


STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY PUNJAB

Ministry of Environment and Forests, Government of India

 O/O Punjab Pollution Control Board,
 Vatavaran Bhawan, Nabha Road,
 Patiala – 147 001
 Telefax:- 0175-2215636

No. SEIAA/ 2835
REGISTERED
Date: 28.06.2016

To

 The Divisonal Engineer (PH- 2),
 Greater Mohali Area Development Authority,
 PUDA Bhawan, Sector -62, Mohali

Subject: 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)

This has reference to your application for obtaining Environmental Clearance under EIA notification dated 14.09.2006 for the development of project namely "Ecocity Phase-II" at Mullanpur, New Chandigarh 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 and the additional clarifications furnished in response to the observations of the SEAC.

It is inter-alia noted that the proposal involves development of project namely "Ecocity Phase-II" at Mullanpur, New Chandigarh. The total land area of the project is 312.12 acres. The project consists of residential plotted area, group housing area, commercial area, public building area, EWS housing area, Green area, School area, Bus terminal area, Rehri market, utilities etc. The project proponent submitted change of land use vide memo no. 3563 CTP (PB) MPM-167 dt. 27th July, 2015 to develop Residential Urban Estate (Eco City-II) in the Master Plan New Chandigarh. The project proponent has submitted approved layout plan and the total cost of the project is 340.74 crore. The total population of the project will be 28,367 persons.

The total water requirement for the project will be 5247 KL/day, out of which 3672.9 KLD will be met through Bhakra mainline canal (Kajauli waterworks line, 421.1 KLD through tube wells and 1153 KLD will be met through recycling of treated wastewater. The total wastewater generation from the project will be 4838 KL/day, which will be treated in a STP of capacity 5000 KLD to be installed within the project premises. The project proponent has proposed to use 1153 kl/day of treated wastewater for flushing purpose, 768 KL/day will be used for horticulture purpose in an area of 1,39,697.48 sq mtr and remaining 2820 KLD will be discharged into GMADA sewer or to 83.12 acre area to be developed as per Karnal technology for plantation purpose in summer season till GMADA trunk sewer is laid down and connectivity is made. In winter season, 1153 kl/day of treated wastewater for flushing purpose, 251 KL/day will be used for horticulture purpose in an area of 1,39, 697.48 sq mtr and remaining 3337 KLD will be discharged into GMADA sewer or to 83.12 acre area for plantation purpose. In rainy season, 1153 kl/day of treated wastewater for flushing purpose, 70 KL/day will be used for horticulture purpose in an area of 1,39, 697.48 sq mtr and remaining 3518 KLD will be discharged into GMADA sewer or to 83.12 acre area for plantation purpose. The project proponent also submitted an undertaking to the effect that 83.12 acres area reserved for future expansion will be developed as per Karnal technology and in said area, no development will be done till GMADA grid sewer is laid in this area and connectivity of sewerage system is laid down.

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 recyclable solid waste shall be sold out to the authorized vendors for which a written tie-up must be done with the authorized recyclers. Organic waste shall be composted by mechanical composters and the inert solid waste shall be sent to the concerned collection centre of integrated municipal solid waste management facility of the area.

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 project proponent has also proposed to provide total 196 rainwater recharging pits to recharge the rain water. 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.

GMADA will be responsible for implementation of EMP and CSR activities. During construction phase contractor will be responsible for the implementation of EMP. Rs.865 lacs will be incurred on account of capital cost for implementation of EMP and Rs. 32.0 lacs/annum will be incurred on account of recurring charges. The project proponent shall spend amount Rs.32.35 crores for following activities under Corporate Social Responsibility :

- Rs. 2.0 crore will be spent on utility services in village Hoshiarpur.
- Rs. 3.25 crore will be spent on schools upto 12th standard over 2.40 acres of land.
- Rs. 2.60 crore will be spent on development of community centre over 1.85 acres of area.
- Rs. 24.0 crore will be spent on development of EWS flats on no profit no loss basis (Land to be provided free of cost).
- Rs. 50.0 lac will be spent on development of playground for various sports activities over 2 acres.

The case was considered by the SEAC in its 142nd meeting held on 11.03.2016, 145th meeting held on 11.05.2016 and lastly 146th meeting held on 30.05.2016 wherein, the Committee awarded 'Silver Grading' to the project proposal and decided that case be forwarded to the SEIAA with the recommendations to grant environmental clearance to the project proponent subject to certain conditions in addition to the proposed measures.

Thereafter, the case was considered by the SEIAA in its 109th meeting held on 15.06.2016 wherein, the Authority noted that the case stands recommended by SEAC and the Committee awarded '**Silver Grading**' to the project proposal. Therefore, the Authority decided to grant environmental clearance to the project proponent proponent for development of project namely "Ecocity Phase-II" in land area of 312.22 acre at Mullanpur, New Chandigarh, subject to the conditions as proposed by the SEAC in addition to the proposed measures. Accordingly, SEIAA, Punjab hereby accords necessary environmental clearance for the above project under the provisions of EIA Notification dated 14.09.2006 and its subsequent amendments, subject to the following conditions in addition to the proposed measures:

PART-A – Common conditions for all the three phases i.e. Pre-Construction Phase, Construction Phase and Operation Phase & Entire Life:

- (i) 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.
- (ii) A first aid room will be provided in the project both during construction and operation phase of the project.
- (iii) Construction of the STP, solid waste, e-waste, hazardous waste, storage facilities tubewell, DG Sets, Utilities etc, earmarked by the project proponent on the layout plan, should be made in the earmarked area only. In any case the position/location of these utilities should not be changed later-on.
- (iv) The environmental safeguards contained in the application of the promoter / mentioned during the presentation before State Level Environment Impact Assessment Authority/State Expert Appraisal Committee should be implemented in letter and spirit.
- (v) Ambient air & noise levels should conform to prescribed standards both during day and night. Incremental pollution loads on the ambient air quality, noise especially during worst noise generating activities, water quality and soil should be periodically monitored during construction phase as well as operation & entire life phase as per the MoEF&CC guidelines and all the mitigation measures should be taken to bring down the levels within the prescribed standards.
- (vi) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest (Conservation) Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, by project proponents from the competent authorities including Punjab Pollution Control Board and from other statutory bodies as applicable.
- (vii) The State Environment Impact Assessment Authority, Punjab reserves the right to add additional safeguards/ measures subsequently, if found necessary, and to take action including revoking of the environmental clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguards/ measures in a time bound and satisfactory manner.
- (viii) A proper record showing compliance of all the conditions of environmental clearance shall be maintained and made available at site at all the times.
- (ix) The project proponent shall also submit half yearly compliance reports in respect of the stipulated prior environmental clearance terms & conditions including results of monitored data (both in hard & soft copies) to the respective Regional office of MoEF, the Zonal Office of CPCB, the SPCB and SEIAA, Punjab on 1st June and 1st December of each calendar year.
- (x) Officials from the Regional Office of Ministry of Environment & Forests, Chandigarh / State Level Environment Impact Assessment Authority / State Level Expert Appraisal Committee / Punjab Pollution Control Board who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all the documents submitted to State Environment Impact Assessment Authority should be forwarded to the APCCF, Regional Office of Ministry of Environment & Forests, Chandigarh.
- (xi) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by State Environment Impact Assessment Authority, Punjab.
- (xii) Environmental clearance is subject to final order of the Hon'ble Supreme

Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project and decisions of any Competent Court, to the extent applicable.

- (xiii) The proponent shall upload the status of compliance of the stipulated EC 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 MoEF&CC, SEIAA, Punjab the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels for all the parameters of NAAQM standards shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- (xiv) The inlet and outlet point of natural drain system should be maintained with adequate size of channel for ensuring unrestricted flow of water.
- (xv) The unpaved area shall be more than or equal to 20% of the recreational open spaces.

PART-B – Specific Conditions:

I. Pre-Construction Phase

- (i) "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.
- (ii) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- (iii) 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.
- (iv) 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. Construction Phase:

- (i) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- (ii) Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed off after taking the necessary precautions for general safety and health aspects of people with the approval of competent authority. The project proponent will comply with the provisions of Construction & Demolition Waste Rules, 2016. Dust, smoke & debris prevention measures such as wheel washing, screens, barricading and debris chute shall be installed at the site during construction including plastic / tarpaulin sheet covers for trucks bringing in sand & material at the site.
- (iii) Construction spoils, including bituminous material and other hazardous material will be disposed off as per Construction and Demolition Waste Management Rules, 2016.
- (iv) 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 emission standards.

- (v) The project proponent shall use only treated sewage/wastewater for construction activities and no fresh water for this purpose will be used. A proper record in this regard should be maintained and available at site.
- (vi) Fly ash based construction material should be used in the construction as per the provisions of Fly Ash Notification of September, 1999 and as amended on August, 2003 and notification No. S.O. 2804 (E) dated 03.11.2009.
- (vii) Water demand during construction should be reduced by use of ready mixed concrete, curing agents and other best practices.
- (viii) Adequate treatment facility for drinking water shall be provided, if required.
- (ix) 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.
- (x) (i) The project proponent will provide dual plumbing system for supplying the fresh water for potable purposes and treated wastewater for flushing purposes etc. and colour coding of different pipe lines carrying water/wastewater/ treated wastewater as follows:
 - a. Fresh water : Blue
 - b. Untreated wastewater : Black
 - c. Treated wastewater : Green
(for reuse)
 - d. Treated wastewater : Yellow
(for discharge)
 - e. Storm water : Orange
 (ii) The project proponent shall ensure that the allottees of plots in the project area provide dual plumbing system in their individual houses so as to use the treated waste water for flushing and other non potable purposes.
- (xi) The project proponent will ensure that the allottees provide fixtures for showers, toilet flushing and drinking of low flow either by use of aerators or pressure reducing devices or sensor based control.
- (xii) **(a)** Adequate steps shall be taken to conserve energy and taking measures as prescribed under the Energy Conservation Building Code and National Building Code, 2005 on Energy conservation.
(b) Solar lights shall be provided as proposed for illumination of common areas.
- (xiii) The diesel generator sets to be used during construction phase should conform to the provisions of Diesel Generator Set Rules prescribed under the Environment (Protection) Act, 1986.
- (xiv) Separate wet & dry bins at ground level and for common areas for facilitating segregation of waste, collection centre and mechanical composter (with a minimum capacity of 0.3kg/tenement/day) shall be provided for proper collection, handling, storage, segregation, treatment and disposal of solid waste.
- (xv) A rainwater harvesting plan shall be designed where the re-charge bores (minimum one per 5000 sqm of built up area) shall be provided. Recharging wells for roof top run-off shall have provision of adequate treatment for removing suspended matter etc. before recharging as per the CGWA guidelines. Run-off from areas other than roof top such as green areas and roads/pavement etc. may also be recharged but only after providing adequate treatment to remove suspended matter, oil & grease etc. and ensuring that rainwater being recharged from these areas is not contaminated with

pesticides, insecticides, chemical fertilizer etc.

- (xvi) Green belt of adequate width as proposed shall be provided so as to achieve attenuation factor conforming to the day & night standards prescribed for residential land use. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous species/variety. A minimum of one tree for every 80 sqm of land shall be planted and maintained. The existing trees may be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of three trees for every one tree that is cut) shall be done with the obligation to continue maintenance. Tree species to be planted shall be strictly as per SEIAA guidelines.

III. Operation Phase and Entire Life

- i) "Consent to operate" 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 at the time of start of operation.
- ii) The total water requirement for the project will be 5247 KL/day, out of which 3672.9 KL /day shall be met through Bhakra Mainline Canal (Kajauli water works line), 421.1 KLD through own tubewells and remaining 1153 KL/day through recycling of treated wastewater.
- iii) a) The total wastewater generation from the project will be 4838 KL/day including waste water from Hoshiarpur Village, which will be treated in a STP of capacity 5000 KL/day to be installed within the project premises. As proposed, reuse of treated wastewater and discharge of surplus treated wastewater shall be as below:

Season	Reuse for flushing (KLD)	For irrigation purposes (KLD)	Discharge into 83.12 acre plantation purpose
Summer	1153	768	2820
Winter	1153	251	3337
Rainy	1153	70	3518

- b) Storage tank of adequate capacity shall be provided for the storage of treated wastewater and all efforts shall be made to supply the same for construction purposes. Only, the surplus treated wastewater shall be discharged into sewer after maintaining the proper record.
- c) The project proponent will develop at least 83.12 acre of land (available for future expansion) with eucalyptus plantation as per the Karnal technology for the discharge of its surplus(after reuse for flushing & horticulture purposes) treated waste water till such time the trunk sewer is laid by GMADA and connectivity of the project sewer is made with the trunk sewer.
- iv) The project proponent shall ensure safe drinking water supply to the habitants.
- v) The wastewater generated from swimming pool(s) shall not be discharged and the same shall be reused within the premises for purposes such as horticulture, HVAC etc.
- vi) A proper record regarding groundwater abstraction, water consumption, its reuse and disposal shall be maintained on daily basis and shall maintain a

- record of readings of each such meter on daily basis.
- vii) Rainwater harvesting/recharging systems shall be operated and maintained properly as per CGWA guidelines.
 - viii) The facilities provided for collection, segregation, handling, on site storage & processing of solid waste such as wet & dry bins, collection centre & mechanical composter etc. shall be properly maintained chute system provided for collection of solid waste. The collected solid waste shall be segregated at site. The recyclable solid waste shall be sold out to the authorized vendors for which a written tie-up must be done with the authorized recyclers. Organic waste shall be composted by mechanical composters with a minimum capacity of 0.3kg/tenement/day and the inert solid waste shall be sent to the concerned collection centre of integrated municipal solid waste management facility of the area. A proper record in this regard shall be maintained.
 - ix) Hazardous waste/E-waste should be disposed off as per Rules applicable and with the necessary approval of the Punjab Pollution Control Board.
 - x) 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.
 - xi) The project proponent before allowing any occupancy shall obtain completion certificate from the Competent Authority to the effect that all the development works have been completed as per the proposals submitted and submit a copy of the same to the SEIAA, Punjab. The project proponent shall further ensure that the individual allottees obtain completion certificate from the Competent Authority before allowing them to occupy the house.
 - xii) 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.
 - xiii) Solar power plant and other solar energy related equipments shall be operated and maintained properly.
 - xiv) Environmental Management Cell shall be formed during operation phase which will supervise and monitor the environment related aspects of the project.

PART C – General Conditions :

I. Pre-Construction Phase

- i) This environmental clearance will be valid for a period of seven years from the date of its issue or till the completion of the project, whichever is earlier.
- ii) The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded environmental clearance and copies of clearance letters are available with the Punjab Pollution Control Board. The advertisement should be made within seven days from the day of issue of the clearance letter and a copy of the same should be forwarded to the Regional Office, Ministry of Environment & Forests, Chandigarh and SEIAA, Punjab.
- iii) The project proponent shall obtain permission from the CGWA for abstraction of groundwater & digging of borewell(s) and shall not abstract any groundwater without prior written permission of the CGWA, even if any borewell(s) exist at site.
- iv) The project proponent shall obtain CLU from the competent authority.
- v) A copy of the clearance letter shall be sent by the proponent to concerned

Panchayat, Zilla Parishad/ 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.

II. Construction & Operation Phase and Entire Life Phase

- i) The project proponent shall adhere to the commitments made in the Environment Management Plan for the construction & operation phase and Corporate Social Responsibility and shall spend amount Rs.32.35 crores for following activities under Corporate Social Responsibility :
 - Rs. 2.0 crore will be spent on utility services in village Hoshiarpur.
 - Rs. 3.25 crore will be spent on schools upto 12th standard over 2.40 acres of land.
 - Rs. 2.60 crore will be spent on development of community centre over 1.85 acres of area.
 - Rs. 24.0 crore will be spent on development of EWS flats on no profit no loss basis (Land to be provided free of cost).
 - Rs. 50.0 lac will be spent on development of playground for various sports activities over 2 acres.
- ii) The diesel generator sets to be provided shall conform to the provisions of Diesel Generator Set Rules prescribed under the Environment (Protection) Act, 1986. The exhaust pipe of DG set if installed must be minimum 10 m away from the building or in case it is less than 10 m away, the exhaust pipe shall be taken upto 3 m above the building.

Sd/-
Member Secretary (SEIAA)

Endst. No2836-44

Date 28.06.2016

A copy of the above is forwarded to the following for information & further necessary action please.

1. The Secretary to Govt. of India, Ministry of Environment and Forest, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-office Complex, East Arjun Nagar, New Delhi.
3. The Chairman, Punjab State Power Corporation Ltd, the Mall, Patiala.
4. The Deputy Commissioner, SAS Nagar.
5. The Chairman, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala.
6. The Director (Environment), Ministry of Environment and Forest, Northern Regional Office, Bays No.24-25, Sector-31-A, Chandigarh. The detail of the authorized Officer of the project proponent is as under:
 - a) Name of the applicant : Sh. Dharampal, Divisional Engineer (PH)
 - b) Contact no. : 9779457664
 - c) E-mail ID : dharampal.1960@gmail.com

7. The Chief Town Planner, Department of Town & Country Planning, 6th Floor, PUDA Bhawan, Phase-8, Mohali
8. Monitoring Cell, Ministry of Environment and Forest, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.
9. The Environmental Engineer (Computers), Punjab Pollution Control Board, Head Office, Patiala for displaying this document on the web site of the State Level Environment Impact Assessment Authority.

Sd/-
Member Secretary (SEIAA)