implementation of development activities. It was observed that Itgi village is surrounded by the mine lease all around it. Further, it was also observed that the village will fall in the pre-dominant downwind direction of the Cement Plant. It may, therefore, be necessary to examine the possibility of shifting the village to some other location. Further, this limestone deposit being of sedimentary nature, use of surface miners should be examined. The mining lease area is private land with rainfed agricultural land (No. of land oustees - 280). It was also observed by the EAC that the Hospital established by the Company is having 6-7 beds only.

Based on the presentation made and discussion held during 19-21<sup>st</sup> December, 2012 the Committee sought additional information:-

- (i) Setting up hospital with satisfactory health care facilities for local residents.
- (ii) Detailed R&R Plan, with reference to the village located near mine lease area.
- (iii) Details of the CSR.

It was decided that the Proposal may be placed before the Committee for its further consideration after the requisite information as mentioned above is furnished.

The Proponent submitted following clarification/information to MoEF on the three issues raised which was discussed by the Committee.

(1) regarding Setting up hospital with satisfactory health care facilities for local residents.

- i. 9/10 bedded Hospital is proposed with necessary equipment & medicines for providing health care facilities to local residents.
- ii. Three doctors (out of which at least one will be a lady doctor) and necessary para-medical staff will be appointed.
- iii. Ambulance/ Vehicle facility.
- iv. Medical and Health & Hygiene education camps will be organized for nearby villagers periodically.

- v. Rs 110 Lakhs will be spent for launching ICUs on wheels service with ultra-modern facilities like ECG, EEG, respirator, Bio-metric monitors etc. Recurring cost of Rs 86.0 lakhs will be spent during the 10 years period.
- vi. Ambulances/ Vehicles will be provided, whenever necessary to take the patients to the following nearby hospitals having better medical facilities: (a) Digaon village: Very near to our site (within 3 Kms) and having Primary Health Centre with qualified doctors and medical staff, (b) Chittapur town: Taluka Head quarters having major health center and many qualified private doctors is about 6 Kms from our site. Orient Cement is committed to contribute Rs. 57.60 lakhs in the next 10 years for strengthening of this health center, (c) Gulbarga town: District Head quarters having Government District Hospital, many private hospitals & medical colleges with hospitals. Orient Cement is committed to contribute Rs 57.20 lakhs in the next 10 years for strengthening of the District Hospital & Rs 54.10 lakhs to Red Cross society at Gulbarga, (d) Other nearby places like Shahbad, Wadi, Malkhed, Sedam etc. are also having private and Government clinics and dispensaries.

(2) Regarding R & R Plan proponent informed that:

- (i) No Habitation or dwellings within the mine lease area
- (ii) Land sellers are paid as per compensation package fixed/ decided by the tripartite committee comprising of project proponent, land sellers & District authorities in the presence of local legislator and other leaders, and agreed upon by all.
- (iii) Gainful employment to the land sellers directly or through its agencies, within the needs of the company.
- (iv) Preference to local people for the various jobs as per qualifications and suitability.
- (v) Initiated necessary training activity by identifying 40 local people and sending them for training in various trades at L&T Training Centre. They will be absorbed in various jobs in the project
- (vi) As part of CSR activities, Rs 74 crores will be spent in the first ten years of the project
- (vii) Welfare measures in the fields of Education, Health, Hygiene & Sanitation, Community mobilization, Livelihood Promotion & capability building etc. of the local population

(3) PP proposes to incur about Rs 74 crores in the first 10 years of the project, towards CSR activities in the nearby villages of the project, under the following major Heads:

Item	Rs. (in lakhs)
Infrastructure Development	- 2959.9
Education	- 897.0
Hygiene & Sanitation	- 336.9
Health	- 607.6

Livelihood Promotion & Capacity building	- 757.9
Heritage, Culture etc. promotion	- 605.0
Programme administration, monitoring etc.	-1232.9
<b>TOTAL</b>	<b>-7397.2</b>

Based on the information furnished, presentation made and discussions held, the Committee **recommended** the Project for environmental clearance.

**2.43 Enhancement of Production of Lime Stone from 30,000 TPA to 1.94 Lakh TPA of Rangpur Limestone mine of M/s GHCL Ltd. at Village-Rangpur, Taluka- Sutrapada, Distt.- Junagadh, Gujarat (88 ha) (Min Mec Consultancy Pvt. Ltd.)- EC Reconsideration**

The Proposal was discussed in the Expert Appraisal Committee in its meeting held during 24-26<sup>th</sup> September, 2007 for prescribing TORs. The TORs were issued by MoEF vide letter No.-J-11015/506/2007-IA-II(M) dated 24<sup>th</sup> October 2007. The proposal is for renewal of mining lease and enhancement of production of limestone from 30,000 TPA to 1.94 lakh TPA. The total mine lease area is 88 ha. Working is opencast manual involving drilling and blasting. Life of mine is 17 years. Gir Sanctuary is at 15 Km from the mine lease. Ultimate working depth will be 6 m bgl. The peak water requirement is 15 KLD which will be obtained from Sutrapara plant. The Proponent submitted an EIA Report to the MoEF dated 20.09.2008. The baseline studies were carried out during September 2007 to November 2007. On the perusal of the results from the EIA/EMP it is observed that the level of air pollutants is within the standards. Total hardness, calcium and chloride is reported to be above permissible limits. Iron concentration and toxic and heavy metal concentration is below permissible limits. The Public Hearing for the Project was conducted on 25.07.2008 at Mamalatar Office Sutarpada. Issues raised during the Public Hearing included construction of Ram Mandir, road to the Village and about assurance of the company to give employment to 10-15 youths. Issues like providing cycles to handicapped, blasting carried out in unscientific manner and injuries caused to the people, livelihood to poor people and good wages to labors etc. The Company assured to the Public that an Action Plan along with sufficient budgetary provisions will be made to meet the demands of the public. The proposal was considered in the Expert Appraisal Committee in its meeting held during 17-19<sup>th</sup> December, 2008 for EC. The Committee sought following additional information.

- (i) Location map showing the distance of the mine lease w.r.t. Gir Sanctuary and the migratory routes of lions duly authenticated by the Chief Wildlife Warden. In case the mine is located within 10 Km, NOC from Chief Wildlife Warden should be provided.
- (ii) Conservation plan for schedule-I fauna reported in the study area.
- (iii) The mine lease area is reported to involve goucher land (as per public hearing). The arrangement made to provide alternate goucher land in lieu thereof should be provided.
- (iv) Details of the plan proposed for monitoring the occupational health impact of the project on the workers and on the surrounding population should be given.
- (v) Action plan to address the issues raised during public hearing along with financial allocation and time frame.
- (vi) Detailed greenbelt development plan clearly indicating the time frame, area to be covered, species to be planted.
- (vii) Details of the post mine land use.

- (viii) Alternate source of water close to the mine should be examined and details provided.

The Proposal was placed before the Expert Appraisal Committee in its meeting held during 20-21<sup>st</sup> May, 2009. The Committee took note of the letter from the Proponent dated 14.05.2009 seeking postponement of their presentation. Vide letter No. GHCL/MoEF/Rangpur dated 23<sup>rd</sup> March, 2009, the PP had submitted point wise clarification on the issues raised by the EAC in its meeting held during 17-19<sup>th</sup> December, 2008.

In the present meeting, The Committee took note of the clarifications submitted on the points raised by the then Committee in the Dec.2008 Meeting. However, it was noted that the Conservation Plan submitted was not yet approved by the competent Wild Life Authorities. It was also observed that this was a **violation case** as mine continued to operate from 2007 till 24<sup>th</sup> August, 2011 although the renewal of mine lease fell due in 2007.

Therefore, the Committee **deferred** the Project for environmental clearance till the deficiencies as above are dealt with by the PP, whereafter the Committee will further consider the proposal.

#### **2.44 Kaguda Gypsum Mine with production capacity of 0.1056 MTPA of RSMML at Village Kaguda, District Jalore, Rajasthan (225 ha) (Consultant: WAPCOS Ltd)-EC Reconsideration**

The Proposal was considered by the Expert Appraisal Committee in its meeting held during 18-20<sup>th</sup> August, 2008 for prescribing TOR. The Proposal is for opening of a new mine for production of 0.1056 MTPA of Gypsum. The mine lease area is 225 ha. No forest land is involved. Life of the mine is 3 years. Working will be by opencast method without involving drilling and blasting. Depth of the mine is 1.5 m bgl. TOR were issued to the Project by MoEF vide letter No. J-11015/88/2008-IA.II(M) dated 25<sup>th</sup> September, 2008. In accordance to the TORs the Proponent submitted EIA/EMP Report to the MoEF vide letter No. RSMM/GYP/Plan/Env-Kaguda/2012-342 dated 24.08.2012. The Proposal was considered by the Expert Appraisal Committee in its meeting held during 16-18<sup>th</sup> January, 2013 for consideration of environmental clearance. The Proposal was deferred because Proponent did not attend the meeting. The baseline studies were carried out during November 2011 to January, 2012. The Total Dissolved Solids in water were reported to be above permissible limits. Similarly PM<sub>10</sub> values in air were recorded above permissible limits. Public Hearing was conducted 14.05.2010 at Village Kaguda, District Jalaur. The PH was chaired by the Additional District Collector, Jalaur. Meeting was attended by the Regional Officer SPCB, Jodhpur. The issues raised by the public include illegal mining, decreasing ground water table due to mining, environmental pollution, employment generation, grabbing the land of farmers by the company, human health etc. Most of the people complained about health, agricultural and environment issues due to mining. Necessary remedial measures are called for through comprehensive Action Plan with time bound commitments and budgetary provisions for implementation.

It was noted that a **Court Case** is pending against the project. The study season for monitoring was not appropriate (November to January). No micro-metrology station was established. Tor compliance was not given in the EIA/EMP report. The committee therefore **deferred and delisted** the proposal and

suggested to submit revised EIA/EMP report along with the details and status of the Court Case.

#### **2.45 Enhancement of production of Jhakarada Gypsum Mine from 0.1 MTPA to 0.4265 MTPA of M/s RSMML, Village Jhakarada, Tehsil Gudamalani, District Barmer (336.18 ha) (Consultant: WAPCOS Limited)-EC**

The Proposal was considered by the Expert Appraisal Committee in its meeting held during 18-20<sup>th</sup> August, 2008 for prescribing TORs. The Proposal is for enhancement of production of Gypsum from 0.1 MTPA to 0.4265 MTPA. It is a violation case. Their mine is reported to be closed since 2004. The mine lease area is 336.18 ha. No forest land is involved. Life of the mine is 2 years. Working will be opencast without involving drilling and blasting. Depth of the mine will be 3 m bgl. MoEF issued TORs vide letter No. J-11015/90/2008-IA.II(M) dated 23<sup>rd</sup> September, 2008. In accordance to the TORs the Proponent submitted an EIA/EMP Report to the MoEF vide ref No. RSMM/GYP/PLAN/ENV-JHAKHARDA/2012-341 dated 24.08.2012. The baseline studies were carried out during November 2008 to January, 2009. Total Dissolved Solids in the water environment were reported to be above permissible limits. Heavy metals were reported to be well within permissible limits. Suspended Particulate Matter in the air environment were reported to be above permissible limits. SO<sub>x</sub> and NO<sub>x</sub> values were reported to be within permissible limits. The Public Hearing was conducted on 09.06.2011 and 10.06.2011 at Halibav (Jalore) and Ramji Ka Gol (Barmer) respectively. The Public Hearing was chaired by the Additional District Magistrate Jalore. It was attended by the Regional Officer, Jodhpur Regional Office, RSPCB. The issues raised during public hearing were also considered and discussed during the meeting, which inter-alia included providing facilities such as school and hospital to local residents, considering the transportation services of local truck owners, mosquito problem due to mining etc. It was observed that there has been lot of support to the Project during public hearing.

The Proposal was considered by the Expert Appraisal Committee in its meeting held during 16-18<sup>th</sup> January, 2012. The Proposal was deferred because the Proponent did not attend the meeting.

The baseline data monitoring was not for an appropriate season (November to January). No micro-metrology station was established. Tor compliance was not given in the EIA/EMP report. The Committee therefore **deferred** the proposal and suggested to submit the revised EIA/EMP report.

#### **2.46 Sukinda Chromite Mine of M/s Tata Steel Ltd. at Village Kalarangiatta, Tehsil Sukinda, District Jajpur of Odisha State (579.68 ha) (Consultant: Vimta Labs Ltd)-EC**

The Proposal was considered by the Expert Appraisal Committee in its meeting held during 21-23<sup>rd</sup> June, 2011 for prescribing TORs. MoEF issued TOR to the Project Vide letter no. J-11015/96/2011-IA.II(M) dated 29<sup>th</sup> July, 2011. The proposal is for enhancement of production of Chrome ore from 0.95 to 2.4 million TPA (ROM) and Pyroxenite ore (ROM) from 0.25 to 0.5 million TPA, enhancement of chrome concentrate production from 0.1 to 0.6 million TPA, It is also proposed for change in technology from opencast mining to underground mining and change in beneficiation technology by introduction of column floatation and magnetic separation techniques, solid / paste disposal of tailings with the introduction of

parallel plate filters. The mine lease area falls between Longitude 85°45'35" E-85°47'48"E and Latitude 20°59'44" N -21°01'30"N. Mining will intersect groundwater table.

Total mining lease area is 406 ha. (332.302 non-forest area, 73.697 ha forest area, 0.085 ha Gramya Jungle, 73.612 ha forest block). Proposed area for overburden dump is 100 ha (forest land). Applied area for proposed tailing dam is 73.685 ha (65.315 ha non-forest land, 8.37 ha forest area, 6.428 ha Gramya jungle and 1.942 ha is forest block. This area is away from the mine lease, for disposal of solid tailings. Forest Diversion Plan for Corridor of 8.37 ha forest area The COB plant is located within mine lease. Additional area of 100 ha for OB dump is just outside the mine lease. Forestry clearance for 100 ha of forestland for dumping was granted in May, 2005. The mine was earlier granted a combined environment and forestry clearance (for 73.697 ha) in 1998.

Vide letter no. TSLDEL/8/6/2012 dated 10<sup>th</sup> January, 2013, Proponent has submitted final EIA/EMP Report to the Ministry. It was stated by the Project Proponent that the baseline data on Ambient Air Quality, Water Quality, noise level, soil quality, flora and fauna was collected during December 2011 to February, 2012. Public Hearing was conducted on 14.12.2012 at Sukinda Chromite Mines. The P.H. was chaired by District Magistrate, Jajpur. Regional Officer SPCB, Cuttak was also present. Issues raised by the public include health, drinking water, environmental care, employment, discharge of Chromium water in nallah, etc. The Chairman of the Public Hearing ratified the minutes of the meeting with the views and demands of the public.

The Proposal was considered by the Expert Appraisal Committee in its meeting held during 13-15<sup>th</sup> March, 2013 for Environmental Clearance. It was observed by the Committee that the certified copy of the Compliance Report from the Regional Office of MoEF is not submitted by the Proponent. Furthermore Committee observed that MoEF Vide reference no. 8-78/96-FC dated 27.1.1998 laid general environmental condition regarding maintaining the maximum height of Over Burden (OB) dump. It was said that the overburden dump should be restricted to 60 m height. Benches should be provided and slope should be maintained below 28°. it was observed by the Committee that the overall slope of the benched dumps will be less than 28°, though the height was more than the then prescribed limit. It is mentioned by the PP that the recent studies conducted by IIT Khragpur ascertained that dumps up to 110 m height are stable. Accordingly, the Proponent proposed the height of the dumps of 110m. The Committee emphasized on the basic precautionary measures of height restriction (110 meters from toe to top of the dump on sloping ground), slope restriction (28°), and strict adherence to the control measures implicit in the detailed design of the dump and as prescribed in the specialist study under reference, including buttressing of the dump toes and proper drainage and stabilization of each of the completed O.B. Dumps. It was noted by the Committee that the Committee's observations on dump stability could also be reiterated as conditions to be attached to EC.

Based on the information furnished, presentation made and discussions held, the Committee sought the required certified copy of the Compliance Report from the Regional Office of MoEF to be submitted. It was decided the Proposal may be brought back before the Committee for its further consideration after the information as mentioned above is furnished.

The Proponent obtained the certified copy of the status of compliance of Project from Eastern Regional Office of MoEF, Bhubneshwar vide letter dated F. No. 101-116/09/EPE dated 28.03.2013. The Proponent submitted the copy of the Compliance Report to MoEF vide letter No. TSLDEL/17/2013 dated 1<sup>st</sup> April, 2013.

The compliance report of the project was discussed in detail and it was observed by the Committee that, the proponent has by and large, complied with the Conditions of the EC granted to the project and the action points suggested by the Regional Office have been noted by the PP. It was also brought to the notice of Committee that a complaint from Mr. Premananda Jyotish, President, Biju Swabhiman Dal was received in the Ministry regarding the present proposal of M/s Tata Steel. The issues raised in the complaint and the response of the Project Proponent are as follows:

1. *M/s Tata Steel used more forest land (other than his approved land) without permission of the concerned authority since last 10 years and the same can be identified after a proper physical demarcation of used land by local revenue authority.*

Response of M/s Tata Steel:

- i. Company is working within the allotted forest area over 73.697 ha (broken prior to 1980) present within the Mining Lease area after getting necessary Stage-II Forest Clearance vide letter no. 8-78/96-FC, dated 27.01.1998.
  - ii. Similarly, company has also obtained Stage-II Forest Clearance vide letter no. 8-28/2004-FC, dated 11.05.2005 over 100 ha for dumping of overburden.
  - iii. The area has been duly demarcated in the field in presence of forest and revenue officials.
  - iv. The land schedule and lease map has also been duly authenticated by Tahsildar based on the reports of Revenue Inspector.
  - v. State Forest Department after due site verification has recommended for TWP and renewal of Forest Clearance.
  - vi. MoEF, GoI has also granted TWP on 06.03.2013.
2. *Tata Steel also destroyed more planted trees without prior permission of concerned authority which is contradictory to forest laws.*

Response of M/s Tata Steel:

- i. Due permission has also been obtained before felling of trees where ever required as per the statute.
  - ii. Besides company has also taken initiatives for large scale plantation in the region.
  - iii. Since inception, company has planted over an area of 89.35 ha within mining lease, 167.26 ha outside the ML area and 230.16 ha in the villages by TSRDS (Tata Steel Rural Development Society).
  - iv. Company has deposited necessary statutory fees such as NPV, CA etc. and has also obtained approval for compensatory afforestation scheme before working in the forest land.
3. *Tata Steel also not aware about the air, water and environmental pollution in his mining area and hence the people, animal and plants situated in the nearest area are affected severely. The same company also not care about the local employment*

*(direct & indirect) local development of Road, Forest, School, Temples as it necessary as per law.*

Response of M/s Tata Steel:

- i. Company is doing mining since 1960 and has been abiding by all statutory norms and has obtained all necessary approvals & clearances required for mining operations.
- ii. Statutory authorities viz. OSPCB, MoEF, IBM are regularly inspecting the mine and have found no noncompliance.
- iii. Besides, company has been awarded at State, National and International level for its initiatives for Environment safeguards. Ex: Green Tech Env (Gold) Award, World Quality Congress Environmental Sustainability Award, Overall 2nd position in 15th ME&MC week organized under the aegis of IBM, Bhubaneswar Region during 2012-13
- iv. Company under its CSR activity takes up various activities towards peripheral development.

*4. Tata Steel has also included in the list of illegal excess collection/ production of chrome behind the knowledge of concerned authority and also penalized by local mining authority.*

Response of M/s Tata Steel:

- i. The production of chrome ore has been done as per the approved Mining Plan/ Scheme of Mining.
- ii. Necessary permissions has been obtained from State Govt for dispatch of mineral.
- iii. Necessary Govt. dues i.e Royalty, Excise has been paid in due time as demanded

*5. intention of Tata Steel is to collect more and more chrome for his own benefit and excess illegal chrome collection/ production (mis-utilisation of national properties) is the present standing example also.*

Response of M/s Tata Steel:

- i. The chrome ore is mined out from the mine is being utilized for value addition through beneficiation and ferro chrome making.
- ii. Mining is done as per the approved Mining plan/ Scheme of Mining.
- iii. Tata Steel has been pioneer to install the beneficiation unit in 1991.
- iv. Company has also plans to install the unit which shall recover the chrome values from the tailings which is of first kind in the country.

*6. Tata Steel till not established the required chrome plant equivalent with the collection of chrome from his own mines but intended to sale the same in open market for his own benefit only.*

Response of M/s Tata Steel:

- i. Tata Steel has been pioneer to install the Chrome Ore Beneficiation plant to recover the chrome values from sub grade/ lean ore during 1991.
- ii. Tata Steel has been first to stop the sale of chrome ore since 2006.

- iii. Tata Steel uses the total chrome ore for value addition through beneficiation and ferro chrome making.

7. *at the time of public hearing Tata Steel gathered some illiterate drunkers in the meeting premises to create disturbances and to support Tata Steel who are not aware of the mining laws and forest and environment pollution in the said locality.*

Response of M/s Tata Steel:

- i. The entire Public Hearing proceeding was conducted in presence of District Collector, S.P, Jajpur and the Regional Officer, OSPCB.
- ii. Total 94 persons gave their views during the public hearing.
- iii. The Sarpanch of all the nearby Gram panchyats gave their views in favour of the company during the Public Hearing.
- iv. The details of project proposal, its impact and its benefits were spelt out before the public as per the procedures under EIA Notification, 2006.
- v. The proceedings of the public hearing was video recorded by State Pollution Control Board.

Based on the information submitted, presentation made and discussions held regarding the response made by the PP, the Committee **recommended** the Project for environmental clearance

#### **2.47 Iron Ore Beneficiation by Froth Flotation process of M/s Jindal Saw Ltd. near Village Dhedwas, Distt.- Bhilwara, Rajasthan (Consultant: Consulting Engineers Group Ltd.) –TOR**

The Proposal was considered by the Expert Appraisal Committee in its meeting held during 19-21<sup>st</sup> March, 2012 for prescribing TORs. It was observed that the EC was granted to the said project in August, 2010. During exploration and further analysis the proponent observed that the ore body contains some iron sulphide which is harmful to pellets. Accordingly, the proponent have proposed to treat the concentrate by froth floatation to bring down the sulphur to less than or equal to 0.2%. Thus, the earlier project which was granted environment clearance is proposed to undergo change in scope by addition of another component in the beneficiation plant. Accordingly, the Committee considered the project under para 7(ii) of the EIA Notification, 2006 and the project was subjected to due diligence in terms of additional studies / information which the project proponent should submit for consideration of the project by the EAC in terms of the proposed change of scope. The Committee desired information / studies on the following:

- (i) Information relating to handling of chemicals should be furnished.
- (ii) Acid drainage and the issues relating thereto should be discussed, clearly bringing out their impact on different components of environment.
- (iii) Details relating to management and disposal of sludge should be furnished.
- (iv) Details relating to disposal / management of effluents should be furnished.
- (v) Detailed scheme for disposal of sulphur should be provided.
- (vi) Ingredients to be added at site, their quantity to be stored etc. should be examined in the light of applicability of HSM Rules and details furnished.
- (vii) Additional water requirement due to change in scope, water balance and availability of water should be provided.

- (viii) Soil permeability data and the requirement of lining for the tailing pond should be discussed in the light of leaching.
- (ix) Characteristics of effluents should be given.
- (x) Details of waste disposal should also be given.
- (xi) As regards the requirement of conducting public hearing afresh or otherwise, it was decided that a decision on the same will be taken after the requisite information on the above mentioned points has been submitted and examined by the Committee.

It was decided in the EAC meeting held during 19-21<sup>st</sup> March, 2012 that the proposal may be brought back before the Committee for its further consideration after the requisite information as mentioned above has been submitted.

Vide letter No.-JSL/JPR/2012-13/1338 dated 7<sup>th</sup> November 2012 the proponent submitted point wise clarification regarding the issues raised by the Committee in its meeting held during 19-21<sup>st</sup> March, 2012. It is noted that the earlier case is placed for TOR. However, the proponent has now submitted the information for amendment in EC.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs condition (i) Details of transportation of iron sulphide to USA (ii) details of handling of chemicals, (iii) Details of disposal of hazardous waste, and (iv) Details of management and disposal of sludge and effluents.

#### **2.48 Mining of stone & Bajri of M/s Krishna Stone Crushing Co at Village & Po Paragpur, Tehsil Dehra, Distt. Kangara, Himachal Pradesh (18.6875 ha)-TOR**

The Proposal was considered by the Expert Appraisal Committee in its meeting held during August 29<sup>th</sup> -31<sup>st</sup> 2012. The Consideration of the Proposal was deferred because of Proponent did not attended the meeting. The Proponent has obtained a Mining lease of the area for mining sand, stone and bajri under Himachal Pradesh Minor Minerals (Concessions) Revised Rules 1971 which was further renewed vide letter No. Udyog- Bhu (Khani-4) laghu-96/05-11382 dated 15-11-2006 for a period of 5 years with effect from 20-06-2001 to 19-06-2006. Further the mine lease is granted for 5 years wef 20.06.2011 to 19.06.2016 under "H.P. Minor Minerals (Concessions) Revised Rules 1971"

The Mine Lease area is located between Latitude 31°49' 0.94" to 31°49' 07.9" N and Longitude 76°13'10.7" to 76°13'19.8"E. It is 'A' category project as the site is located within 10 Km radius i.e. 6.5 km of Pong Dam Wildlife Sanctuary. NBWL clearance is mandatory for this project.

The proposed project is manual extraction and collection of sand, stone and bajri from Khad (stream) bed up to one meter. Total material handling in a year would be 72,000 metric tons, including 43,900 metric tons of stone & Bajri (cobble), 17,300 metric tons of sand and 10,800 metric tons waste and silt. It is reported by the proponent that Mining area is divided into 2 blocks. Each block is mined in the alternate year so that one block is rested for replenishment for 2 consecutive rainy seasons. During the extraction of stone and bajri from the Khad (stream) bed for consumption in the crushing unit, around 10,800 metric tons of

waste and silt will be generated which shall be backfilled in the exhausted pit of already worked block.

The cost of the Project will be Rs. 46.5 Lakhs. NBWL clearance is mandatory for the project. It is reported by the proponent that the mining was started in 1995 and continued up to 20.06.2011 and at present, mining is closed due to lack of Environmental Clearance. This is a violation case as the mining was being done without Environmental Clearance. Further, it is reported by the project proponent that there is no court case/litigation is pending against the project.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs condition (i) Details of replenishment studies, (ii) Details of Transportation of mined materials and its impact on Environment due to transportation, and (iii) cumulative impact due to sand mining.(iv) NBWL clearance is mandatory for the project and to be forwarded by the Chief Wild Life Warden of State Govt.

#### **2.49 Mining of sandstone and bajri with production capacity of 65,000 MTPA of M/s Kajla Stone Crusher at Village & PO Moch, Tehsil Fatehpur, District Kangra, Himachal Pradesh (11.22 ha)-TOR**

The Proposal was considered by the Expert Appraisal Committee in its meeting held during August 29<sup>th</sup> -31<sup>st</sup> 2012. The Consideration of the Proposal was deferred because of Proponent did not attended the meeting. The proposal is for mining of sandstone and bajri at Village Moch. The mining lease is approved in favor of Shri Raghbir Singh vide letter no. Udyog-Bhu (Khani-4)Laghu-632/99, Govt of Himachal Pradesh, Dept of Industries (Geology) dated 29.11. 2010.

The Mine Lease area is located between Latitude 32°06'52.6"N-32°06'50.3"N and Longitude 75°56'53.5"E -75°56'52.4"E. It is 'A' category project as the site is located within 10 Km radius i.e. 1.4 km of Pong Dam Wildlife Sanctuary.The Project is located in seismic zone-V. Total cost of the Project is Rs. 41 Lakhs.

The proposed project is manual extraction and collection of sand, stone and bajri from Khad (stream) bed up to one meter. Total material handling in a year would be 65000 metric tons, including 39000 metric tons of stone & Bajri (cobble), 13000 metric tons of sand and 13000 metric tons waste and silt. It is reported by the proponent that during the extraction of stone and bajri from the Khad (stream) bed for consumption in the crushing unit, around 13000 metric tons of waste and silt will be generated which shall be backfilled in the exhausted pit of already worked block.

The cost of the Project will be Rs. 41.34 Lakhs. NBWL clearance is mandatory for the project. It is reported by the project proponent that there is no court case/litigation is pending against the project.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs condition (i) Details of replenishment studies, (ii) Details of Transportation of mined materials and its impact on Environment due to transportation, and (iii) cumulative impact due to sand mining.(iv) NBWL clearance is mandatory for the project and to be forwarded by the Chief Wild Life Warden of the State Govt.

## **2.50 Mining of Sandstone and Bajri mining with production capacity of 76,500 MTPA of M/s Shiv Shakti Stone Crusher Co-operative Industrial Society at Village Anuhi Jungle, Soldha, Tehsil Jawali, District Kangra, Himachal Pradesh(16.9752ha)-TOR**

The Proposal was considered by the Expert Appraisal Committee in its meeting held during August 29<sup>th</sup> -31<sup>st</sup> 2012. The Consideration of the Proposal was deferred because of Proponent did not attended the meeting.

It is 'A' category project as the site is located within 10 Km radius of Pong Dam Wildlife Sanctuary. The proposal is for mining of sandstone and bajri under Himachal Pradesh Minor Minerals (Concessions) Revised Rules 1971 and has been renewed for a third period of five years vide letter No. Udyog-Bhu (Khani-4) Laghu-501/98-1964 dated 01.06.2009. NBWL clearance is mandatory for the project.

Total cost of the Project is Rs. 47.06 Lakhs. It is reported by the proponent that the working mine was closed due to lack of Environmental Clearance. This is a violation case as the mining was being done ~~undergoing~~ without Environmental Clearance. It is reported by the project proponent that there is no court case/litigation is pending against the project.

The proposed project is manual extraction and collection of sand, stone and bajri from Khad (stream) bed up to one meter. Total material handling in a year would be 76,500 metric tons, including 44,400 metric tons of stone & Bajri (cobble), 17600 metric tons of sand and 14,500 metric tons waste and silt. It is reported by the proponent that during the extraction of stone and bajri from the Khad (stream) bed for consumption in the crushing unit, around 14500 metric tons of waste and silt will be generated which shall be backfilled in the exhausted pit of already worked block.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs condition (i) Details of replenishment studies, (ii) Details of Transportation of mined materials and its impact on Environment due to transportation, and (iii) cumulative impact due to sand mining.(iv) NBWL clearance is mandatory for the project and to be forwarded by the Chief Wild Life Warden of the State Govt.

## **2.51 Mining of Sandstone and Bajri of M/s Navneet Sharma with production capacity of 54,000 MTPA at Villge & PO Har, Tehsil Jawali, District Kangra, Himachal Pradesh (11.7281ha) -TOR**

The Proposal was considered by the Expert Appraisal Committee in its meeting held during August 29<sup>th</sup> -31<sup>st</sup> 2012. The Consideration of the Proposal was deferred because of Proponent did not attended the meeting.

The Mine Lease area is located between Latitude 32°09'30.3"N to 32°09'25.6"N and Longitude 76°02'24.3"E to 76°02'21.8"E. It is 'A' category project as the site is located within 10 Km radius i.e. 2.3 km of Pong Dam Wildlife Sanctuary. The Project is located in seismic zone-V. Total cost of the Project is Rs. 34.13 Lakhs. NBWL clearance is mandatory for the project. It is reported by the project proponent that there is no court case/litigation is pending against the project.

The proposed project is manual extraction and collection of sand, stone and bajri from Khad (stream) bed up to one meter. Total material handling in a year would be 53600 metric tons, including 32200 metric tons of stone & Bajri (cobble), 12800 metric tons of sand and 8600 metric tons silt and clay. It is reported by the proponent that during the extraction of stone and bajri from the Khad (stream) bed for consumption in the crushing unit, around 8600 metric tons of waste and silt will be generated which shall be backfilled in the exhausted pit of already worked block.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs condition (i) Details of replenishment studies, (ii) Details of Transportation of mined materials and its impact on Environment due to transportation, and (iii) cumulative impact due to sand mining. (iv) NBWL clearance is mandatory for the project and to be forwarded by the Chief Wild Life Warden of the State Govt. (v) submission of precautions to be taken in the disaster management plan for the project.

## **2.52 Mining of Stone, Sand and Bajri with proposed production capacity of 53,600 MTPA of M/s Ranjit Rana at Villaghe and PO Spail, Tehsil Jawali, District Kangra, Himachal Pradesh (14.0036 ha)-TOR**

The proposal is for mining of sand, stone and bajri under Himachal Pradesh Minor Minerals (Concessions) Revised Rules 1971, vide letter No. Udyog-Bhu (Khani-4) Laghu-632/99-1866 dated 05.06.2008 for a period of five years. The present land use of the area is 'gair mumkin khad' falling in category "uncultivable stream".

The Mine Lease area is located between 32°06'20.3"N to 76°06'09.5"E. It is 'A' category project as the site is located within 10 Km radius i.e. 1.6 km of Pong Dam Wildlife Sanctuary. NBWL clearance is mandatory for the project. The Project is located in seismic zone-V. Total cost of the Project is Rs. 34 Lakhs. It is reported by the project proponent that there is no court case/litigation is pending against the project.

The proposed project is manual extraction and collection of sand, stone and bajri from Khad (stream) bed up to one meter. Total material handling in a year would be 53,600 metric tons, including 32200 metric tons of stone & Bajri (cobble), 12,800 metric tons of sand and 8600 metric tons silt and clay. It is reported by the proponent that during the extraction of stone and bajri from the Khad (stream) bed for consumption in the crushing unit, around 8600 metric tons of waste and silt will be generated which shall be backfilled in the exhausted pit of already worked block.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs condition (i) Details of replenishment studies, (ii) Details of Transportation of mined materials and its impact on Environment due to transportation, and (iii) cumulative impact due to sand mining. (iv) NBWL clearance is mandatory for the project and to be forwarded by the Chief Wild Life Warden of the State Govt. (v) submission of precautions to be taken in the disaster management plan for the project.

### **2.53 Khandbandh Iron Ore Mine for Production of 1.123 MTPA of Iron Ore along with 500 TPH Crushing Plant M/s SMC Power Generation Ltd., Village Khandbandh, Jalhari and Baitarani, Tehsil Barbil, District Keonjhar, Orissa (244.03 ha)-Extension of TORs**

The Proponent received TORs from the MoEF vide letter No.J-11015/105/2011-IA-II(M) dated 29<sup>th</sup> July 2011. As per the TOR, the baseline data was collected during post monsoon season 2011 and EIA/EMP was prepared in December 2011. The project proponent has informed that as per the RR Policy of the State Government of Odisha the portion of the land belonging to Scheduled Tribes is to be surrendered by the Proponent. Therefore the revised area will be smaller than the previously granted lease and accordingly the land use breakup will be changed. The said approval of revised lease area is now pending with State Government of Odisha. The project proponent informed that it will take some time to submit final EIA/EMP to MoEF. The project proponent vide letter No. SMCPGL/ENV/2013-14/TOR, dated 18<sup>th</sup> February, 2013 requested MoEF to extend the validity of TORs.

Based on the information furnished and discussions held, the Committee **recommended** the extension of the validity of TOR for additional one year i.e. from 29<sup>th</sup> July, 2013 to 28<sup>th</sup> July, 2014.

### **2.54 Expansion of Captive Limestone Mine of M/s Chettinad Cement from 4.0 to 10 MTPA at Kallur Village, Gulbarga District, Karnataka (422.94ha) -TOR Extension**

The Proponent had received TORs from the MoEF vide letter no. J-11015/29/2011-IA.II (M), dated 27<sup>th</sup> June, 2011. Based on the TORs issued for the proposed expansion, the EIA study has been carried out and the Draft EIA Report is getting finalized. The proponent has informed that there is delay in getting mining plan approval from the IBM. The Proponent is planning to submit the EIA Report to Karnataka Pollution Control Board. The Public Consultation is expected to take place by the month of April 2013. The final EIA Report will be submitted to the Ministry by May, 2013. In case of any unexpected delay in conduction the Public Consultation due to Legislative Assembly Election scheduled in May, 2013, the project proponent vide letter No. Chettinad Cement/ Kallur Mine Expansion/TOR Extn /2013, dated 28<sup>th</sup> January, 2013 requested the MoEF to extend the validity of the TORs.

Based on the information furnished and discussions held, the Committee **recommended** extension of the validity of TOR for additional one year i.e. from 27<sup>th</sup> June, 2013 to 26<sup>th</sup> June 2014.

### **2.55 Dewarkhand (Khalari) Limestone Mines of M/s ACC Ltd. at Village Dewarkhand, Distt. Ranchi, Jharkhand (303.98 ha) -TOR Extension**

The Proponent received TOR from the MoEF vide letter no. J-11015/492/2008-IA.II (M), dated 23<sup>rd</sup> February, 2009 which is valid up to 22-02-2013. The project proponents vide Letter No. ACC/KRLI/2012-13/174, dated 15-02-2013 requested MoEF to extend the validity of the TORs. As per the letter of the Project proponent, Public Hearing of the Project was conducted on 17-07-2010. The Proceedings of the Public Hearing were sent by JSPCB, Ranchi to the MoEF vide letter no. 3383, dated 04-08-2010. The Mining Plan work has been assigned to the Consultant; however the PP is unable to submit the approved Mining Plant to the MoEF. The project proponent has not attended the 6<sup>th</sup> EAC meeting.

Based on the discussions held, the Committee was of the view that validity of TOR has already expired as the maximum period of 4 years has been completed on 22.02.2013; so no further extension of TOR can be recommended by the EAC. The Project file may be closed.

**2.56 M/s Sojat Lime Company, District – Pali, Rajasthan (852.69 ha) – TOR Extension.**

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

**2.57 M/s Penna Cement Industries Ltd., Talaricheruvu Village Tadipatri Mandal, District – Anantpur, A.P. (106.86 ha) – TOR Extension**

The Proponent received TOR from the MoEF vide letter no. J-11015/391/2010-IA. II (M) dated 28<sup>th</sup> March, 2011, which was valid up to 27-03-2013. The project proponents vide Letter No. PICL:TAL:MOEF:12-13:165, dated 22-02-2013 requested to extend the validity of the TORs for one year; as they anticipated delay in submission of final EIA Report to MoEF.

Based on the information furnished and discussions held, the Committee **recommended** extension of the validity of TOR for additional one year i.e. from 28<sup>th</sup> March, 2013 to 27<sup>th</sup> March, 2014.

**3. Any Other Items:** With the permission of the Chair. The followings items were discussed:

**3.1: Corrigendum to the Minutes of the 5<sup>th</sup> Meeting held during March 13<sup>th</sup>-15<sup>th</sup>, 2013 with regard to item no. 2.29- Expansion of production capacity (from 0.9 MTPA to 2.32 MTPA) of Kuteshwar Limestone Mine (Right Bank Lease) - Opencast Mining & Crushing & Screening Plant (200 TPH to 650 TPH) of M/s SAIL, Village Gairtalai, Marwa & Jararoda, District Katni, Madhya Pradesh (944.89 ha) (Consultant: Bhagvathi Ana Labs Ltd)-TOR**

The Committee had recommended the TORs for undertaking detailed EIA study in it's 5<sup>th</sup> Meeting held during March 13<sup>th</sup>-15<sup>th</sup>, 2013. The Proponent vide letter no. RMD/92-954/Envn./1743, dated 4<sup>th</sup> April, 2013 informed that they had requested to collect base line data during summer season (March-May 2013) for EIA/EMP report. This was agreed to in the 5<sup>th</sup> Meeting of EAC. However, it is not recorded in the minutes of meeting.

The Committee discussed the issue and **recommended** for including the collection of base line data being generated during summer season (March-May 2013) for EIA/EMP report.

**3.2: Corrigendum to the Minutes of the 5<sup>th</sup> Meeting held during March 13<sup>th</sup>-15<sup>th</sup>, 2013 with regard to item no. 2.30-Enhancement of production capacity by 0.06 MTPA in existing capacity of 0.9 MTPA of Kuteshwar Limestone Mine (Left Bank Lease)- Opencast Manual Mining of M/s SAIL, Village Kuteshwar, District Katni, Madhya Pradesh (91.14 ha)(Consultant: Bhagvathi Ana Labs Ltd)-TOR**

The Committee had recommended the TORs for undertaking detailed EIA study in its 5<sup>th</sup> Meeting held during March 13<sup>th</sup>-15<sup>th</sup>, 2013. The Proponent vide letter no. RMD/92-954/Envn./1743, dated 4<sup>th</sup> April, 2013 informed that they had requested to collect base line data during summer season (March-May 2013) for EIA/EMP report. This was agreed to in the 5<sup>th</sup> Meeting of EAC. However, it is not recorded in the minutes of meeting.

The Committee discussed the issue and **recommended** for including the collection of base line data being generated during summer season (March-May 2013) for EIA/EMP report.

**3.3: Corrigendum to the Minutes of the 4<sup>th</sup> Meeting held during February 20<sup>th</sup> -22<sup>th</sup>, 2013 with regard to item no. 2.25- Mantralayam Sand Reach Project on Tungabhadra River with production capacity of 2,44,967 Cum/Annum of M/s Chowdeswari Mining Company Pvt. Ltd. at Village & Mandal Mantralayam District Kurnool, Andhra Pradesh (24.496 ha) (Consultant: Pioneer Enviro) –TOR**

It was brought to the notice of the Committee that all proposals which are Category 'A' Projects when general conditions apply, should be reflected in the Minutes. The Committee agreed to do so in future and also agreed for insertion of the sentence that "The aforesaid project site is 0.25 km from the Andhra Pradesh and Karnataka State border. Therefore it is a Category 'A' Project as per EIA Notification, 2006 due to there being interstate boundary in the vicinity."

**3.4: Corrigendum to the Minutes of the 2<sup>nd</sup> Meeting held during December 19<sup>th</sup>-21<sup>st</sup>, 2012 with regard to item no. 2.37 of Paretha Granite Deposit Mine with production of 2,65,000 TPA (ROM) of M/s Rajyog Minerals Pvt. Ltd near Village Paretha, Tahsil Nowgaon, Distt. Chattarpur, Madhya Pradesh (22.00 ha) –Amendments in the Minutes-EC**

The proposal is for opening of a new mine for production of 2,65,000 TPA (ROM) of granite. The mine lease area is 22 ha. It has been considered as Category 'A' because of its location within 10 km of the interstate boundary Madhya Pradesh and Uttar Pradesh. No forestland is involved. Mine working will be opencast mechanized. Life of mine is 63 years. Estimated Project Cost is Rs. 7.67 Crores.

The proposal was considered in the 2<sup>nd</sup> Meeting of Reconstituted EAC held during December 19<sup>th</sup> -21<sup>st</sup>, 2012 wherein the Committee recommended the Project for Environment Clearance subject to submission of detailed Conservation Plan for the Scheduled-I species found in the study area. However, it was noted later that detailed Conservation Plan for the Scheduled-I species was obtained from the Chief Wild Life Conservation of Forest vide Letter No. 3278, dated 25/06/2012. The Committee discussed and desired that this needs to be reflected in the minutes and thus the project is recommended for Environmental Clearance.

**3.5 Iron Ore Beneficiation Plant of M/s ESSAR Steel Orissa Ltd., Joda, District Keonjhar, Orissa (change in scope of EC condition)**

The proposal of M/s ESSAR Steel Orissa Limited for setting up of an iron ore Beneficiation Plant (BP) having a capacity of 10.7 million through-put was considered in the EAC meeting held on October 23-25, 2007. The beneficiation

plant would be using low grade iron ore from the nearby mines. The proposal envisaged that iron ore fines will be transported from these mines to the BP by road/ conveyor. The beneficiated ore will be transported in the form of slurry to their pellet plant at Paradeep, approximately 260 km by an underground slurry pipeline

Based on the information furnished in the prescribed format (Form-1) along with Project Report and presentation made, the Committee prescribed TORs on 7.12.2007 for undertaking detailed EIA study which included:-

- (i) Proposed plant Location w.r.t. the source of iron ore and mode of transportations to the beneficiation plant to be clearly brought out
- (ii) Air quality modelling should also take into account the impact of movement of vehicles for transportation of mineral.
- (iii) Impact on local transport infrastructure due to the project. Projected increase in truck traffic as a result of the project in the present road network (including those outside the project area) and whether it is capable of handling the increased load. Arrangement for improving the infrastructure, if contemplated including action to be taken by other agencies such as State Government, if any, should be covered.
- (iv) Public hearing points raised and commitment of the project proponent on the same.

The proposal was considered by the Committee in the 20th meeting held on October 22-24, 2008. It was stated by the proponent that the raw material for the beneficiation plant will be obtained from the nearby operating mines in the Barbil – Joda region and will be transported by road/ conveyor. The beneficiated iron ore slurry will be transported to their pellet plant at Paradeep through 253 km long underground slurry pipeline. The proponent informed the Committee that the Public was informed about movement of iron ore fines by road from the mines and have also committed to the Public to improve the road infrastructure as part of the Project CSR activity (this is reflected in the Public Hearing proceedings submitted by OPCB).

Based on the presentation made and discussions held, the Committee sought further information on the following:-

- (i) Keeping in view the increased magnitude of traffic density due to the proposed project, AAQ modelling for NO<sub>x</sub> levels should be carried out and results furnished. The input data used for modelling should also be provided.
- (ii) Impact on local transport infrastructure due to the project. [as per TOR no. (xxi) of the letter dated 7.12.2007].

The additional information/clarifications submitted by the proponent, was considered further in the 24th meeting held on February 17-19, 2009. Based on the information submitted, presentation made and discussion held, the Committee recommended the project for environmental clearance with a condition to transport the iron ore fines from the surrounding mines by rail/ conveyor. EC with the above condition was issued on 4th May, 2009.

The proponent have now made a request to allow them to transport the ore by road rather than by rail for the reasons stated in their current proposal. Accordingly, the proposal was placed before EAC in the 24th meeting held on February 21-23, 2012. The proponent made a presentation before the EAC. Based

on the presentation made and discussion held, the Committee sought information on the following:

- (i). To carry out a feasibility study of using various modes of transportation for the ore i.e. rail or road or combination of the two or any other mode and their relative merits.
- (ii). Issues of re-handling of ore during shifting from one mode to the other en-route.
- (iii). Issues relating to environment and public health impact due to various modes of transportation.
- (iv). Technical analysis of combination of transportation modes.
- (v). Feasibility of multi-mode alternatives clearly bringing out as to how much load could be shared and distributed among various possible modes of transportation which could be adopted in the project.

Based on the additional information/ clarifications submitted by the proponent, the proposal was considered further in the 27th meeting of the Expert Appraisal Committee held on May 23-25, 2012. The proponent made a feasibility study of various modes of transport inter-alia aerial ropeways, belt conveyor, rail transport and road transport. It was shown that ropeways and belt conveyors are not feasible options due to various constraints inter-alia multiple picking points, prohibition of creation of stack yard as per OMPPS Rules, 2007, involvement of forests and tribal lands and large handling capacity. As regards rail transport, this option was also stated to be unviable due to limitations in terms of, limited unloading facility, rake allotment by railways (short distance of movement), multiple handling etc. Additionally, topography of the area was also stated to be a major constraint in adopting rail route as the mode of transportation. As regards the road mode, it was stated to be the viable option due to established road connectivity to all the mines. These roads are reported to have adequate handling capacity in terms of the vehicular load. The KIDCO road and feeder roads are reported to have adequate capacity. It was stated that 12 tonne capacity trucks will be used. The expected truck density will be 124 trucks per hour. Pollution load estimation was also presented.

Based on the presentation made and discussion held, keeping in view the spatial distribution of mines from which the mineral is to be sourced, limitation of rail network, topography of the area and the environmental scenario presented including the anticipated impact due to adoption of road transportation, the Committee agreed to recommend the proposed change of mode of transportation from rail to road.

While processing the proposal in the Ministry, following observations were made and it was decided to be placed again before the EAC:

Issue 1: Transportation by road would add pollution and existing traffic movement may have an impact due to additional truck traffic of 2 per min:-

Committee's observation:

- a. The proponent have submitted a Feasibility Report including the Operations Research Transportation Study and the Traffic Study Report. These reports indicate that the pollution load due to the additional movement of truck traffic and its impact on the public health is minimum and also less than the road-rail-road combination (stand

alone rail movement not possible due to non availability of sidings in the mines and the unloading facility in the existing railway sidings).

- b. As regards the capacity of roads, the study report and the presentation made by the proponent brings out that the additional truck traffic of 124 trucks per hour will not hamper the existing movement as the roads have sufficient capacity to handle the same. This apart, the study and the presentation also shows that these roads have the capacity to handle the entire production of 70 Million tons of iron ore in the area.

Issue 2: Whether the roads are public, do they have sufficient capacity, maintenance of these roads to be studied and for such study the Department of Environment of the State should be involved:-

Committees observation:

The Feasibility Study Report submitted by the proponent has addressed this and has brought out that the major movement is through the mine roads and would also use the KIDCO road which has been specifically developed for movement of iron ore in the area. These roads have sufficient capacity and will not have any impact on the movement of existing traffic. Maintenance of mine roads is by the respective mines and that of KIDCO road by SPV (All mines are part of the SPV). It is a general practice that such studies are undertaken by the project proponent through a NABL/ MoEF accredited consultant and data as far as possible is collected from the Govt. Department, any additional data required to be generated on ground by the consultant. State Govt. does not get involved in such studies as it is specific to a project.

Issue 3: Public hearing was done on 23.04.2009 with the mode of transportation as rail which is more than four years: -

Committee's observation:

- (a) The EIA submitted by the proponent was for movement of iron ore by road and conveyor (from nearby mines), this has also been reflected in the Committee Meetings and the Public Hearing proceedings.
- (b) As informed by the project proponent, they were studying the feasibility of using the existing rail net work and also the possibility of a Merry Go Round from the mines to the BP. Using the existing rail network has limitations as they are public sidings with only manual loading facility and no unloading facility at Nayagarh siding which is close to BP (at 5km). The only siding available with unloading facility is at Barbil which is at a distance of 40 km from the BP. It would perforce involve road – rail–road movement (multiple handling). Merry go round was not a feasible option as per the proponent due to constraints of hilly terrain, tribal & forest land, multiple picking points etc. Due to these reasons under study, there has been a delay in requesting for an amendment in change in mode of transportation as desired by the proponent.

Based on the discussions, presentations and the reports submitted earlier, the Committee revisited the issues raised. In its considered view, the Committee wishes to reiterate its earlier recommendation for amendment to the EC for change in mode of transport of iron ore by road instead of rail transportation.

**3.6: Expansion of Thakurani Iron Ore Mining Project of Shri Padam Kumar Jain, located in Village(s) Noamundi and Barajamda, Tehsil Noamundi, District Singhbhum(W), Jharkhand – (environmental clearance).**

The proposal was considered by the Expert Appraisal Committee during its meeting held on May 23-25, 2012, wherein the Committee had observed that data shows high levels of RSPM levels, and therefore, the Committee had desired that the proponent should effectively implement the safeguard measures and show their effectiveness by actual monitored data and come back thereafter. Based on the additional information/clarifications submitted by the proponent, the proposal was considered further by EAC in July 25-27 2012. A report of State SPCB was considered by the Committee. As per the report, the level of pollution has come down. The PP has also taken mitigation measures which have resulted in lowering the levels of pollution. The PP has monitored the AAQ data in June & July, 2012, which confirm the low level of pollution. Other issues and their reply were also found satisfactory. Based on the presentation made and discussion held, the Committee recommended the project for environmental clearance. Further the certified compliance report of the project submitted by Regional Office, Bhubneshwar was discussed by the Committee and it was seen that the proponent has by and large complied to the conditions of the prior EC granted vide no. J-11015/48/2005-IA.II (M) dated 29.04.2008. The Committee reiterated its earlier recommendation for grant of environmental clearance to the project.

The Meeting concluded with a vote of thanks to the Chair. It was decided that the next meeting would be held on 15-17<sup>th</sup> May, 2013.

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**ANNEXURE-I****Terms of Reference**

<b>S. No.</b>	<b>Terms of Reference</b>
1	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification, 1994 came into force w.r.t. the highest production achieved prior to 1994.
2	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
3	All documents including approved mine plan, EIA and public hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management and mining technology and should be in the name of the lessee.
4	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
5	Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large may also be detailed in the EIA report.
6	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
7	The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc should be for the life of the mine / lease period.
8	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted.
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/Critically Polluted Areas/Aravalli (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	Impact, if any, of change of land use should be given.
18	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.
19	One season (non-monsoon) primary baseline data on ambient air quality (PM <sub>10</sub> , SO <sub>2</sub> and NO <sub>x</sub> ), water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM <sub>10</sub> , particularly for free silica, should be given.
20	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
21	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.

22	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
23	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.
24	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.
25	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.
26	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.
27	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.
28	Quantity of solid waste generation should be estimated and details for its disposal and management provided. The quantity, volumes and methodology planned for removal and utilisation (preferably concurrently) of top soil should be indicated. Details of backfilling proposed, if any, should also be given. It may be clearly indicated that out of the total waste generated during the mine life, how much quantity would be backfilled and how much quantity would be disposed off in the form of external dumps (number of dumps, their height, slopes and terraces to be brought out).
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	Phase-wise plan of greenbelt development, 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.
41	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.
42	Details of rainwater harvesting proposed, if any, in the project to be provided.
43	The reclamation plan, post mine land use and progressive greenbelt development plan shall be prepared in tabular form and submitted.
44	For expansion proposals, the certified report from the Regional Office of the MoEF is submitted.
45	All documents submitted should be numbered and date of submission to be mentioned.

**List of Participants**

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1. Sri M.S. Nagar - Chairman
2. Dr. S. Subramaniyan - Vice-Chairman
3. Dr. L Ajay Kumar - Member
4. Dr. S.K. Peshin - Member
5. Prof. G.S. Roonwall - Member
6. Sri P.K. Verdia (17<sup>th</sup>-18<sup>th</sup> April) - Member
7. Dr. D. Mohamed Kizhar Irshath (16-17<sup>th</sup> April)- Member
8. Dr. Saroj Director, MoEF - Member Secretary
9. Dr. Sonu Singh, Deputy Director, MoEF
10. Dr. R.B. Lal, Deputy Director, MoEF
11. Representative of District Industries Center (DIC), Department of Industries & Commerce Government of Punjab
12. Representative of M/s Rabela Traders & Finance Pvt. Ltd.
13. Representative of M/s The India Cements Ltd
14. Representative of Hutti Gold Mines
15. Representative of M/s Maihar Cement
16. Representative of M/s Nirmal Kumara Pradeep Kumar
17. Representative of M/s Khalsa Stone Works
18. Representative of Singareni Collieries Company Limited
19. Representative of M/s V. Sudhakar
20. Representative of M/s E.V. Ranga Reddy
21. Representative of M/s Siddhi Vinayak Cement Private Limited
22. Representative of M/s Umesh Prasad Agarwal
23. Representative of M/s Munshi Ram Chawla
24. Representative of M/s Ram Gopal
25. Representative of M/s Shri Vijay Kumar
26. Representative of M/s Pawan Minerals
27. Representative of M/s JK Cement Ltd.
28. Representative of M/s Manmohan Mineral Industries Pvt. Ltd.
29. Representative of M/s Sudha Parihar
30. Representative of M/s Divyajyothi Steels Ltd.
31. Representative of M/s Sanjith Aswath
32. Representative of M/s Gimpex A P Barytes Beneficiation Pvt. Ltd.
33. Representative of M/s Shri Sandeep Kumar Bansal
34. Representative of JSW Cements Ltd.
35. Representative of Smt. Neetu Singh
36. Representative of M/s Chettinad Cement Corporation Ltd.
37. Representative of M/s Banwarilall Newatia
38. Representative of M/s Jayswal Neco Industries Ltd
39. Representative of M/s Bisra Stone Lime Company Ltd.
40. Representative of M/s. Orient Cement
41. Representative of M/s GHCL Ltd.
42. Representative of RSMML
43. Representative of M/s RSMML

44. Representative of M/s Tata Steel Ltd.
45. Representative of M/s Jindal Saw Ltd.
46. Representative of M/s Krishna Stone Crushing Co
47. Representative of M/s Kajla Stone Crusher
48. Representative of M/s Shiv Shakti Stone Crusher Co-operative Industrial Society
49. Representative of M/s Navneet Sharma
50. Representative of M/s Ranjit Rana
51. Representative of M/s SMC Power Generation Ltd.
52. Representative of M/s Chettinad Cement
53. Representative of M/s ACC Ltd.
54. Representative of M/s Penna Cement Industries Ltd.

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