

Supplementary Agenda for the 122nd meeting of State Level Environment Impact Assessment Authority to be held on 02.05.2017 at 10.30 AM in Committee Room, Regional Office, Punjab Pollution Control Board, Mohali.

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Item No. 122.32: Application for obtaining environmental clearance under EIA notification dated 14.09.2006 for mining of minor minerals (Sand) from the bed of river Satluj in the revenue estate of Village- Arzidarya Bramad Pragpur, Tehsil- Balachaur, District- SBS Nagar, Punjab of General Manager cum Mining Officer, District Industries Centre, SBS Nagar. (Proposal No. SIA/PB/MIN/64286/2017)

The facts of the case are as under:

Earlier, the General Manager cum Mining Officer, District Industries Centre, Ludhiana vide online application dated 25.04.2017 bearing proposal number SIA/PB/MIN/52891/2016, had applied for obtaining environmental clearance under EIA notification dated 14.09.2006 for mining of minor minerals (Sand) from the bed of river Satluj in the revenue estate of Village- Arzidarya Bramad Pragpur, Tehsil- Balachaur, District- SBS Nagar, Punjab. The project is covered under category 1 (a) of the Schedule appended to the said notification. The details of the project are as under:

- 1) About 1,27,880 TPA of mining of minor minerals (Sand) will be carried out in an area of 11.376 Hectare from the bed of river Satluj in the revenue estate of Village- Arzidarya Bramad Pragpur, Tehsil- Balachaur, District- SBS Nagar in H.B. no. 437 bearing Khasranos 21 min, 100/22 min, 101/23 min, 106/24 min
- 2) The project is an open-cast mining project, confined to excavation of Sand from the proposed site. In the operation phase Sand will be excavated semi-mechanically with the help of JCB and Poclain. These will be loaded directly into trucks and transported to local markets.
- 3) The minerals will be collected in its existing form. Excavation will be carried out only up to a depth of 3 m (Maximum) below ground level or above water level, whichever is less. Excavation of Sand material will be done only during the day time and completely stopped during the monsoon season.
- 4) Total amount of water required for the project will be 5.46 KLD out of which 1.44 KLD will be used for domestic purpose, 3.3 KLD for Green belt development and remaining 0.72 KLD for dust suppression. Water will be supplied through private tankers from nearby available source.

- 5) The total cost of project will be Rs. 9,00,000.
- 6) All the activities will be carried out in a Semi-Mechanically. The material will be excavated and loaded directly into tractors. The operation will be done only from sun rise to sun set. 01 nos. Rounded off JCB machines is required /day for loading Tippers to destination.
- 7) Approx. 2500 trees are to be planted within 5 years of the Plan Period. It is proposed to plant local trees along the haul road and the available place with consultation with concern Local authority or Gram Panchayat.
- 8) Insignificant amount of Domestic solid waste will be generated from the proposed project. 1,27,880 tonnes of top soil will generated. The soil covering the sand horizon commands good demand and may be distribute to neighborhood farmers free of cost. The top soil cover should not be wasted and disposed off anywhere else.
- 9) Liquid effluent will be generated and managed through Portable Bio-Toilet shall be provided for the workers at the site. The sewage generated from the toilet provided for the mine workers shall be collected and treated by the inbuilt process of DRDO patented Bio technology using specially cultured anaerobic bacteria.
- 10) The project proponent has submitted the following documents alongwith Form– I:
 - (i) Pre- feasibility report
 - (ii) EMP
 - (iii) Mining Plan
 - (iv) Land Documents (Jamabandi)
 - (v) Surface Plan of Proposed Project.
 - (vi) 1 Km & 10 Km Buffer google map showing the sand mining site.
 - (vii) Location Plan on Latha Map.
 - (viii) Haul Road Map
 - (ix) Contour Map
 - (x) DFO Letter
 - (xi) Site Photographs
 - (xii) Undertaking

- (xiii) Consent of Farmer
- (xiv) Commissioner Certificate for land excavation
- (xv) DSR, SBS Nagar

The case was considered by SEAC in its 158th meeting held on 27.04.2017, which was attended by the following on behalf of project proponent:

- (i) Sh. Gurdev S. Mahal, General Manager-cum-Mining officer, DIC, SBS Nagar.
- (ii) Sh. Sushminder Singh, State Geologist.
- (iii) Sh. Rajesh Yadav, M/s Ascenso Enviro Private Ltd., Environmental consultant of the project proponent.

Before allowing the presentation, SEAC observed that the project is an open-cast mining project, confined to excavation of Sand from the proposed site. In the operation phase, Sand will be excavated semi-mechanically with the help of JCB and Poclain and it will be loaded directly into trucks and transported to local markets, which is not allowed.

General Manager, DIC, SBS Nagar requested for allowing him to withdraw his application for sand mining so as to submit fresh application after considering the observation of the SEAC.

After discussions, the SEAC decided to forward the case to the SEIAA with the recommendation to allow the applicant to withdraw his application.

The application has been forwarded to SEIAA for withdrawal and has been placed in instant meeting of SEIAA at Sr.no. 122.28 to be held on 02.05.2017.

The General Manager cum Mining Officer, District Industries Centre, Ludhiana vide revised online application dated 27.04.2017 bearing proposal number SIA/PB/MIN/64286/2017(i.e. present item), has applied for obtaining environmental clearance under EIA notification dated 14.09.2006 for mining of minor minerals (Sand) from the bed of river Satluj in the revenue estate of Village- Arzidarya Bramad Pragpur, Tehsil- Balachaur, District- SBS Nagar, Punjab. The project is covered under category 1 (a) of the Schedule appended to the said notification. In the revised application, the khasra nos with area 21/1(45 kanal-19 marla), 21/3(79 kanal-19 marla), 100/22Min (10 kanal-0), 101/23min (52 kanal-0) ,106/24/4(58 kanal-9 marla), & 106/24Min (35kanal-11 marla).

The case was considered by SEAC in its 159th meeting held on 01.05.2017, which was attended by the following on behalf of project proponent:

- (i) Sh. Gurdev S. Mahal, General Manager-cum-Mining officer, DIC, SBS Nagar.
- (ii) Sh. Rajesh Yadav, M/s Ascenso Enviro Private Ltd., Environmental consultant of the project proponent.

Before allowing the project proponent to present the salient features of the project, the SEAC observed that aks sajra and other documents submitted by the project proponent are not in order. Also, number of workers for manual mining and project cost mentioned in the application do not represent the true figures for project of such magnitude. To this observation of SEAC, the project proponent submitted aks sajra plan showing clear cut active channel of river, its embankment and also submitted complete set of application alongwith undertaking regarding mining operation will not be a part of the active river channel & other revised documents including manpower requirement and project cost. Thereafter, the SEAC allowed the project proponent to present the details of the project and Environmental Consultant of the project proponent presented the details of the project proposal before the SEAC as under:

- 1) About 1,27,880 TPA of mining of minor minerals (Sand) will be carried out in an area of 11.76 Hectare from the bed of river Satluj in the revenue estate of revenue estate of Village- Arzidarya Bramad Pragpur, Tehsil- Balachaur, District- SBS Nagar in H.B. no. 437 bearing Khasranos 21/1(45 kanal-19 marla), 21/3(79 kanal-19 marla), 100/22 min(10 kanal-0), 101/23 min(52 kanal-0), 106/24/4 (58 kanal-9 marla) & 106/24 min (35 kanal-11 marla).
- 2) Mining Officer, DIC, SBS Nagar certified that no mining lease is granted within 500 mtr periphery from the area of said mining lease.
- 3) NOC has been issued by the Department of Forest, SBS Nagar vide letter no. 239 dated 10.04.2015 to the Mining Officer, District Industries Centre, SBS Nagar with certain condition.
- 4) Mining of Sand will be carried out upto a depth of 3m bgl or above ground water level whichever comes first, using hand tools like shovel, pan, sieve etc only during the day time.

- 5) No Mining activity will be carried out during monsoon season and at the time of floods.
- 6) The total cost of project will be Rs. 2.5 crore/year and the manpower required will be 71 nos.
- 7) All the activities will be carried out manually using hand tools like shovel, pan, sieve etc. The operation will be done only from sun rise to sun set hence there will be no power requirement for the project at site.
- 8) Total amount of water required for the project will be 6.82 KLD out of which 2.8 KLD will be used for domestic purpose, remaining 0.72 KLD for dust suppression & remaining 3.3 KLD will be used for green belt. water will be supplied through tankers from nearby available source.
- 9) 47 trucks/day will be plying during the working hours due to the mining activities. Movement of the vehicle will be restricted during the peak hour of the work. Only pollution check certificate vehicles will be used for transportation purpose. For the transportation of minerals densely populated areas, villages will be avoided & an alternate route will be followed for evacuation purpose.
- 10) During Mining activities, no solid & hazardous waste will be generated. The Municipal waste generation shall be disposed off as per the Solid Waste Management Rules, 2016. Segregation of bio-degradable waste and non-bio degradable wastes shall be done at site and disposed off accordingly.
- 11) Plantation will be raised along both side of roads civic amenities in consultation with the local authorities. About 1100 trees are proposed in the green belt along haulage road and nearby mining site.
- 12) Adequate occupational health & safety measures shall be provided to the workers.
- 13) Top soil generated as overburden will be used for the development of green belt. Water sprinkling will be done on the roads regularly. Care will be taken to prevent spillage by covering the carrying vehicles with tarpaulin and sprinkling of water, if material in dry form.

- 14) Mitigation measures such as regular maintenance of machinery, minimum use of horns at the village area and plantation of the trees along the bank will be done to maintain the noise level within the prescribe limits.
- 15) Project proponent shall be responsible for the implementation of the EMP and Rs. 9,80,000 per annum as recurring cost for the implementation of the EMP on the following activities: -
 - (i) Management of Haulage Roads including Sprinkling, Tractor trolley with sprinkler for the Protection of Environment.
 - (ii) Environmental Monitoring (Air, Water Soil etc.).
 - (iii) Plantation.
 - (iv) Occupational Health measure such as first aid and other miscellaneous.
- 16) About Rs. 4,90,000 will be spent for following activities under Corporate Social Responsibility for the people residing in nearby villages: -
 - (i) Toilets will be made in the nearby school. Items like desk, chair, storage bins & Almira, dari will be given to the nearby schools.
 - (ii) Organizing regular health check-up camps for the mine workers periodically to observe any contradictions due to exposure to dust and take corrective measures.
 - (iii) Medicines will be given in the nearby dispensaries.
 - (iv) Common vocational training, awareness programme will be organized in the nearby villages.

General Manager, DIC, SBS Nagar requested to recommend the case to SEIAA for grant of environmental clearance to the project.

After detailed deliberations, the Committee observed that the project proponent has provided adequate and satisfactory clarifications to the observations raised by it. Therefore, the Committee decided that the case be forwarded to the SEIAA with the recommendation to grant Environmental Clearance to the project promoter for carrying out for mining of minor minerals sand) @ 1,27,880 TPA in an area of 11.376 Hectare from the bed of river Satluj in the revenue estate of revenue estate of Village- Arzidarya Bramad Pragpur, Tehsil- Balachaur, District- SBS Nagar in H.B. no. 437 bearing Khasra nos 21/1(45 kanal-19 marla), 21/3(79 kanal-19 marla), 100/22 min(10 kanal-0), 101/23 min(52 kanal-0), 106/24/4 (58 kanal-9 marla) & 106/24 min (35 kanal-11 marla) in the revenue estate of revenue estate of Village- Arzidarya Bramad Pragpur, Tehsil- Balachaur, District- SBS Nagar subject to

the conditions proposed at Annexure-A of the proceedings in addition to the proposed measures.

The case is placed before SEIAA for consideration.

Item No:122.33: Application for obtaining environmental clearance under EIA notification dated 14.09.2006 for mining of minor minerals (Sand) from the bed of river Beas in the revenue estate of Village Rarra, Tehsil Dasuya District Hoshiarpur, Punjab of General Manager cum Mining Officer, District Industries Centre, Hoshiarpur. (Proposal No. SIA/PB/MIN/59628/2016)

The facts of the case are as under:

The General Manager cum Mining Officer, District Industries Centre, Ludhiana vide online application dated 25.04.2017, has applied for obtaining environmental clearance under EIA notification dated 14.09.2006 for mining of minor minerals (Sand) from the bed of river Beas in the revenue estate of Village Rarra, Tehsil Dasuya District Hoshiarpur, Punjab. The project is covered under category 1 (a) of the Schedule appended to the said notification.

The case was considered by SEAC in its 158th meeting held on 27.04.2017, which was attended by the following on behalf of project proponent:

- (i) Sh. Arun Kumar, General Manager-cum-Mining officer, DIC, Hoshiarpur.
- (ii) Sh. Sushminder Singh, State Geologist.
- (iii) Sh. S. Brahma, HOD-EIA, M/s Shivalik Solid Waste Management Ltd., Environmental consultant of the project proponent.

Before allowing Environmental consultant to present the case, the SEAC queried that whether land of the mining project involve private ownership land. In reply to this query, project proponent informed that the mining is to be carried out from the private ownership land. To an another query of SEAC whether consents of the concerned land owner(s) have been obtained for carried out the mining operation, project proponent sought time to submit the consent letter and requested for deferment.

After discussion, SEAC accepted the request of project proponent and decided to defer the case.

The case was again considered by SEAC in its 159th meeting held on 01.05.2017, which was attended by the following on behalf of project proponent:

- (i) Ms. Harjot Kaur, Mining officer, DIC, Hoshiarpur.
- (ii) Sh. S. Brahma, HOD-EIA, M/s Shivalik Solid Waste Management Ltd., Environmental consultant of the project proponent.

The SEAC observed that the project proponent has submitted consents of private land owners for carrying out the mining operation in an area of 33.9 acres. Thus, the SEAC allowed the project proponent to present the details of the project and Environmental Consultant of the project proponent presented the details of the project proposal before the SEAC as under:

- 1) About 5,65,995 TPA of mining of minor minerals (Sand) will be carried out in an area of 12.94 Hectare from the bed of river Beas in the revenue estate of Village Rarra, Tehsil Dasuya District Hoshiarpur, Punjab in H.B. no. 522 bearing Khasra nos 80//3 (7-19), 4(8-0), 8(8-0), 9(8-0), 11(8-0), 12(8-0), 13(8-0), 81//8(8-0), 11(8-0), 12(8-0), 13(8-0), 14(8-0), 15(8-0), 18(8-0), 19(8-0), 20(8-0), 21(8-0), 22(8-0), 82//12(8-0), 13(8-0), 14(8-0), 15(8-0), 16(8-0), 17(8-0), 18(8-0), 19(8-0), 20(8-0), 21(8-0), 22(8-0), 23(8-0), 24(8-0) & 25(8-0).
- 2) Mining Officer, DIC, Hoshiarpur certified that no mining lease is granted within 500 mtr periphery from the area of said mining lease.
- 3) NOC has been issued by the Department of Forest, Hoshiarpur vide letter no. 938 dated 12/06/2015 to the Mining Officer, District Industries Centre, Hoshiarpur with certain condition.
- 4) Mining of Sand will be carried out upto a depth of 3m bgl or above ground water level whichever comes first, using hand tools like shovel, pan, sieve etc only during the day time.
- 5) No Mining activity will be carried out during monsoon season and at the time of floods.
- 6) The total cost of project will be Rs. 4,61,25000 and the manpower required will be 113 nos.
- 7) All the activities will be carried out manually using hand tools like shovel, pan, sieve etc. The operation will be done only from sun rise to sun set hence there will be no power requirement for the project at site.
- 8) Total amount of water required for the project will be 11.20 KLD out of which 5.08 KLD will be used for domestic purpose and remaining 6.12 KLD for dust suppression. water will be supplied through tankers from nearby available source.

- 9) 18 trucks/hr will be plying during the working hours due to the mining activities. Movement of the vehicle will be restricted during the peak hour of the work. Only pollution check certificate vehicles will be used for transportation purpose. For the transportation of minerals densely populated areas, villages will be avoided & an alternate route will be followed for evacuation purpose.
- 10) During Mining activities, no solid & hazardous waste will be generated. The Municipal waste generation shall be disposed off as per the Solid Waste Management Rules, 2016. Segregation of bio-degradable waste and non-bio degradable wastes shall be done at site and disposed off accordingly.
- 11) Plantation will be raised along both side of roads civic amenities in consultation with the local authorities. Budget of Rs. 60,000 have been proposed for the green belt along haulage road and nearby mining site.
- 12) Adequate occupational health & safety measures shall be provided to the workers.
- 13) Top soil generated as overburden will be used for the development of green belt. Water sprinkling will be done on the roads regularly. Care will be taken to prevent spillage by covering the carrying vehicles with tarpaulin and sprinkling of water, if material in dry form.
- 14) Mitigation measures such as regular maintenance of machinery, minimum use of horns at the village area and plantation of the trees along the bank will be done to maintain the noise level within the prescribe limits.
- 15) Project proponent shall be responsible for the implementation of the EMP and Rs. 8,32,500 will be incurred as total capital cost & Rs. 1,66,500 per annum as recurring cost for the implementation of the EMP on the following activities: -
 - (i) Management of Haulage Roads including Sprinkling, Tractor trolley with sprinkler for the Protection of Environment.
 - (ii) Environmental Monitoring (Air, Water Soil etc.).
 - (iii) Plantation.
 - (iv) Occupational Health measure such as first aid and other miscellaneous.
- 16) About Rs. 9,22,500 will be spent for following activities under Corporate Social Responsibility for the people residing in nearby villages: -
 - (i) Toilets will be made in the nearby school. Items like desk, chair, storage bins & Almira, dari will be given to the nearby schools.

- (ii) Organizing regular health check-up camps for the mine workers periodically to observe any contradictions due to exposure to dust and take corrective measures.
- (iii) Medicines will be given in the nearby dispensaries.
- (iv) Common vocational training, awareness programme will be organized in the nearby villages.

The SEAC raised query that the certain khasra nos mentioned in the auction letter does not match with the Khasra nos as mentioned in consent letter of private land owners. To this query of SEAC, the representative from the project proponent side submitted that in the auction letter, the mining area is more i.e. 23.2 hectare but he is having consent letters for an area of 12.94 hectare and therefore requested to grant the environmental clearance for carrying out mining in area of 12.94 hectare having common khasra nos in both auction letter as well as in consent letter. The SEAC acceded to the request of the project proponent and asked to correct the entities filled in application form.

Mining Officer, DIC, Hoshiarpur made the necessary corrections and requested to recommend the case to SEIAA for grant of environmental clearance to the project.

After detailed deliberations, the Committee observed that the project proponent has provided adequate and satisfactory clarifications to the observations raised by it. Therefore, the Committee decided that the case be forwarded to the SEIAA with the recommendation to grant Environmental Clearance to the project promoter for carrying out for mining of minor minerals sand) @ 5,65,995 TPA from the bed of river Beas in total area of 12.94 Hectare having H.B. no. 522 bearing Khasra nos 80//3 (7-19), 4(8-0), 8(8-0), 9(8-0), 11(8-0), 12(8-0), 13 (8-0), 81//8 (8-0), 11(8-0), 12(8-0), 13(8-0), 14(8-0), 15(8-0), 18(8-0), 19(8-0), 20(8-0), 21(8-0), 22(8-0), 82//12(8-0), 13(8-0), 14(8-0), 15(8-0), 16(8-0), 17(8-0), 18(8-0), 19(8-0), 20(8-0), 21(8-0), 22(8-0), 23(8-0), 24(8-0) & 25(8-0) in the revenue estate of Village Rarra, Tehsil Dasuya District Hoshiarpur, Punjab, subject to the conditions proposed at Annexure-A of the proceedings in addition to the proposed measures.

The case is placed before SEIAA for consideration.

Annexure-A

Conditions to be imposed on Sand/Gravel Mining Projects

A. Specific conditions:

- (i) The environmental clearance will be valid for a period of seven years from the date of issuance, as per the provisions of the EIA Notification, 2006 as amended subsequently, for mining of minor minerals in the above said location and khasra numbers.
- (ii) The absolute elevation (Redline), below which no mining shall be allowed to be carried out, shall be determined by the Department of Industries & Commerce, Punjab along with Department of Irrigation, Punjab after carrying out proper survey of the mining site, so as to avoid impacts on structures such as bridges, piers and to avoid vegetation impacts associated with down cutting due to excessive removal of sediment. In no case mining shall be carried out below the redline. Environmental clearance of mine lease area will be transferred to any contractor only after defining the red line.
- (iii) The Mining Officer shall demarcate the mining lease area in the presence of revenue authorities and concerned Village Panchayat or their representatives. Mining lease area will be demarcated on the ground with pucca pillars with reference to some permanent bench mark before starting any mining activity at site. The existing river bed level will also be marked on the pillars to be erected before starting the mining activities. Intimation with documentary evidence before starting activity i.e. transfer of environmental clearance in the name of contractor shall be submitted to SEIAA, Punjab.
- (iv) Mining shall be as per the approved Development/Mining Plan prepared for this project and as per the Mines & Mineral (Development & Regulation) Act, 1957 and rules framed there under as amended from time to time, other Acts/rules related with mining of minor minerals.
- (v) The mining activity shall be carried out strictly as per guidelines contained in the Office Memorandum dated 24.12.2013 & Sustainable Sand Mining Management Guidelines 2016 issued by MoEF&CC, New Delhi as amended from time to time and guidelines issued by Geological Survey of India.
- (vi) The Mining Officer shall obtain Consent to Establish and Consent to Operate from the Punjab Pollution Control Board and effectively implement all the conditions stipulated therein.
- (vii) The Mining Officer shall observe the mining site after every 15 days and in case, a Schedule-I or Schedule-II species as per Wildlife Act or any rare or endangered species are reported, the Mining Officer will get a conservation

- plan prepared in consultation with the Department of Wildlife and ensure its implementation.
- (viii) The mining of minor mineral (sand) shall be carried out only upto a depth of 3.0 m of the demarcated riverbed level or above the groundwater level, whichever is less.
 - (ix) The mining activity shall be restricted to the section of river bed where there is no flow of water and no in stream mining shall be carried out in any circumstances. Stream shall not be diverted under any circumstances to form inactive channel.
 - (x) The Mining Officer shall ensure that the mining shall be carried out by the contractor/lessor as per the EMP prepared and development / mining plan prepared as per the Mines & Mineral (Development & Regulation) Act, 1957 / other Acts/Rules related with mining of minor minerals. It shall be ensured that no mining shall be carried out during the monsoon season as defined by the Meteorological Department.
 - (xi) The Mining Officer shall ensure that wherever deployment of labour attracts the Mines Act, the provision thereof shall be strictly followed.
 - (xii) The Mining Officer shall undertake plantation/afforestation work by planting the native species in the nearby area adjacent to mine lease.
 - (xiii) The Mining Officer shall ensure that 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 Ministry of Environment & Forests/Punjab Pollution Control Board in this regard.
 - (xiv) The Mining Officer shall undertake adequate safeguard measures during extraction of sand and ensure that due to this activity, the hydro-geological and ecological 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, if any, and installing new piezometers during the mining operation.
 - (xv) 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 at Chandigarh, the Central Ground Water Authority, the Regional Director, Central Ground Water Board; SEIAA, Punjab and Punjab Pollution Control Board. If at any stage, it is observed that the groundwater table is getting depleted or rising due to the mining activity, necessary corrective measures shall be carried out.

- (xvi) The Mining Officer 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.
- (xvii) Appropriate mitigation measures shall be taken by the Mining Officer to prevent pollution at the mining site in consultation with the State Pollution Control Board. It shall be ensured that there is no leakage of oil and grease at the mining site from the vehicles/mining equipments used for transportation.
- (xviii) The transportation route map will be prepared and finalized in such a manner that no vehicle passes through the flowing water section / channel of the river. Vehicular emissions shall be kept under control and regularly monitored. The project proponent shall ensure that, as far as possible, the transportation route will be away from the habitation area and will not pass through any village. The transportation hours of mined material shall be restricted to non-peak hours only.
- (xix) The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded. All the public roads as well as approach roads shall be maintained by the Department and it shall be ensured that tippers carrying mined material are not loaded beyond the permissible load as per designed load bearing capacity of the road. Moreover, provision of sufficient funds shall be made in the budget for the proper maintenance of the roads.
- (xx) Mining shall be carried out only by manual opencast method by hand tools without use of drilling, blasting and JCB or any other mechanized means.
- (xxi) Mineral handling area shall be provided with the adequate number of dust suppression systems. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- (xxii) 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.
- (xxiii) Provision shall be made for the housing of workers, if residing at site, within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project. In case of non-residential/daily workers, provision of adequate bath rooms, mobile toilets, and mobile STP shall be made to avoid open defecation and treated domestic effluent shall be discharged onto land for plantation.
- (xxiv) The municipal solid waste generated shall be disposed off as per Solid Waste Management Rules, 2016. Segregation of bio-degradable and non-biodegradable wastes shall be done at site and disposed off as per provisions

of Solid Waste Management Rules. Dustbins will be provided at site and the workers will be guided to put the domestic waste and plastic carry bags etc. if any, in the dustbin. No littering will be permitted at the site as well as in the vicinity.

- (xxv) The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e., PM10) and NO in the ambient air within the impact zone shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH, Faecal Coliform and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.
- (xxvi) The Mining Officer shall take all precautionary measures during mining operation for conservation and protection of rare and endangered flora & fauna 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 and SEIAA, Punjab.
- (xxvii) The Mining Officer shall submit within 3 months their policy towards Corporate Environment Responsibility which should inter-alia address (i) Standard operating process/ procedure to bring into focus any infringement/deviation/violation of environmental or forest norms/ conditions, (ii) Hierarchical system or Administrative order of the company to deal with environmental issues and ensuring compliance of EC conditions and (iii) System of reporting of non compliance/violation of environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- (xxviii) Vehicles hired to be used for transportation of mined material should be in good condition and should conform to applicable air and noise emission standards as provided in the Vehicular Act.
- (xxix) Ambient noise levels should conform to prescribed standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored.
- (xxx) The Risk assessment and disaster management plan should be prepared.
- (xxxi) The Mining Officer shall submit the site plan showing the earmarked area for storage of mined material.

- (xxxii) The Mining Officer shall ensure that the compensation to the private land owner (s) for the mined area shall be made as per the prevalent policy of the State Govt.
- (xxxiii) No mining operation shall be carried out at any point within 75 m of railway line, 60 m from national highway, 50 m from HT line/any public works/reservoirs, tanks/canal/public roads and buildings or inhabited or 10 m of outer edge of any village road. No mining shall be carried out within 500 m of upper side and lower side of high level bridge on the rivers. Similarly, no mining shall be carried out within 250 m of upper and lower side of other bridges. To prevent bank erosion, no mining at the concave side of the river channel will be carried out. No mining shall be carried out 100 m inside and 500 m outside of the flood protection bund of river Satluj. A safety barrier of 7.5m width shall be left intact around the mine lease boundary. Mining shall be restricted minimum 3 m away (inward) from the active channel bank and stream.
- (xxxiv) The project proponent shall ensure that the quantum of material to be mined does not exceed the annual replenishable rate and the original bed level of the river shall be maintained.
- (xxxv) The project proponent shall ensure the implementation of the post closure mining plan as proposed by the project proponent in the mining plan.
- (xxxvi) The protection bundh is not permitted for use as transportation route for the hauling of mined material. In case, use of small stretch of protection bundh is un-avoidable for taking the final route, the said portion of the protection bundh shall be maintained in good condition. The said portion shall be used only after obtaining prior written permission of the concerned department and a copy of the same be sent to the SEIAA, Punjab.
- (xxxvii) The project proponent shall adopt and follow the procedure for monitoring of sand mining or river bed mining as given in the Appendix-xii of Notification No. S.O. 141 (E) dated 15.01.2016 issued by MoEF& CC for streamlining the process of environmental clearance for mining of minor mineral.

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 & Climate Change.
- (ii) No change in the calendar plan including excavation, quantum of mineral sand/gravel (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) 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) & NO_x should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Chandigarh and the Punjab Pollution Control Board / Central Pollution Control Board once in six months and SEIAA, Punjab.
- (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. 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.
- (vii) 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.
- (viii) 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 and SEIAA, Punjab.
- (ix) The Mining Officer should inform to the Regional Office of the Ministry of Environment & Forests located at Chandigarh and SEIAA, Punjab regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (x) The Regional Office of Ministry of Environment & Forests located at Chandigarh and SEIAA, Punjab 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.
- (xi) The Mining Officer 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 and the State Pollution Control Board and SEIAA, Punjab. 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 and SEIAA, Punjab.

- (xii) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZilaParisad/ 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.
- (xiii) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industries Centre and the Collector's office/ Tehsildar's office.
- (xiv) The environmental statement for each financial year ending 31 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 and SEIAA, Punjab by e-mail.
- (xv) The Mining Officer shall adhere to the commitments made in the Environment Management Plan and Corporate Social Responsibility.
- (xvi) The Mining Officer should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at <http://envfor.nic.in> and a copy of the same should be forwarded to the Regional Office of Ministry of Environment & Forests at Chandigarh and SEIAA, Punjab.
- (xvii) The Ministry of Environment, Forests & Climate Change and SEIAA, Punjab or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- (xviii) The SEIAA may cancel the environmental clearance granted to this project under the provisions of EIA Notification, 2006, if, at any stage of the validity of this environmental clearance, it is found/ come to the knowledge of the SEIAA that the project proponent has deliberately concealed and/or submitted false or misleading information or inadequate data for obtaining the environmental clearance.
- (xix) Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring the change of river course, if any and report submitted to the Ministry of Environment, Forests & Climate Change & its Regional Office located at Chandigarh and SEIAA, Punjab.

- (xx) The Mining Officer shall get the micro chemical analysis of the mined material done from an approved laboratory once in a year and shall submit the analysis results to the Ministry of Environment & Forests/Punjab Pollution Control Board and SEIAA, Punjab.
- (xxi) The Mining Officer shall ensure that the contractor shall engage people of local area for mining purpose as far as possible, so as to have opportunities of employment for them.
- (xxii) The Mining Officer may apply for transfer of environmental clearance under EIA notification dated 14.09.2006 to the contractor finalized by the Department of Industries & Commerce to SEIAA, Punjab. However, no activity shall be undertaken by the contractor till the environmental clearance is transferred in his name and he is lawfully bound to comply with the conditions of the environmental clearance.
- (xxiii) The monitoring of the mining project in respect of Environment Management shall be carried out by the State/District Level Environment Management Cells constituted by the Govt. of Punjab vide notifications dated 03.12.2012.
- (xxiv) 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.

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