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GMADA - Knowledge Park, Sector 66, 82 & 83 Mohali.doc
STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY PUNJAB
Ministry of Environment and Forests, Government of India

O/O Punjab Pollution Control Board,
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No. SEIAA/ 2634

Dated: 30-8-14

Registered

To

Sh. Devinder Singh,
The Divisional Engineer (PH-1),
Greater Mohali Area Development Authority (GMADA),
PUDA Bhawan, Sector-62,
SAS Nagar (Mohali)-160062

Subject: Environmental Clearance for development of a Township namely "Knowledge Park" in Sector 66-B, 82-A, 83-A, 101-A Mohali by M/s Greater Mohali Area Development Authority (GMADA).

This has reference to your application for obtaining environmental clearance under EIA notification dated 14.09.2006 for development of a Township namely "Knowledge Park" in Sector 66-B, 82-A, 83-A, 101-A Mohali and subsequent presentation given before the State Level Expert Appraisal Committee (SEAC) for seeking prior environmental clearance for subject cited project as required under the EIA Notification, 2006. The proposal has been appraised as per procedure prescribed under the provisions of EIA Notification dated 14.09.2006 on the basis of the mandatory documents enclosed with the application viz., Form-1, 1-A, conceptual plan, rapid EIA report and the additional clarifications furnished in response to the observations of the SEAC.

It is inter-alia noted that the proposal involves developing of a Township namely "Knowledge Park" Sector 66-B, 82-A, 83-A, 101-A Mohali. The total plot area is 7,098,226.62 sqm, which will be developed for residential, commercial, institutional areas and non-polluting IT industries. The GMADA vide letter no. 14860 dated 11.06.2014 has intimated that the principal change of land (CLU) for an area of 709 hectares has been granted to Secretary, Housing and Urban Development, Punjab and the letter regarding approval of the same will be sent later on. The layout plan has been approved by the DTP, S.A.S. Nagar vide no. 785/13 dated 21.01.2013.

The total water requirement will be 20,291 KLD, out of which 16,108 KLD will be met from fresh water and 4183 KLD will be met from recycling of treated wastewater. 40% of fresh water i.e. 6149 KLD will be met through own tubewell and

the remaining 9949 KLD will be met through canal water. The GMADA has submitted a letter no. 18456 dated 22.11.2013 issued by Deputy Commissioner, SAS Nagar to the effect that Mohali city does not fall under the 43 notified critical/ over exploited zones, therefore, it does not require permission to install the tubewell. The total wastewater generation will be 8266 KLD, which will be treated in an STP of capacity 10,000 KLD to be installed within the project premises. Out of the total 8266 KLD of treated wastewater, 4183 KLD will be used for flushing purpose and remaining 3256 KLD will be used for irrigation of green area in summer season. In winter season, 4183 KLD will be used for flushing purpose and remaining 3256 KLD will be used for irrigation of green area. In rainy season, 4183 KLD will be used for flushing purpose, and remaining 2055 KLD will be discharged into choe namely Jagatpura drain passing through the project site. Green belt will be developed in an area of 24,02,740.06 sqm and the water demand for development of the same will be 13,215.07 KLD in summer season out of which 3256 KLD will be met through treated wastewater and remaining 9959.07 KLD will be met from fresh water. In winter season, the water demand for horticulture will be 4,324.9 KLD, out of which 3256 KLD will be met through treated wastewater and remaining 1068.9 KLD will be met from fresh water. In rainy season, the water demand for horticulture will be 1,201.37 KLD which will be met from fresh water.

The total quantity of MSW has been estimated as 38,257 Kg/day. The biodegradable and non-biodegradable solid waste will be segregated at source and will be sent to the common Municipal Solid Waste Management facility to be developed at village Samgauli, Tehsil Dera Bassi. The hazardous wastes such as used oil from the D.G. sets will be sold to authorized recyclers. The total power requirement will be 100 MVA, which will be taken from Punjab State Power Corporation Ltd. The project promoter has also made provision to provide DG sets as standby arrangement of power supply. Adequate parking facilities will be provided by individual plot owner, within the plots.

Rs.4900 Lacs will be utilised for implementation of EMP during operation phase and Rs.1300 Lacs will be incurred on account of recurring charges. Since the project is being developed by Govt. Agency, EMP will be implemented by Govt. Department. Public facilities like Hospital, school, playground, community centre etc. will be provided by the GMADA under Corporate Social Responsibility. Also, GMADA has undertaken to provide water supply and sewage facility in the villages namely

Chau Majra, Saini Majra and Rurka falling under their project scheme. The traffic circulation plan and Disaster/Risk Assessment & Management Plan has been prepared and submitted alongwith application.

The case was considered by the SEIAA in its 68th meeting held on 23.08.2014 and the Authority based on the recommendations made by the SEAC in its 99th meeting held on 21.08.2014 and after consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, the SEIAA, Punjab, hereby, accords environmental clearance to the said project under the provisions of Environmental Impact Assessment Notification No. 1533 (E) dated 14.9.2006 and subsequent amendments subject to the strict compliance of following terms and conditions in addition to the proposed measures.:

PART A – Specific conditions

I. Construction Phase

- i) The project proponent will provide a green cover of 30 m width on both sides of the drain passing through the project site including the portion to be re-aligned as committed during the presentation.
- ii) The project proponent will provide a storage reservoir for the storage of storm water runoff with a capacity of 4.5 ML and will provide recharging wells in the said reservoir. This system should be developed scientifically and storm water be treated adequately so as to ensure that pollutants such as silt, oil & grease etc. do not enter the groundwater. Further, a provision should be made to ensure that water does not enter the re-charge wells directly and passes through the treatment facility by default. use this water for horticulture and other purposes subsequently.
- iii) "Consent to establish" shall be obtained from Punjab Pollution Control Board under Air (Prevention & Control of Pollution) Act, 1981 and Water (Prevention & Control of Pollution) Act, 1974 and a copy of the same shall be submitted to the Ministry of Environment & Forests / State Level Environment Impact Assessment Authority before the start of any construction work at site.
- iv) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- v) A first aid room will be provided in the project both during construction and operation phase of the project.
- vi) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- vii) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed off after taking the necessary precautions for general safety and health aspects of people with the approval of competent authority.

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- viii) Construction spoils, including bituminous material and other hazardous material, must not be allowed to contaminate watercourses and the dump sites for such material must be secured, so that they should not leach into the groundwater.
- ix) The diesel generator sets to be used during construction phase should be of low sulphur diesel type and should conform to the provisions of Environment (Protection) Act, 1986 prescribed for air and noise emission standards.
- x) Vehicles hired for bringing construction material to the site and other machinery to be used during construction should be in good condition and should conform to applicable air and noise emission standards.
- xi) 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 during construction phase.
- xii) Fly ash should be used as construction material in the construction as per the provisions of Fly Ash Notification of September, 1999 and as amended on August, 2003 (This condition is applicable only if the project is within 100 Km of Thermal Power Station).
- xiii) Ready mixed concrete should be used in building construction as far as possible.
- xiv) Water demand during construction should be reduced by use of premixed concrete, curing agents and other best practices.
- xv) Separation of drinking water supply and treated sewage supply should be done by the use of different colours.
- xvi) Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- xvii) Adequate steps shall be taken to conserve energy by limiting the use of glass, provision of proper thermal insulation and taking measures as prescribed under the Energy Conservation Building Code.
- xviii) The approval of competent authority shall be obtained for structural safety of the buildings due to earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightning.
- xix) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, disposal of waste water & solid waste in an environmentally sound manner, 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.

II. Operation Phase

- i) The installation of sewage treatment plant (STP) and adequacy of disposal system should be certified by Punjab Pollution Control Board and a report in this regard should be submitted to the Ministry of Environment & Forests/State Level Environment Impact Assessment Authority before the project is commissioned for operation. The discharge of treated sewage shall conform to the norms and standards prescribed by Punjab Pollution Control Board for such discharges. The project proponent shall discharge not more than 2055 KLD of treated wastewater into choe during rainy season.

- ii) The project proponent shall provide electromagnetic flow meter at the outlet of the water supply, outlet of the STP and any pipeline to be used for re-using the treated wastewater back into the system for flushing and for horticulture purpose/green etc. and shall maintain a record of readings of each such meter on daily basis.
- iii) Adequate & appropriate pollution control measures should be provided to control fugitive emissions to be emitted within the complex.
- iv) Adequate treatment facility for drinking water shall be provided, if required.
- v) Rainwater harvesting for roof run-off should be implemented. Before recharging the roof run-off, pretreatment must be done to remove suspended matter, oil and grease. However, no run off from gardens/green area/roads/pavements shall be connected with the ground water recharging system.
- vi) The solid waste generated should be properly collected and segregated. The recyclable solid waste shall be sold out to the authorized vendors and inerts shall be sent to disposal facility. The Bio-degradable solid waste shall be adequately treated as per the scheme submitted by the project proponent. Prior approval of competent authority should be obtained, if required.
- vii) Hazardous waste/E-waste should be disposed off as per Rules applicable and with the necessary approval of the Punjab Pollution Control Board.
- viii) The green belt along the periphery of the plot shall achieve attenuation factor conforming to the day and night noise standards prescribed for residential land use. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous species/variety.
- ix) The project proponent should take adequate and appropriate measures to contain the ambient air quality within the prescribed standards. The proposal regarding mitigation measures to be taken at site should be submitted to the Ministry of Environment & Forests/ State Level Environment Impact Assessment Authority within three months.
- x) Incremental pollution loads on the ambient air quality, noise and water quality should be periodically monitored after commissioning of the project.
- xi) Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting in addition to provision for solar water heating.
- xii) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- xiii) A report on the energy conservation measures conforming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about machinery of air-conditioning, lifts, lighting, building materials, R & U Factors etc. and submitted to the respective Regional office of MoEF, the Zonal Office of CPCB and the SPCB/SEIAA in three months time.
- xiv) Environmental Management Cell shall be formed during operation phase which will supervise and monitor the environment related aspects of the project.

