

Item No.142.1.8: Application for obtaining Environmental Clearance under EIA notification dated 14.09.2006 for development of project namely "Ecocity Phase-II" at Mullanpur, New Chandigarh by M/s Greater Mohali Area Development Authority (GMADA). (Proposal no. SIA/PB/NCP/10631/2015)

The facts of the case are as under:

Greater Mohali Area Development Authority (GMADA) vide its letter dated 23.06.2015 has applied for obtaining environmental clearance as required under EIA notification dated 14.09.2006 for development of project namely "Ecocity Phase-II" at Mullanpur, New Chandigarh. The project is covered under category 8 (b) of the Schedule appended to the said notification. The details of the project as per Form I & IA are as under:

- The total Project area is 467.56 acres with 312.22 acre as net planned area.
- Total water requirement for the project will be 3.5 MLD, which will be met through 6 No. of tubewells and Bhakhra main canal (kajauli line).
- The total wastewater generation from the project will be 2.8 MLD, which will be treated in a STP of 3 MLD capacity to be installed within the project premises. The project proponent has proposed to use 897 KLD of treated wastewater for flushing purpose, 768 KLD for irrigation of green area and remaining 1143 KLD will be discharged to GMADA sewer in summer season. In winter season, 897 KLD of treated wastewater will be used for flushing purpose, 251 KLD will be used for irrigation of green area and remaining 1660 KLD will be discharged to GMADA sewer. In rainy season, 897 KLD of treated wastewater will be used for flushing purpose, 70 KLD will be used for irrigation of green area and remaining 1841 KLD will be discharged to GMADA sewer. The green area will be developed in an area of 139697.48 sqm.
- The total quantity of solid waste to be generated from the proposed project has been estimated as 10.7 MT/day, which will be segregated into biodegradable and non-biodegradable waste. The biodegradable waste will be converted into Manure using Biodegradable Municipal waste management system (BMWMS) which will convert Biodegradable waste into compost. The inert waste will be dumped to GMADA dumping site. Recyclable waste will be sold to local kabaris.
- The used oil from the D.G. sets will be sold out to the registered recyclers as per the provisions of the Hazardous Waste (Management, Handling & Transboundary Movement), Rules, 2008.

- The total load of electricity required for proposed project will be 10.3 MVA which will be supplied by PSPCL. The project proponent has proposed to install DG sets of adequate capacity.
- The project proponent has submitted the "Terms of Reference".

Regional Office, Punjab Pollution Control Board, Mohali was requested vide e-mail dated 30.06.2015 to visit the project site and submit report regarding latest construction status.

The Environmental Engineer, Punjab Pollution Control Board, Regional Office, Mohali vide e-mail dated 27.07.2015 has intimated that the site of the project was visited by the AEE of this office on 24.07.2015 and Sh. Raj Kumar, SDO of GMADA was contacted. He had shown the boundary limits of the project to the visiting Officer and it was observed that no development/construction activity has been started at the project site by the GMADA, so far.

The case was considered by the SEAC in its 124th meeting held on 28.07.2015, which was attended by the following on behalf of GMADA:

1. Sh. M.S. Mann, DTP, GMADA
2. Ms. Gagandeep Kaur, DTP, GMADA, SAS Nagar
3. Sh. Dharam Pal, Divisional Engineer (PH) GMADA, Mohali
4. Sh. Sandeep Garg of M/s Eco Laboratories & Consultants Pvt. Ltd., Environmental Consultant of GMADA.

Sh. Sandeep Garg of M/s Eco Laboratories & Consultants (P) Ltd., Environmental Consultant of Promoter Company informed that the ariel distance of the project from Sukhna Wildlife Sanctuary, Chandigarh is about 10.5 kms.

The SEAC observed that the GMADA is required to submit the following documents before its case is considered:

- (i) Certificate from the Forest Department to the effect that proposed site is more than 10 kms from Sukhna Wildlife Sanctuary and Bird Sanctuary situated in Sector-21, Chandigarh.
- (ii) Certificate from the Forest Department to the effect that no forest land is involved in the proposed project.

After deliberations, the SEAC decided to ask the GMADA to submit the above noted documents and to defer the case till the GMADA submits the same.

Now, the project proponent vide his email dated 08/09/2015 has submitted the certified map from Forest Department to the effect that proposed site is more than 10 kms from Sukhna Wildlife Sanctuary and Bird Sanctuary situated in Sector-21, Chandigarh. Further, the project proponent has written a letter to Divisional Forest Officer, SAS Nagar regarding issuing of NOC but has yet not received any reply.

The case was considered by the SEAC in its 139th meeting held on 05.01.2016, which was attended by the following on behalf of GMADA:

1. Sh. M.S. Mann, DTP, GMADA
2. Sh. Dharam Pal, Divisional Engineer (PH) GMADA, Mohali
3. Sh. Sandeep Garg of M/s Eco Laboratories & Consultants Pvt. Ltd., Environmental Consultant of GMADA.

Sh. Sandeep Garg of M/s Eco Laboratories & Consultants Pvt. Ltd., Environmental Consultant of GMADA, who is the Environmental Consultant of the GMADA, presented the case before the SEAC as under:

- The total Project area is 467.56 acres with 312.22 acre as net planned area.
- Total water requirement for the project will be 3.5 MLD, which will be met through 6 No. of tubewells and Bhakhra main canal (kajauli line).
- The total wastewater generation from the project will be 2.8 MLD, which will be treated in a STP of 3 MLD capacity to be installed within the project premises. The project proponent has proposed to use 897 KLD of treated wastewater for flushing purpose, 768 KLD for irrigation of green area and remaining 1143 KLD will be discharged to GMADA sewer in summer season. In winter season, 897 KLD of treated wastewater will be used for flushing purpose, 251 KLD will be used for irrigation of green area and remaining 1660 KLD will be discharged to GMADA sewer. In rainy season, 897 KLD of treated wastewater will be used for flushing purpose, 70 KLD will be used for irrigation of green area and remaining 1841 KLD will be discharged to GMADA sewer. The green area will be developed in an area of 139697.48 sqm.
- The total quantity of solid waste to be generated from the proposed project has been estimated as 10.7 MT/day, which will be segregated into biodegradable and non-biodegradable waste. The biodegradable waste will be converted into Manure using Biodegradable Municipal waste management system (BMWMS) which will convert Biodegradable waste into compost. The inert waste will be dumped to GMADA dumping site. Recyclable waste will be sold to local kabaris.
- The total load of electricity required for proposed project will be 10.3 MVA which will be supplied by PSPCL. The project proponent has proposed to install DG sets of adequate capacity.
- The e-waste generated will be stored in an isolated room and will be sold to the

manufacturers.

- The used oil from the D.G. sets will be sold out to the registered recyclers as per the provisions of the Hazardous Waste (Management, Handling & Transboundary Movement), Rules, 2008.

The project proponent has submitted the "Terms of Reference".

The Committee noted that the case pertains to category 8 (b) of the Schedule appended to the EIA Notification dated 14.9.2006 and such type of projects are to be appraised as category B-1 as per the said notification. Thus, the project proponent is required to be issued '**Terms of Reference**' for preparation of draft Rapid EIA study report.

The project proponent requested for allowing the use of baseline data from EIA studies of nearby project i.e. M/s Altus Space Builders Pvt. Ltd. already conducted during the period of Sep-2014 to Dec-2014. The Project Proponent also submitted analysis reports from EIA study of M/s Altus Space Builders Pvt. Ltd. project monitored during the period of Sep-2014 to Dec-2014. The project proponent submitted request for using old baseline data as their project is located in the close proximity of the project of M/s Altus Space Builders Pvt. Ltd and almost cover the buffer zone of 10 KM of their project as well. Further, the Project Propoent submitted that they will generate baseline data for one more month. The request submitted by the project proponent is taken on record by the SEAC.

The SEAC observed that OM dated 22.08.2014 issued by the MoEF allows use of 3 year old baseline data. The SEAC accepted the request of the Project Propoent and decided to allow the use of baseline data of M/s Altus Space Builders Pvt. Ltd. for EIA study. However, the project proponent will generate baseline of one more month as proposed.

After detailed deliberations in the matter, it was decided to finalize following "**Terms of Reference**" and to convey the same to the project proponent for preparation of detailed draft Rapid EIA report:

A. Construction stage

1. The project falls under category **B-1** under item 8(b) Township and Area Development projects and requires an Environmental Impact Assessment Study for the entire site area.
2. Examine details of land use as per Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.
3. Examine and submit the details of the environmental impacts at the stage of land acquisition including aspects such as displacement of families, rehabilitation, acquiring of agricultural/forest land, acquiring of ecologically important lands and water bodies.
4. Examine baseline environmental quality along with projected incremental load due to the project.

5. Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
6. Examine and submit the details of the environmental impacts due to change of land use and land cover including aspects such as hydrological characteristics, imperviousness of land and drainage pattern being altered.
7. Submit the details of the trees to be felled for the project.
8. Submit the present land use and permission required for any conversion such as forest, agriculture etc
9. Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.
10. Examine soil characteristics and depth of ground water table for rainwater harvesting.
11. Examine and submit the details of the environmental impacts at the stage of construction of boundaries & fencing including its impact on the pattern of natural drainage and flooding pattern and barriers being constructed for restricting wildlife movement into project area.
12. Examine and submit the details of the environmental impacts due to leveling and landscaping including aspects such as excavation & filling of soil, clearing of vegetation, change of topography, development of plantation, green belt, lawns & parks and development of impervious areas.
13. Examine and submit the details of the environmental impacts due to excavation, transportation and filling of earth including aspects such as excavation, filling, sourcing, transportation and disposal of soil.
14. Examine and submit the details of the construction material to be used at the construction stage including aspects such as quarries and transportation, stone crushing and screening, mining & transportation of sand, soil excavation, transportation and filling.
15. Examine and submit the impacts being caused due to transportation of construction materials and men such as increase in traffic and load on public transportation facility, destruction and damage of transportation infrastructure, increase of risk due to road accident, pollution caused due to dust and tail pipe emissions and consumption of fuel by transport vehicles. A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
16. Examine and submit the details of the temporary housing and amenities to be created and used by the work force including aspects such as water supply, electrical energy and fuel supply.
17. Examine and submit the details of the environmental impacts at the stage of creation of roads, transportation facility and other physical infrastructure including aspects such as use of construction materials, excavation and /or filling of soil, generation of construction waste, creation of impervious surfaces, noise & suspended dust pollution and accidental risk.
18. Examine and submit the details of the noise pollution, air pollution, consumption of fuel and generation of scrap being caused due to operation and maintenance of construction machinery and equipment.
19. Examine and submit the details of the source and supply of water for construction activity.
20. Examine and submit the details of the source and quantity of power for construction activity.

21. Examine and submit the details of the fuel consumption, noise pollution, emissions of the exhaust gas, engine & coolant oil and batteries being discarded due to captive and emergency power generation.
22. Examine and submit the details of the handling of wastewater during construction including the domestic wastewater being generated from amenities.
23. Examine and submit the details of the environmental impacts at the stage of development of residential buildings, commercial, institutional and industrial infrastructure including aspects such as construction materials to be used, earth work (excavation and/or soil filling), generation of construction waste, lighting, HVAC units, waste generation from packaging, residual paints and chemicals and their cans, Generation of wooden, glass, metal and other scrap materials, plumbing and sanitary waste generation, creation of impervious surfaces, noise pollution, suspended dust pollution and risk of accidents.
24. Examine and submit the details of the environmental impacts due to the laying of the water supply system including aspects such as use of piping, fittings and pumps, water pumping stations, earth work and water treatment plant.
25. Examine and submit the details of the environmental impacts due to the laying of the sewerage and sewage treatment and disposal system including aspects such as use of construction material, piping, fittings and pumps, earth work, laying of sewers & manholes, sewage pumping stations and sewage treatment plant.
26. Examine and submit the details of the environmental impacts due to the laying of the storm water drainage system including aspects such as use of construction material, piping, fittings and pumps, earth work, storm drains, storm water inlets and catch basins and storm water outfalls.
27. Examine and submit the details of the environmental impacts due to the electrical power system and street lighting to be provided including aspects such as construction materials to be used, distribution lines, cables, control panels, transformers and meters.
28. Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption. Energy conservation and energy efficiency.
29. DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.

B. Operation stage

1. Examine and submit the details of the environmental impacts due to the residential, commercial, institutional, industrial, recreational, social, cultural & religious activities to be carried out.
2. Examine and submit the details of the environmental impacts due to the facilities to be provided such as water supply, electrical power supply, fuel supply & consumption including LPG, transportation and communication.
3. Examine and submit the details of the environmental impacts due to the coming up of the activities such as urban agriculture and animal husbandry.
4. Examine and submit the details of the environmental impacts due to the sewerage & sewage treatment and its disposal systems and storm water & its drainage system.
5. Examine and submit the details of the environmental impacts caused due to the generation of captive power & emergency power.

6. Submit the details of the management & handling of municipal solid waste, e-waste, hazardous waste, scrap, estate management, construction and demolition waste management.
7. Submit the details of the socio economic impact due to the employment to be generated from the household activities.
8. Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water. Examine details.

C. General

1. Other details as indicated in Appendix III of EIA Notification 2006 and the manual titled as "EIA guidance Manual-Building, Construction, Township and area Development projects" published by the Ministry of Environment & Forests, New Delhi, should also be attended.
2. Environmental aspects identified under some of the project activities may not be comprehensive and some of the significant aspects under some of the activities of the project in question might not have been identified. All such environmental aspects may be added to the list.
3. Some of the activities with their associated environmental aspects of the project in question might be of significant magnitude and not included in the list project activities. All such activities may be added to the list of project activities.
4. The project proponent may add additional project activities and environmental aspects, if any, fill the impact matrix (copy attached) and carryout significance analysis for identifying the significant environmental aspects. Scale, sensitivity and duration of impacts; type, size and frequency of environmental aspects; applicable legal requirements; and concerns of interested parties and local public may be used as the basis for the significance analysis of the environmental aspects.
5. In the EIA study each of the environmental aspects listed in the TOR should be quantified, their positive and negative impacts on different areas of impacts should be identified and assessed and the results of such assessment should be reported in the EIA report.
6. In the Environment Management Plan, management of each of the significant environmental aspects (with identified and assessed significant environmental impacts) for mitigating the impacts should be objectively stated.
7. Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.
8. Ground water classification as per the Central Ground Water Authority.
9. Environment Management Plan should include technical and institutional aspects for pre-treatment by constituent units.
10. Environmental Management Plan should be accompanied with Environmental Monitoring Plan and environmental cost and benefit assessment. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
11. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
12. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
13. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given

14. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
15. Does the Environment policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
16. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
17. Does the company have a 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? This reporting mechanism should be detailed in the EIA report.
18. Delineate the concrete proposal regarding activities to be undertaken under Corporate Social Responsibility programme, which should be long lasting in nature and should be as per the needs of a particular Village/area/ local habitats/ stakeholders to be adopted by the promoter company, which can be done by involving a person having knowledge and experience of socio-economic activities.

A detailed draft EIA/EMP report should be prepared as per the above TOR's and shall be submitted to the SEAC as per the provisions of the EIA Notification dated 14.9.2006. The project proponent may use baseline data from EIA study of M/s Altus Space Builders Pvt. Ltd. carried for the period of Sep-2014 to Dec-2014. However, one month baseline data will be generated by him for carrying out the EIA study. The aforesaid 'Terms of Reference' will be valid for a period of two years from its issuance.

Accordingly, TOR's have been conveyed vide letter no 405-09 dated 18.01.2016 to the project proponent. Now, the project proponent has submitted the EIA report and requested to grant environmental clearance to the project

The case is placed before the SEAC for consideration.