# No. J-11015/159/2010-IA.II(M) Government of India Ministry of Environment & Forests

Paryavaran Bhavan, C.G.O. Complex, Lodi Road, New Delhi-110003.

Dated the 28<sup>th</sup> June, 2013

To

The Director,
Department of Industries and commerce,
Government of Punjab,
17 Bay building, Sector -17 Chandigarh.

### Sub: Minor Mineral Mining Projects of M/s Department of Industries and Commerce Punjab – Grant of EC - Regarding.

This has reference to the 55 proposals for mining of sand/gravel/stone (minor minerals) from four districts of Punjab namely Pathankot/Gurdaspur, Rupnagar, Patiala & S.A.S. Nagar. The proposals were received from Department of Industries and Commerce, Government of Punjab. The proposals were prescribed TORs by MoEF and SEIAA during the period from 27.02.2010 to 03.04.2011. These proposals were considered in the 6<sup>th</sup> meeting of the reconstituted Committee of the Expert Appraisal Committee held during April 16<sup>th</sup>-18<sup>th</sup>, 2013 and Committee recommended the proposals for grant of environmental Clearance. While processing the proposals it was noted that 28 proposals cannot be considered for grant of environmental clearance due to the location of mines within 1 km of protected areas, requirement of cumulative impact assessment report for mines located in close proximity to each other and public hearing not been conducted as per EIA notification, 2006. The decision in respect of these 28 proposals is being communicated separately.

2. The following 27 proposals for mining on Chakki, Ravi, Satluj, Soan and Ghaggar Rivers forming six clusters are considered for grant of environmental clearance:

	Cluster 1- District Pathankot on Chakki River					
S. No.	Project Name	TOR Issued by MoEF/ SEIAA	Area (ha) in TOR	Production capacity (Lakh TPA) in TOR	Area (ha) for EC	Producti on capacity (Lakh TPA) for EC
1	River Bed Mining project at Gandhran	MoEF on 03.04.2011	70	12.6	70	4.20
2	River Bed Mining project at Mamoon	MoEF on 03.04.2011	88	15.84	88	5.28
3	River Bed Mining project at Karoli	SEIAA on 27.02.2010	34.4	8.0	35	2.70
4	River Bed Mining project at Jandroi	SEIAA on 27.02.2010	16.4	6.0	16.6	2.00
5	River Bed Mining project at Gho	SEIAA on 27.02.2010	26.0	8.0	22.7	2.70
6	River Bed Mining project at Nalunga	SEIAA on 27.02.2010	7.2	3.0	7.3	1.0
7	River Bed Mining project at Tarheti Narangpur	SEIAA on 27.02.2010	8	3.0	8	1.0
8	River Bed Mining project at Barsoon	SEIAA on 27.02.2010	12.4	3.0	12.4	1.0
9	River Bed Mining project at Beli Changa	SEIAA on 27.02.2010	9.6	3.0	9.7	1.0
10	River Bed Mining project at Talwara Jattan	SEIAA on 27.02.2010	26.8	11.0	27	3.67

	Cluster 2- District Pathankot/Gurdaspur on Ravi River						
S. No.	Project Name	TOR Issued by MoEF/ SEIAA	Area (ha) in TOR	Production capacity (Lakh TPA) in TOR	Area (ha) for EC	Production capacity (Lakh TPA) for EC	
1	River Bed Mining project at Bherian	MoEF on 28.02.2011	160	43.2	158.4	14.40	
2	River Bed Mining project at Raji Beli	SEIAA on 27.02.2010	7.2	2.0	7.2	0.67	
3	River Bed Mining project at Dulpat	SEIAA on 27.02.2010	11.6	3.0	11.6	1.0	
4	River Bed Mining project at Chak Hari Rai	SEIAA on 27.02.2010	47.2	10.0	47.2	3.34	

	Cluster 3- District Rupnagar on Satluj River					
S. No.	Project Name	TOR Issued by MoEF/ SEIAA	Area (ha) in TOR	Production capacity (Lakh TPA) in TOR	Area (ha) for EC	Productio n capacity (Lakh TPA) for EC
1	River Bed Mining project at Manguwal	MoEF on 03.04.2011	8.71	0.3	16.48	0.20
2	River Bed Mining project at Diwarhi	MoEF on 03.04.2011	10.27	0.26	17.83	0.15
3	River Bed Mining project at Kiratpur	MoEF on 28.02.2011	31.92	1.12	32.05	0.37
4	River Bed Mining project at Plassi	SEIAA on 27.02.2010	18.18	0.66	19.45	0.22

	Cluster 4- District Rupnagar on Soan River					
S. No.	Project Name	TOR Issued by MoEF/ SEIAA	Area (ha) in TOR	Production capacity (Lakh TPA) in TOR	Area (ha) for EC	Production capacity (Lakh TPA) for EC
1	River Bed Mining project at Surewal	MoEF on 28.02.2011	93.55	3.0	73.12	0.78
2	River Bed Mining project at Dyapur	MoEF on 03.04.2011	52.68	1.9	51.92	0.63
3	River Bed Mining project at Algran	MoEF on 03.04.2011	60.7	2.08	19.74	0.23
4	River Bed Mining project at Bhallan	SEIAA on 27.02.2010	8.0	0.51	5.77	0.12
5	River Bed Mining project at Harsabela	MoEF on 03.04.2011	134.91	4.76	79.29	0.93

	Cluster 5- District Patiala on Ghaggar River					
S. No.	Project Name	TOR Issued by MoEF/ SEIAA	Area (ha) in TOR	Production capacity (Lakh TPA) in TOR	Area (ha) for EC	Production capacity (Lakh TPA) for EC
1	River Bed Mining project at Tepla	MoEF on 03.04.2011	17.03	7.57	17.07	2.52
2	River Bed Mining project at Kapoori	MoEF on 03.04.2011	6.67	2.96	6.63	0.98

	Cluster 6- District S.A.S. Nagar on Ghaggar River					
S. No.	Project Name	TOR Issued by MoEF/ SEIAA	Area (ha) in TOR	Production capacity (Lakh TPA) in TOR	Area (ha) for EC	Production capacity (Lakh TPA) for EC
1	River Bed Mining project at Sundran	MoEF on 28.02.2011	29.72	1.5	29.72	0.50
2	River Bed Mining project at Kakrali	MoEF on 28.02.2011	32.53	1.7	32.53	0.75

3. Out of twenty seven proposals, the seven proposals are located within 10 km from the boundary of Protected Areas notified under the Wild Life (Protection) Act, 1972 and require the clearance from the Standing Committee of National Board for Wildlife, the details are as follows:

S. No.	Project Name	Protected Area	Distance & Direction
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 Raji Beli	Kathlaur Kaushlian Wildlife Sanctuary	About 8 km in NE Direction
4	River Bed Mining project at Harsabela	Jhajjar Bachauli Wildlife Sanctuary	About 8.5 km in NE Direction
5	River Bed Mining project at Manguwal	Ropar Wetland	About 9 km in SW Direction
6	River Bed Mining project at Diwarhi	Ropar Wetland	About 8 km in SW Direction
7	Kapoori Sand Mining Project	Bir Bhunarheri Wildlife Sanctuary	About 4 km in W Direction

4. It was reported by the project proponent that in all the above proposals, the method of mining would be semi-mechanised except in seven proposals where the project lies near the protected areas, it would be restricted to manual mining. 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. 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. The details of the twenty seven projects are Annexed.

5. The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and hereby accords environmental clearance under the provisions thereof to the above mentioned Minor Mineral Mining Projects of M/s Department of Industries and Commerce Punjab of minor minerals (sand, stone and bajri) from the bed of river Chakki, Ravi, Satluj, Soan and Ghaggar, subject to implementation of the following conditions and environmental safeguards.

#### A. Specific conditions

- The Environmental Clearance is valid for a period of 5 years i.e. upto the period of the approved mine plan.
- ii. The project proponent shall obtain Consent to Establish and Consent to Operate from the Punjab Pollution Control Board and effectively implement all the conditions stipulated therein.
- iii. Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004, as may be applicable to this project.
- iv. Environmental clearance to the proposals listed at Para 3 above is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the Standing Committee of National Board for Wildlife.
- v. Annual replenishment report certified by an authorized agency shall be submitted. In case the replenishment is low the mining activity / production levels shall accordingly be decreased / stopped.
- vi. A monitoring committee shall be established including Local Panchayat, to check on traffic due to transportation and submit an annual report for the same.
- vii. 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.
- viii. Arrangement for drinking water, first aid facility along with species specific anti-venom in case of emergency for the workers shall be made.
- ix. It shall be ensured that no mining shall be carried out during the monsoon season.
- x. The material transportation shall be only through covered trucks.
- xi. Effective safeguard measures shall be taken to control particulate level so as to ensure that these are within permissible limit.
- xii. Regular monitoring of ambient air quality shall be carried out and records maintained. The results of monitoring shall be submitted to MoEF and its Regional Office and CPCB, SPCB regularly.
- xiii. Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as loading and unloading point and all transfer points. Extensive water sprinkling shall be carried-out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- xiv. The project proponent shall undertake adequate safeguard measures during extraction of river bed material and ensure that due to this activity the hydro-geological regime of the surrounding area shall not be affected. Regular monitoring of ground water level and quality shall be carried out around the mine lease area by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Chandigarh, the Central Ground Water Authority and the Regional Director, Central Ground Water

Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.

- xv. The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and groundwater), if any, required for the project.
- xvi. Appropriate mitigative measures shall be taken to prevent pollution of the river in consultation with the State Pollution Control Board. It shall be ensured that there is no leakage of oil and grease in the river from the vehicles used for transportation.
- xvii. Vehicular emissions shall be kept under control and regularly monitored. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.
- xviii. No drilling and blasting operation shall be carried out.
- xix. Mineral handling area shall be provided with the adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- xx. Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.
- xxi. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- xxii. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely elephant etc. found in the study area. Action plan for

conservation of flora and fauna shall be prepared in consultation with the State Forest and Wildlife Department. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific to this project site shall be effectively implemented. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. A copy of action plan shall be submitted to the Regional Office of the Ministry of Environment and Forests, Chandigarh.

#### **B.** General conditions

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral Sand, Gravel, Boulders (minor mineral) and waste should be made.
- (iii) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM<sub>10</sub>) and NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.
- (iv) Data on ambient air quality RSPM (Particulate matter with size less than 10micron i.e., PM<sub>10</sub>) & NOx should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Chandigarh and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (v) Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.

- (vi) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
- (vii) Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
- (viii) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- (ix) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Chandigarh.
- (x) The project authorities should inform to the Regional Office located at Chandigarh regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xi) The Regional Office of this Ministry located at Chandigarh shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- (xii) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office Chandigarh, the respective Zonal Office of Central Pollution Control Board the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Chandigarh, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.

- (xiii) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (xiv) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days.
- (xv) The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Chandigarh by e-mail.
- (xvi) The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web of Environment and site of the Ministry Forests http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Chandigarh.
- 6. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 7. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
- 8. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act,

1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made thereunder and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Punjab and any other Court of Law relating to the subject matter.

9. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

(Dr. Saroj) Director

#### Copy to

- i. The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
- ii. The Secretary, Science, Technology and Environment Department, Government of Punjab, Punjab Civil Secretariat, Chandigarh.
- iii. The Conservator of Forests (C), Ministry of Environment & Forests, Regional Office (NZ), Bays No. 24-25, Sector 31-A, Dakshin Marg, Chandigarh-160 030.
- iv. The Chief Wildlife Warden, Government of Punjab,SCO 1028-29, Sector 22-B, Chandigarh
- v. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
- vi. The Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-Il0001.
- vii. The Chairman, Punjab Pollution Control Board, Vata Varan Bhawan, Nabha Road, Patiala, Punjab-147 001.
- viii. The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- ix. The District Collector, Pathankot/Gurdaspur, Rupnagar, Patiala & S.A.S. Nagar Districts, Punjab.
- x. Guard File.

(Dr. Saroj) Director

### 1. River Bed Mining of Sand/gravel from River Chakki, located in Village Gandhran, Tehsil Pathankot, District Pathankot, Punjab (70 ha).

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 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.

#### 2. River Bed Mining of Sand/gravel from River Chakki, located in Village Mamoon, Tehsil Pathankot, District Pathankot, Punjab (88 ha).

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 Panchavat 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  $PM_{10}$  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.

#### 3. River Bed Mining of Sand/gravel from River Phungi, located in Village Karoli, Tehsil Pathankot, District Pathankot, Punjab (35 ha).

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.

#### 4. River Bed Mining of Sand/gravel from River Phungi, located in Village Jandroi, Tehsil Pathankot, District Pathankot, Punjab (16.6 ha).

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. 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).

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. 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 2749-B dated 06-02-2013.

### 6. River Bed Mining of Sand/gravel from River Chakki, located in Village Nalunga, Tehsil Pathankot, District Pathankot, Punjab (7.3 ha).

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 - $32^{\circ}07'$  06.04" to  $32^{\circ}07'22.71$ "N and Longitude -  $75^{\circ}35'47.46"$  to  $75^{\circ}35'54.47$ "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  $PM_{10}$ . The  $PM_{10}$  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.

## 7. River Bed Mining of Sand/gravel from River Chakki, located in Village Tarheti Narangpur, Tehsil Pathankot, District Pathankot, Punjab (8.0 ha).

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 Smt. Sarojini Gautam Sharda, Board chaired by Additional 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-*qhi* dated 06-02-2013.

### 8. River Bed Mining of Sand/gravel from River Chakki, located in Village Barsoon, Tehsil Pathankot, District Pathankot, Punjab (12.40 ha).

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.

# 9. River Bed Mining of Sand/Gravel from River Chakki, located in Village Beli Changa, Tehsil Pathankot, District Pathankot, Punjab (9.7 ha).

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 - $32^{0}11'$  33.86" to  $32^{\circ}11'$ 53.79"N and Longitude -  $75^{\circ}38'$ 32.13" to  $75^{\circ}38'$ 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.

# 10. River Bed Mining of Sand/Gravel from River Chakki, located in Village Talwara Jattan Tehsil Pathankot, District Pathankot, Punjab (27.0 ha).

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 - $75^{\circ}37'02.75''$ E to  $75^{\circ}37'32.51''$ 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 Panchavat 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.

#### 11. River Bed Mining of Sand/gravel from River Ravi, located in Village Bherian, Tehsil Pathankot, District Pathankot, Punjab (158.4 ha).

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 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 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.

#### 12. River Bed Mining of Sand/gravel from River Masto, located in Village Raji Beli, Tehsil Pathankot, District Pathankot, Punjab (7.2 ha).

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. 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 Mine working will be semi-mechanized. However, no North East direction. 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.

#### 13. River Bed Mining of Sand/gravel from River Masto, located in Village Dalpat, Tehsil Pathankot, District Pathankot, Punjab (11.6 ha).

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 -  $32^{\circ}16'$  55.85" to  $32^{\circ}17'11.13"N$  and Longitude -  $75^{\circ}27'33.72"$  to  $75^{\circ}27'48.11"E$  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.

### 14. River Bed Mining of Sand/gravel from River Ravi, located in Village Chak Hari Rai, Tehsil Pathankot, District Pathankot, Punjab (47.2 ha).

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 -  $32^{\circ}18'19.26''$  N to  $32^{\circ}18'47.46''$ N and Longitude -  $75^{\circ}28'46.66''$  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.

## 15. River Bed Mining of Sand from River Satluj, located in Village Manguwal, Tehsil Rupnagar, District Rupnagar, Punjab (16.48 ha).

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.

### 16. River Bed Mining of Sand from River Sirsa, located in Village Diwarhi, Tehsil Rupnagar, District Rupnagar, Punjab (17.83 ha).

The proposal is for environmental clearance for Diwarhi Sand Mining Project from the bed of River Sirsa in Village Diwarhi, Tehsil Rupnagar, District Rupnagar, Punjabfor 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 Panchavat 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-*qhi* dated 18-12-2012.

## 17. River Bed Mining of Sand from River Soan, located in Village Kiratpur, Tehsil Anandpur Sahib, District Rupnagar, Punjab (32.05 ha).

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-qhi dated 21-12-2012.

### 18. River Bed Mining of Sand from River Satluj, located in Village Plassi, Tehsil Nangal, District Rupnagar, Punjab (19.45 ha).

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.

#### 19. River Bed Mining of Sand/gravel from River Soan, located in Village Surewal, Nangal, District Rupnagar, Punjab (73.12 ha).

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 semimechanized. 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 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 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.

### 20. River Bed Mining of Sand/gravel from River Soan, located in Village Dyapur, Nangal, District Rupnagar, Punjab (51.92 ha).

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 semimechanized. 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  $PM_{10}$ . The  $PM_{10}$  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-qhi dated 11-03-2013.

#### 21. River Bed Mining of Sand from River Soan, located in Village Algran, Nangal, District Rupnagar, Punjab (19.74 ha).

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 The Public hearing was held on 14.03.2012 at village replenishment rate. 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-*qhi* dated 11-03-2013.

#### 22. River Bed Mining of Sand from River Soan, located in Village Bhallan, Tehsil Nangal, District Rupnagar, Punjab (5.77 ha).

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 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 The Public hearing was held on 3.02.2012 at village replenishment rate. 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-qhi dated 14-03-2013.

### 23. River Bed Mining of Sand/ Gravel from River Soan, located in Village Harshabela, Nangal, District Rupnagar, Punjab (79.29 ha).

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.

#### 24. River Bed Mining of Sand from River Ghaggar, located in Village Tepla, Tehsil Rajpura, District Patiala, Punjab (17.07 ha).

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  $PM_{10}$ . The  $PM_{10}$  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-qhi dated 21-01-2013.

### 25. River Bed Mining of Sand from River Ghaggar, located in Village Kapoori, Tehsil Patiala, District Patiala, Punjab (6.63 ha).

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 lavers 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-qhi dated 28-12-2012.

# 26. River Bed Mining of Sand from River Ghaggar, located in Village Sundran, Tehsil Dera Bassi, District SAS Nagar, Punjab (27.92 ha).

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. 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.

### 27. River Bed Mining of Sand from River Ghaggar, located in Village Kakrali, Tehsil Dera Bassi, District SAS Nagar, Punjab (32.53 ha).

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. forestland is involved. Bir Machhela, Khola Raitan Reserved Forest and Dariya and Khoi 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  $PM_{10}$ . The  $PM_{10}$  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.