



STATE EXPERT APPRAISAL COMMITTEE, PUNJAB
Ministry of Environment and Forests, Government of India

O/O Punjab Pollution Control Board,
Vatavaran Bhawan, Nabha Road,
Patiala – 147 001
Telefax:- 0175-2216980

No. SEAC/2014/3666

Dated: 26.12.2014

To

Sh. Sushminder Singh,
State Geologist,
Deptt. of Industries & Commerce, Punjab,
17, Bays Building, Sector-17,
Chandigarh.

Subject: ToRs for carrying out EIA Study to obtain environmental clearance under EIA Notification dated 14.09.2006 for the projects of mining of minor minerals (river sand/gravel) in Districts Moga, Jalandhar, Gurdaspur, Amritsar, S.B.S. Nagar and Pathankot, submitted by the Deptt. of Industries & Commerce, Punjab.

This has reference to your applications for obtaining grant of environmental clearance for the following twenty nine (29) projects of Districts Moga, Jalandhar, Gurdaspur, Amritsar, S.B.S. Nagar and Pathankot for mining of minor minerals (river sand/gravel). The projects are covered at Sr. No. 1(a), Category 'B' of the Schedule attached to EIA notification dated 14.9.2006 and general condition shall apply to these projects:-

Sr. No.	Name of the mining site	Area of the mining site (hectares)	Khasra Nos.	Quantity to be mined.
1.	Village Chak Bhora, Tehsil Dharamkot, District Moga	4.73	46/2, 46/3, 46/4, 46/8, 46/9, 62, 85, 66	46,383 Ton/year
2.	Village Gatti Jattan, Tehsil Dharamkot, District Moga	3.23 hectares	4/22, (8-0), 10/1 (8-0), 2 (8-0), 9 (8-0), 10 (8-0), 11 (8-0), 12 (8-0), 13 (7-16)	36,103 Ton/year
3.	Village Silkiana, Tehsil Phillaur, District Jalandhar	1.28 hectares	50/23, 24, 25, 52/3, 4, 5	30,000 Ton/year
4.	Village Panj Dhera,	4.28	56/20, 21, 55/1, 2,	1,00,000

	Tehsil Phillaur, District Jalandhar	hectares	4, 5, 6, 54/21, 60/1, 2, 5, 61/1, 2, 3, 4, 5, 62/1	Ton/year
5.	Village Kiamwala, Tehsil Nakodar, District Jalandhar	2.42 hectares	38/11, 12, 38/12, 13, 38/10, 38/18, 19	60,000 Ton/year
6.	Village Rame, Tehsil Shahkot, District Jalandhar	3.73 hectares	50/13, 14, 15, 50/1, 2, 3, 9, 10, 51/5, 49/18, 19, 20	80,000 Ton/year
7.	Village Ramwal, Tehsil Dinanagar, District Gurdaspur	4.85 hectares	17//4, 5, 6, 7, 14, 15, 16, 17, 24, 25, 18//4, 5	20,000 Ton/year
8.	Village Fakkarpur, Tehsil Dinanagar, District Gurdaspur	4.45 hectares	3//18, 19, 22, 23, 24, 7, 8, 9, 12, 13, 14.	21,500 Ton/year
9.	Village Bianpur, Tehsil Dinanagar, District Gurdaspur	2.04 hectares	24//2, 9, 12, 18, 19, 20/2, 21, 40/5	15,000 Ton/year
10.	Village Toor, Tehsil & District Gurdaspur	4.8 hectares	26//22, 32//2, 9, 12/2, 22/2, 77, 123, 32//19, 78, 32//12/1, 24//24/2, 25, 21, 22.	12,500 Ton/year
11.	Village Rurewal, Tehsil Ajnala, District Amritsar	4.04 hectares	19/3, 8, 13, 18, 23, 2, 9, 12, 19, 22.	48,692 Ton/year
12.	Village Chaharpur, Tehsil Ajnala, District Amritsar	4.29 hectares	9//5, 6/1, 7, 4, 9, 12 min, 8/1, 19 min, 19 min, 2 8//1, 2/2, 4//21, 22/1	44,493 Ton/year
13.	Village Lalewal, Tehsil Nawanshahr, District S.B.S. Nagar	3.23	42//1, 10, 11, 20, 42//12/1, 19/2, 12/2, 13, 18, 19/1	21,600 Ton/year
14.	Village Kanoun, Tehsil Nawanshahr, District S.B.S. Nagar	4.391	24//1, 2, 3, 8, 9, 10, 11, 12, 18, 19, 20, 21, 33/13	29,295 Ton/year
15.	Village Behlour Khurd, Tehsil Nawanshahr, District S.B.S. Nagar	3.982	10//5 min 5min, 6, 7, 14, 15, 11//16/1, 12//9, 10, 16//20, 22//2	26,568 Ton/year
16.	Village Saidpur Khurd, Tehsil Nawanshahr, District S.B.S. Nagar.	4.69	7//23, 24, 25, 15//1, 2, 9, 10, 11, 12, 19, 16//1, 2	31,320 Ton/year
17.	Village Malakpur, Tehsil Nawanshahr,	4.41	63/12, 13, 17, 18, 19, 55//4, 5, 6, 7, 8,	29,430 Ton/year

	District S.B.S. Nagar		9	
18.	Village Burj Tehal Dass, Tehsil Nawanshahr, District S.B.S. Nagar	4.80	48//12, 13,18, 19, 23, 49//14, 15, 16,17, 25, 62//4/2, 5/22	32,076 Ton/year
19.	Village Khoja, Tehsil Nawanshahr, District S.B.S. Nagar.	4.047	51//5, 6, 13, 52//1, 2, 9, 10, 11, 20, 21	27,000 Ton/year
20.	Village Tahra, Tehsil & District Pathankot	0.8	199, 200, 211	15,000 Ton/year
21.	Village Deriwal, Tehsil & District Pathankot	4.45	36/19, 22, 47/2, 12, 47/3, 51/9, 51/12, 47/12, 47/19, 22, 51/2, 47/9, 12	19,000 Ton/year
22.	Village Taharpur, Tehsil & District Pathankot	3.2	3/17, 18, 19, 20, 22, 23, 4/4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	19,000 Ton/year
23.	Village Dhaki Sardha, Tehsil & District Pathankot.	4.87	32/4/2, 5, 6, 7/1, 14/1, 15/1, 33/4, 7, 13, 15, 16, 17, 23, 24	20,500 Ton/year
24.	Village Mirthal, Tehsil & District Pathankot	4.85	73/1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14	20,500 Ton/year
25.	Village Andoi, Tehsil & District Pathankot	0.82	19/23, 32/1, 2, 3	11,500 Ton/year
26.	Village Tajpur, Tehsil & District Pathankot.	4.85	23/3/2/2, 4, 5/2, 6/2, 7, 8, 9, 10, 11/1, 11/2, 12/1, 23/12/2, 13/2, 14, 15, 17, 18/1	19,500 Ton/year
27.	Village Dadwan, Tehsil & District Pathankot.	3.23	63/4	11,500 Ton/year
28.	Village Baroi, Tehsil & District Pathankot.	3.64	91//1/3/1, 91//2/3/2, 91//1/3/2	11,500 Ton/year
29.	Village Kotli Barwala, Tehsil Ajnala, District Amritsar	2.55	17/1, 2, 3, 4, 17//9/2, 12, 19	25,896 Ton/year

The mining area of all these 29 project sites is less than 5 hectares and river sand mining is involved. As per Office Memorandum dated 24.12.2013 issued by the Ministry of Environment, Forests & Climate Change, no river sand mining project

with mine lease area less than 5 hectares is to be considered for grant of environmental clearance. However, National Green Tribunal, New Delhi vide its order dated 28.03.2014 in application No. 343 of 2013 in the matter of Ranbir Singh Vs State of H.P. & Ors has stayed the operation of said Office Memorandum of Ministry of Environment, Forests & Climate Change.

All these 29 cases were placed before the SEAC in its 100th meeting held on 03.09.2014, wherein, the SEAC deliberated upon the matter in light of the stand taken by the MoEF before the Hon'ble National Green Tribunal on 28.08.2014 to the effect that the mining of minor mineral (river sand) in an area less than 5 ha is not permitted and observed that in all these cases application has been made for mining of minor minerals (sand) in an area less than 5 hectares. After detailed deliberations, the SEAC, observed that it would not be appropriate to process the cases at this stage. Therefore, the SEAC decided that the application of the project proponent for obtaining environmental clearance may be kept pending till further orders of the Hon'ble National Green Tribunal in the matter.

Further, the Hon'ble National Green Tribunal on 16.10.2014 has though completed the arguments in the above said matter, however, has reserved the final orders.

Now, the State Geologist, Department of Industries & Commerce, Punjab has submitted vide letter no. 9630-B dated 05.12.2014 that 29 applications relating to mining of minor minerals (river sand/gravel) are pending with SEIAA/SEAC for obtaining environmental clearance under the provisions of EIA notification, 2006 for mining of minor minerals (river sand/gravel) and has requested to issue ToRs for the same.

All the above mentioned cases were considered by the SEAC in its 105th meeting held on 19.12.2014, which was attended by the following:

- (i) Sh. Sushminder Singh, State Geologist
- (ii) Sh. Gurdev S. Mahal, Functional Manager, District Industries Centre, Amritsar.
- (iii) Sh. Rajesh Kumar, General Manager-cum-Mining Officer, District Industries Centre, SBS Nagar.
- (iv) Sh. Kuldeep Singh Thind, General Manager-cum-Mining Officer, District Industries Centre, Moga.
- (v) Sh. Balwinder Pal Singh, General Manager-cum-Mining Officer, District Industries Centre, Batala/Pathankot/Grudaspur.
- (vi) Sh. E. Shyam Sunder, Head Environment of M/s Bhagavathi Ana Labs Pvt. Ltd., Hyderabad, Environmental Consultant of the project proponent

Sh. Sushminder Singh, State Geologist informed the SEAC that most of the above said 29 quarries have mine lease area above 2 hectares and the validity of the contract awarded to the contractors of the said quarries for mining has been extended upto 2016. He further submitted that as per OM dated 07.10.2014 issued by Ministry of Environment, Forests & Climate Change, environmental clearance can be granted for mining areas less than 5 hectares. As such, they have again approached the SEAC for issuance of ToR.

To a query of SEAC, Sh. Sushminder Singh, State Geologist informed that the compliance of the conditions of environmental clearance to be granted to the said quarries will be monitored by the Committees constituted at different levels.

Sh. E. Shyam Sunder, Head Environment of M/s Bhagavathi Ana Labs Pvt. Ltd., Hyderabad, Environmental Consultant of the project proponent presented the draft ToRs.

After detailed deliberations, the SEAC categorized the above said projects as category 'B' of the EIA Notification dated 14.9.2006, thus, the project proponent is required to be issued 'Terms of Reference' (TOR) for preparation of detailed draft Rapid EIA report. The Committee decided to finalize below noted "Terms of Reference" and to convey the same to the project proponent for preparation of rapid EIA study report. It was, however, made clear to the State Geologist that these ToRs are issued subject to the final decision of the NGT in the matter.

1. All documents including approved mine plan (eco friendly mine plan), EIA report 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.
2. The terms and conditions imposed, if any, by the Competent Authority in the State Government while granting mining lease/permit/contract should be built into the mine plan (eco friendly mine plan) as well as the EIA report. It may inter-alia include; area of working (length and breadth of the river stretch), mode of working, working shift, transportation of mineral, restriction, if any imposed for working etc.
3. Involvement of forestland, if any, in the project and status of forestry clearance should be given.
4. The study area will comprise of 10 km zone around the mine and the data contained in the EIA such as waste generation etc should be for the life of the mine / lease period.
5. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary and national park, migratory routes of fauna, water bodies, human settlements and other ecological features be given.

6. Land use plan of the mine lease area should be prepared to encompass pre-operational, operational and post operational phases.
7. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly detailed mitigation measures required should be worked out with cost implications.
8. The vegetation in the reserve forest / protected forest in the study area, if any, should be indicated.
9. A study shall be got done to ascertain the impact of the mining project on wildlife of the area including aquatic life.
10. Location of any Sanctuary, Wildlife Corridor (existing as well as proposed) within 10 km of the mine lease should be clearly indicated supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance from the Chief Wildlife Warden for operating the mine within 10 km of the protected/reserve forests/sanctuary, if any, should also be obtained and furnished.
11. A detailed biological study for the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] including the aquatic fauna in the riverine system shall be carried out. Details of flora and fauna, duly authenticated, separately for core and buffer zone should be furnished based on field survey clearly indicating the Schedule of the fauna present. In case of any Schedule-I or Schedule-II fauna is 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.
12. Impact of the project on land use including change of river course, if any should be given.
13. Impact on topography, drainage, agricultural fields, pasture lands, wildlife, water logging leading to water borne diseases, if any be studied. It may also be shown whether it will lead to change of watercourse of the river. Modelling exercise should also be got carried out through an expert agency to show the change in river flow dynamics, if any.
14. Collection of one season (non-monsoon) primary baseline data on ambient air quality ($PM_{2.5}$, PM_{10} , SO_2 and NO_x), water quality, noise level, soil and flora and fauna, site-specific meteorological data should also be collected. The location of the monitoring stations should be justified. Date wise collected baseline AAQ data should form part of EIA and EMP report. The mineralogical composition of PM_{10} particularly for free silica should be given. There should be at least one AAQ monitoring station within 500 m of the mine lease in the pre-dominant downwind direction.
15. 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. The water requirement for the project, its availability and source to be furnished. A detailed water balance should also be provided. Fresh water requirement for the project should also be indicated.

16. Necessary clearance from the Competent Authority for withdrawal of requisite quantity of water for the project should be provided.
17. Impact of the project on the water quality should be assessed and necessary safeguard measures, if any required should be provided.
18. Information on site elevation, working depth, groundwater table should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
19. Quantity of solid waste generation, if any, should be estimated and details for its disposal and management should be provided.
20. Impact on local transport infrastructure due to the project should be evaluated. Projected increase in truck traffic as a result of the project in the present road network (including those outside the project area) and whether it is capable of handling the increased load should be estimated. Arrangement for improving the infrastructure, if contemplated including action to be taken by other agencies such as State Government, if any, should be covered.
21. Details of the infrastructure facilities to be provided for the mine workers should be furnished.
22. Phase-wise plan of greenbelt development, plantation and compensatory afforestation clearly indicating the area to be covered under plantation and the species to be planted should be provided.
23. Occupational health impacts of the project activity should be anticipated and reported and proposed preventive measures indicated. These, alongwith details of pre-placement medical examination and periodical medical examination schedules and medical facilities proposed to be provided, should be incorporated in the EMP
24. Measures of socio economic influence to the local community, proposed to be provided by project proponent should be spelt out. As far as possible, quantitative dimensions should be given.
25. Detailed environmental management plan to mitigate the environmental impacts and specific safeguard measures to control PM₁₀ as well as pollution due to transportation should be given.
26. 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.
27. Details of litigation pending against the project, if any, with direction order passed by any Court of Law against the project should be given.
28. The cost of the project (capital cost and recurring cost) as well as the cost towards implementation of EMP should clearly be spelt out.
29. 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-11013/4112006-IA.II(I) dated 22.3.2010, OM No. J-11013/41/2006-IA-II(1) (Part) dated 22.08.2014 and OM No. 22-83/2014-IA-III dated 07.10.2014.
30. Other details as indicated in Appendix III of EIA Notification 2006 and the manual titled as "EIA guidance Manual" published by the Ministry of Environment & Forests, New Delhi for mining projects, should also be attended.
31. The project proponent can use same baseline data generated during rapid EIA study of other mining project located in same river and revenue estate of the

same village, for preparation of rapid EIA study report of this project in light of Office Memorandum dated 22.03.2010 of the Ministry of Environment & Forests, provided it is not more than three years old.

32. EMP showing the statutory requirement for mining of minor minerals under the Mines & Mineral (Develop & Regulation) Act, 1957 and other Acts/rules related with mining of minor minerals and the mechanism as to how the provisions of these Acts / rules will be implemented, regulated and monitored, so as to ensure scientific mining, be given.
33. The responsibility of various activities to be executed either by the Department of Industries & Commerce, Punjab (Regulator) and the contractor (operator) concerned during the period of contract of mining, should be specified and incorporated in the EMP of revised final rapid EIA study report.
34. Combined affect on the environment and sensitive receptors of existing mining sites / to be started in the revenue estate of the village where mining is to be carried and / or village located near the mining site alongwith affect of the mining site shall also be assessed.
35. Mitigation measures as suggested in the Office Memorandum dated 29.10.2014 issued by MoEF, New Delhi should also be kept in mind while preparing the EIA study report.
36. The guidelines framed by the Geological Survey of India titled as "A Model Document on Impacts and Methodology of Systematic and Scientific Mining of the River Bed Material" wherein, the impacts due to mining of gravel/sand mining alongwith the mitigation measures to be adopted have been mentioned, should also be attended.

The project proponent should prepare draft rapid EIA / EMP Report for the projects based on above Terms of Reference and apply to the Member Secretary, Punjab Pollution Control Board for conducting public hearing as per the provisions of EIA Notification, 2006 as amended from time to time on submitting EIA / EMP / Executive Summary Report prepared by the project proponent as per TORs.

After completing the process of public hearing / public consultation, the project proponent shall submit final EIA / EMP to the State Expert Appraisal Committee after incorporating all the issues raised during public hearing / public consultation for Appraisal of the project.

The project proponent shall submit following documents alongwith rapid EIA report to the Committee:

1. Layout plan duly signed by General Manager-cum-Mining Officer.
2. A letter issued by Department of Forest & Wildlife to the effect that no forest land is falling in the mining site.
3. A certificate duly signed by General Manager-cum-Mining Officer regarding the following:

- State/International Boundary not within 10 Km.
- Project not lying in eco-sensitive and protected area including wild life sanctuaries.
- Not lying in the critically polluted areas.

Besides the above, the following general points will also be taken into account:

- a) All documents to be properly referenced with index, page numbers 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 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) Approved mine plan along with copy of the approval letter for the proposed capacity should also be submitted.
- f) The EIA report should also include surface plan of the area indicating contours of main topographic features, drainage and mining area.

**Sd/-
Secretary (SEAC)**

Endst. No. 3667-70

Dated: 26.12.2014

A copy of the above is forwarded to the following for information and necessary action:-

1. The Secretary to Govt. of India, Ministry of Environment & Forests, Govt. of India, CGO Complex, Lodhi Road, New Delhi.
2. The Director, Northern Regional Office, Ministry of Environment & Forests, Bays No. 24-25, Sector 31-A, Dakshin Marg, Chandigarh.
 - a) Name of the applicant Sh. Sushminder Singh, State Geologist
 - b) Fax Number 0 9876185014
 - c) e-mail ID stategeologistpb@yahoo.com
3. The Member Secretary, State Environment Impact Assessment Authority, O/o Special Secretary to Govt. of Punjab, Deptt. of Science, Technology & Environment, Mini Secretariat, Sector-9, Chandigarh.
4. The Environmental Engineer (Computers), Punjab Pollution Control Board, Head Office, Patiala. He is requested to display the approved 'Terms of Reference' given to the project proponent on the website of State Environment Impact Assessment Authority.

**Sd/-
Secretary (SEAC)**