

**No. J-11015/33/2014-IA.II (M)**  
Government of India  
Ministry of Environment, Forests & Climate Change  
IA Division  
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Aliganj, Jor Bag Road,  
New Delhi-110 003

Dated: 08<sup>th</sup> August, 2014

To

**M/s Shri Sanjay Jaglan,**  
S/o Shri Raj Singh Arya,  
House No. 839, Sector-23-A,  
Gurgaon, Haryana.

**Sub.: Mining of Minor Mineral in the Mines of "Panipat Unit-2" with production capacity of 10 million TPA of Sand Mine (ROM) by Shri Sanjay Jaglan S/o Shri Raj Singh Arya, located at Tehsil- Panipat, District- Panipat, Haryana (1775.02ha)-prescribing TORs regarding**

This has reference to your letter no. Nil dated 09.01.2014 received in the Ministry on 20.01.2014 for determining the Terms of Reference (TORs) for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006. For this purpose, the Proponent had submitted information in the prescribed format (Form-1) along with a Pre-feasibility Report. The proposal was considered by the Reconstituted Expert Appraisal Committee in its 18<sup>th</sup> meeting held during March 20-21, 2014.

2. The proposal of Shri Sanjay Jaglan S/o Shri Raj Singh Aryais for mining of minor mineral in the mines of "Panipat Unit-2" with production capacity of 10 million TPA (4 million TPA on the river bed & 6 million TPA outside river bed) of Sand Mine (ROM) in mine lease are of 1775.02ha. The mine lease area is located at Tehsil- Panipat, District- Panipat, Haryana. The lease area lies in the River Bed. The Latitudes and Longitudes of mine lease area(Block PNP-3) are 29°13'29.48"-29°21'30.60"N" & 77° 8'16.06"-77° 7'31.62"E" and (Block PNP-4)29°15'21.11"-29°17'10.97"N" to 77° 3'15.12"-77° 3'41.43"E" respectively on toposheet number 53G03(site), 53G04, 53C15. The Project is located in seismic zone-IV. The mine site is located in the interstate boundary of Haryana & UP within 10 Km radius of the lease area.

3. As per Haryana State Pollution Control Board vide letter No. HSPCB/2014/669 dated 30.06.2014 "*the Mine lease area situated in the villages Nanhera, Adhmi, Jaimana, Rahimpur Kheri Mirjapur, Goela Kalan, Goela Khurd, Sanjoli, Raimal, Khojampur, Bilaspur Hathwala, Garhi Chajju, Sharmalapur and Joarasi Khas as per verification made by ATP and MC Panipat vide letter No. 283 dated 01.04.2014 does not fall under critically polluted area of Panipat.*"

4. The proposed project is an open-cast mining project, confined to excavation of Boulder, Gravel & Sand Mine from the proposed site. The mining operation will be done by semi-mechanized method. Extraction of material will be done only during the day time and will be completely stopped during the monsoon season. The Letter of intent has been issued to Shri Sanjay Jaglan S/o Shri Raj Singh Aryaby Director of Mines & Geology, State Govt. of Haryana, Chandigarh vide letter no. DMG/Hy/PNP Unit- 2/2013/125, dated 03.01.2014. Letter of intent for mine lease area is 10 years.

5. Proponent reported that no ecologically sensitive area such as National Parks, Wildlife Sanctuaries, Tiger Reserves falls within the study area (10 km radius of the mine boundary). The total water requirement is 23 KLD including water demand for domestic purpose, dust suppression & green belt development which will be met by tanker supply. The total cost of project would be around Rs. 4.5 Crores.

6. PP has reported that the mine lease area does not fall under critically polluted area of Panipat. The Committee deliberated the issues and was of the view that PP needs to submit the confirmation letter from CPCB/SPCB that the mine lease area does not fall under critically polluted area of Panipat as per MoEF OM dated 17.09.2013.

7. The Project Proponent mentioned that they had started collection of base line data since March 2014 and requested to monitor the baseline data pre-monsoon season i.e. March 2014 - May 2014. The Committee deliberated the issues and based on the request made by the Project Proponent w.r.t. collection of base line data, the Committee agreed for the same.

8. Based on the information content in the documents submitted and the presentation made before the Committee for mining projects, the following TORs are prescribed for undertaking detailed EIA study:-

- 1) Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification, 1994 came into force w.r.t. the highest production achieved prior to 1994.
- 2) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 3) All documents including approved mine plan, EIA and public hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management and mining technology and should be in the name of the lessee.
- 4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 5) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large may also be detailed in the EIA report.
- 6) Issues relating to Mine Safety and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- 7) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc should be for the life of the mine / lease period.
- 8) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 9) Details of the land for any Over Burden Dumps outside the mine lease, such as extent

- of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
- 10) A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
  - 11) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
  - 12) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
  - 13) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
  - 14) A study shall be done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly detailed mitigative measures required, should be worked out with cost implications and submitted.
  - 15) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the State Wildlife Department/Chief Wildlife Warden under the Wildlife (Protection) Act, 1972 and copy furnished.
  - 16) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
  - 17) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
  - 18) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village located in the mine lease area will be shifted or not. The issues relating to shifting of Village including their R&R and socio-economic aspects should be discussed in the report.
  - 19) One season (non-monsoon) primary baseline data on ambient air quality (PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>), water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There

- should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
- 20) Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
  - 21) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
  - 22) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
  - 23) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
  - 24) Impact of the project on the water quality, both surface and groundwater should be assessed and necessary safeguard measures, if any required, should be provided.
  - 25) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
  - 26) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
  - 27) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
  - 28) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the project.
  - 29) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered.
  - 30) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA report.
  - 31) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
  - 32) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given.
  - 33) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP.

- 34) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 35) Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 36) Detailed environmental management plan to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
- 37) Public hearing points raised and commitment of the project proponent on the same along with time bound action plan to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- 38) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the project should be given.
- 39) The cost of the project (capital cost and recurring cost) as well as the cost towards implementation of EMP should clearly be spelt out.
- 41) Replenishment and drainage study from the reputed Institution;
- 42) Impact of mining activity on adjacent agricultural land with particular reference to run off, soil erosion and loss of top soil due to change in topography;
- 43) Details of Transportation of mined out materials as per the Indian Road Congress for both the ways (loaded as well as unloaded trucks) load and its impact on Environment;
- 44) Impact of all existing mining on the present land use in the study area;
- 45) Proper species specific Conservation plan for Schedule-I and II species;
- 46) Impact of mining on plankton;
- 47) Details of mining activity to be provided w.r.t Block Wise/ Calendar wise/ Zone wise, as the mine lease area is having a long stretch,
- 48) Details of Gradient of river bed to be provided;
- 49) Details of excavation schedule & sequential mining plan to be indicated;
- 50) Mining Plan shall be prepared carefully, dividing lease area into manageable blocks to ensure scientific and systematic mining of minor minerals;
- 51) The base line data shall be collected so as to represent the whole mine lease area;
- 52) Letter from the State Govt. of Forests Department that the mine lease area does not fall under forests land category;
- 53) Details of continuous monitoring stations to be established for carrying out monitoring in each block in the core area;
- 54) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the project;
- 55) Excavation to be carried out up to a maximum depth of 3 m in the river bed and 9 m in area falling outside river bed or 2 m above water table whichever comes first and duly incorporated in mine plan; and
- 56) Details of outcome of the court case in CWP No. 27700 of 2013 before the Hon'ble High Court of Punjab & Haryana as mentioned in the LoI letter issued by the Mines & Geology Department of State Govt. of Haryana.

9. Besides the above, the below mentioned general points are also to be followed:-

- a) All documents to be properly referenced with index and continuous page numbering.
- b) Where data are presented in the report especially in tables, the period in which the data were collected and the sources should be indicated.
- c) Where the documents provided are in a language other than English, an English translation should be provided.
- d) The Questionnaire for environmental appraisal of mining projects as devised earlier by

- the Ministry shall also be filled and submitted.
- e) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II(I) dated 4<sup>th</sup> August, 2009, which are available on the website of this Ministry, should also be followed.
  - f) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the F.R for securing the TOR) should be brought to the attention of MoEF with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
  - g) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, you are requested to submit certified monitoring report on the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project by the Regional Office of Ministry of Environment & Forests, if applicable.

10. The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

11. The prescribed TORs would be valid for a period of two years for submission of the EIA/EMP reports, as per the O.M. No. J-11013/41/2006-IA.II(I) dated 22.3.2010.

12. After preparing the draft EIA (as per the generic structure prescribed in Appendix- III of the EIA Notification, 2006) covering the above mentioned issues, the proponent will get the public hearing conducted and take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.

**(Dr. V.P. Upadhyay)**  
**Director**

**Copy to:**

- 1). **The Secretary**, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- 2). **The Secretary**, Department of Environment, Government of Haryana, Chandigarh.
- 3). **The Secretary**, Department of Forests, Government of Haryana, Chandigarh.
- 4). **The Secretary**, Department of Mines and Geology, Government of Haryana, Chandigarh.
- 5). **The Addl. Chief Conservator of Forests**, Region Office (Northern Region) Ministry of Environment and Forests, Bays No. 24-25, Dakshin Marg, Sector-31A Chandigarh-160030.
- 6). **The Chairman**, Haryana State Pollution Control Board, Plot No. C-11, Sector-6, Panchkula-134109, Haryana.
- 7). **The Member Secretary**, Central Ground Water Authority, A2, W- 3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 8). **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur - 440 001.
- 9). **The District Collector, Panipat** District, State of Haryana.
- 10). **Guard File.**
- 11). **MoEF website.**

**(Dr. V.P. Upadhyay)**  
**Director**