STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY PUNJAB
Ministry of Environment, Forest & Climate Change, New Delhi
O/O Punjab Pollution Control Board,
Vatavaran Bhawan, Nabha Road,
Patiala – 147 001
Telefax:- 0175-2215636

No. SEIAA/2016/ 8581 **REGISTERED** **Date:** 29.11.16

To

Sh. Subrata Chowdhury- President
M/s Hero Realty Ltd,
264, Okhla Phase-3,
New Delhi-110020.

Subject: Environmental Clearance under EIA notification dated 14.09.2006 for area development project namely "Multi-Storey Residential Complex" in revenue estate of Village Birmi, Tehsil Mullanpur, Distt. Ludhiana by M/s Hero Realty Ltd., Ludhiana (Proposal no. SIA/PB/NCP/4973/2015).

This has reference to your application for obtaining Environmental Clearance under EIA notification dated 14.09.2006 for area development project namely "Multi-Storey Residential Complex" in the revenue estate of Village Birmi, Tehsil Mullanpur, Distt. Ludhiana 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 total land area of the project is 63131.22 sqm and the total built up area will be 2, 10,051.22 sqm. GLADA, Ludhiana issued LOI under PAPR Act, 1995 for setting up of the group housing colony. The total water requirement for the project will be 650 KL/day, out of which 110 KL/day will be met through MC supply and remaining 540 KL/day will be met through recycling of treated wastewater. The total wastewater generation from the project will be 540 KL/day, which will be treated in a STP to be installed within the project premises. The project proponent has proposed to use 207 KL/day of treated wastewater for flushing purpose, 27 KL/day will be used for DG cooling tower and 252 KL/day will be used for irrigation of green area in summer season. In

winter season, 207 KL/day of treated wastewater will be used for flushing purpose, 27 KL/day will be used for DG cooling tower, 112 KL/day will be used for irrigation of green area and remaining 140 KL/day will be available for sale. In rainy season, 207 KL/day of treated wastewater will be used for flushing purpose, 27 KLD will be used for DG cooling tower and remaining 252 KL/day will be available for sale.

The excess water during monsoon season shall be sold after due treatment i.e.111 KLD from one STP of capacity @ 211 KLD design & 180 KLD from STP of capacity @ 339 KLD design. The STP's (two in number with totaling capacity@550KLD) have been designed with a capacity of 10% excess over the normal outflow. The Total Fresh Water demand=610 KLD including fresh water demand of 467 KLD & Fire Water tank of 143 KLD & Waste Water generated will be 499 KLD. The water balance for all the three seasons is as under:-

STP-1 (399 KLD) & waste water generated will be 288 KLD

Season	Reuse for flushing (KLD)	For irrigation & landscaping purpose (KLD)	Available for sale
Summer	97	31	161
Winter	97	11	180
Rainy	97	3	188

STP-2 (211 KLD) & waste water generated will be 179 KLD

Season	Reuse for flushing (KLD)	For irrigation & landscaping purpose (KLD)	Available for sale
Summer	67	21	92
Winter	67	7	105
Rainy	67	2	111

Water requirement during construction phase will be 30 KLD and an underground tank of capacity @ 200 KLD will be constructed for storing underground water. Water shall be sourced from tankers. Around 20 officers & 150 laborers will be present during construction phase and estimated drinking water

requirement is 2 KLD which shall be sourced from deep tube well as per CGWA approval.

The storm water from paved surface shall be routed through desilting chamber where oil & grease shall be separated. The chute system will be provided in towers for collection of solid waste i.e. suitable for mixed food use (both well & dry). Sanitation system and exhaust system will be provided to clean & keep the odour free chute system. The mechanical composter will be provided for treatment of organic solid waste at site. The daily waste generation will be around 2400 kg/day. The compostable quantity will be 1200 kg/day considering 50% organics. The composting will be complete in one day and curing will be complete in 10 days. The capacity of composting machine will be 500 kg/batch and each batch is of 60 minutes with 5 hours operation/day.

The total load of electricity required for group housing will be 4400 KW which will be taken from the PSPCL. There is a proposal to install DG sets for stand-by arrangement. The e-waste generated will be stored in an isolated room and will be sold to the manufacturers. Used oil to be generated from the DG sets will be managed & handled as per the provisions of the Hazardous Wastes (Management, Handling &Transboundary Movement) Rules, 2008.

Partner of the Company will be responsible for implementation of EMP till the handling of the project. Rs. 10 lacs will be incurred towards non recurring cost and Rs. 3.25 lacs /month towards recurring cost during construction phase and during occupation phase, Rs. 295 lacs will be incurred towards non-recurring costs and Rs. 4.60 lacs/month will be incurred towards recurring cost.

The project proponent has also proposed to spend Rs.25 lacs towards CSR activities as in addition to the amount to be spent under the provisions of the Companies Act 1956.

The case was considered by the SEAC in its 124th meeting held on 28.07.2015, 126th meeting held on 21.08.2015, 129th meeting held on 11.09.2015, 141st meeting held on 27.02.2016, 142nd meeting held on 11.03.2016, 143rd meeting held on 30.03.2016, 145th meeting held on 11.05.2016, 147th meeting held on 30.06.2016 and the observations of the SEAC were conveyed to the project proponent from time to time.

The case was considered by the SEIAA in its 108th meeting held on 03.06.2016 and decided to send the case to the Punjab Pollution Control Board for

initiating action under the Environment (Protection) Act, 1986 due to start of construction activities of the project without obtaining Environmental Clearance under EIA Notification dated 14.09.2006. The proceedings relating to this item were withheld by the SEIAA in its 109th meeting held on 15.06.2016. The SEIAA in its 115th meeting held on 23.09.2016 has confirmed the proceedings of 108th meeting held on 03.06.2016 relating to the item in question without any amendment. Accordingly, the case was sent to Punjab Pollution Control Board for initiating action under Environment (Protection) Act, 1986 vide letter no. 3447 dated 29.09.2016. Thereafter, the Punjab Pollution Control Board vide email 20.10. has informed that the complaint u/s 15, 16 read with section 19 of Environment (Protection) Act, 1986 against the project proponent and its responsible persons has been filed through Senior Law Officer of the Board in the Hon'ble Court of CJM, Ludhiana on 18.10.2016 without obtaining environmental clearance under EIA Notification dated 14/09/2006.

The case was lastly considered by the SEAC in its 152nd meeting held on 28.10.2016 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 117th meeting held on 20.10.2016, 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 for developing an area development project namely "Multi-Storey Residential Complex" having total land area of the project as 63131.22 sqm and having total built up area as 2,10,051.22 sqm in the revenue estate of Village Birmi, Tehsil Mullanpur, Distt. Ludhiana, Punjab, 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 – Conditions common 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 Ministry of Environment, Forests & Climate Change 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.

(xvi) The environmental clearance is subject to the final order of the Hon'ble Supreme Court of India in matter of civil appeal no. 7191-7192/2015 as may be applicable to this project and decision of any competent authority to the extent applicable.

PART-B – Specific Conditions:

II. 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.

III. 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, must not be allowed to contaminate watercourses. The dump sites for such material must be secured, so that they should not leach into the groundwater.

(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) The project proponent will provide dual plumbing system for reuse of treated wastewater for flushing/ HVAC 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 (for reuse)	:	Green
d. Treated wastewater (for discharge)	:	Yellow

e. Storm water : Orange

(xi) 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.

(xii) Separation of drinking water supply and treated sewage supply should be done by the use of different colors.

(xiii) **(a)** 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 and National Building Code, 2005 on Energy conservation.

(b) Area of roof top utilized for solar panels shall be 74% and minimum 360 KW will be met through Solar Power Energy in the common areas such as corridors, staircases and street area lighting etc

(xiv) 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.

(xv) Chute system, 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.

(xvi) 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.

(xvii) 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.

IV. 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 Fresh Water demand=610 KLD including fresh water demand of 467 KLD & Fire Water tank of 143 KLD & Waste Water generated will be 499 KLD.

iii) The STP's (two in number with totaling capacity@550KLD) will be designed with a capacity of 10% excess over the normal outflow. The water balance for all the three seasons is as under:-

STP-1 (399 KLD) & waste water generated will be 288 KLD

Season	Reuse for flushing (KLD)	For irrigation & landscaping purpose (KLD)	Available for sale
Summer	97	31	161
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STP-2 (211 KLD) & waste water generated will be 179 KLD

Season	Reuse for flushing (KLD)	For irrigation & landscaping purpose (KLD)	Available for sale
Summer	67	21	92
Winter	67	7	105
Rainy	67	2	111

b) The surplus treated wastewater shall be provided to industrial units for using as make up water in the cooling towers and shall also be supplied to nearby construction projects for using it in construction activities. The wastewater shall be given after tertiary treatment and an underground storage tank of capacity 200 KLD which has been proposed for storage of water to meet with the requirement during construction phase will be used for the storage of treated wastewater during operation phase. Besides this, an additional tank of 200 KLD shall be provided for storage of treated wastewater.

iv) The project proponent shall ensure safe drinking water supply to the habitants.

v) The wastewater generated from swimming pool(s) if provided 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 chute system, 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 and occupancy certificate from the Competent Authority and submit a copy of the same to the SEIAA, Punjab.

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) A report on the energy conservation measures conforming to energy conservation norms 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.

xv) 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 bore well(s) and shall not abstract any groundwater without prior written permission of the CGWA, even if any bore well(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 Phase

ii) The project proponent shall adhere to the commitments made in the Environment Management Plan for the construction phase and Corporate Social Responsibility and shall spend minimum amount of Rs. 10 Lacs towards non recurring cost, Rs.3.25 Lacs/month towards recurring expenditure and will spend Rs. 25 Lacs towards CSR activities as proposed in addition to the amount to be spent under the provisions of the Companies Act 1956.

III. Operation Phase and Entire Life

iii) **a)** The entire cost of the environmental management plan will continue to be borne by the project proponent until the responsibility of environmental management plan is transferred to the occupier/residents society under proper MOU under intimation to SEIAA, Punjab. The project proponent shall spend minimum amount of Rs. 295 Lacs towards non recurring cost & Rs. 4.60 lacs/month recurring expenditure as proposed in the EMP.

b) The project proponent shall adhere to the commitments made in the proposal for CSR activities and shall spend a minimum amount as proposed.

iv) 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.

Member Secretary (SEIAA)

Endst. No. **Date**

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

1. The Secretary to Govt. of India, Forests & Climate Change, Indira Paryavaran Bhavan, Jorbagh Road, New Delhi - 110 003.
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, Ludhiana.
5. The Chairman, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala.
6. The Director (Environment), Ministry of Environment, Forests & Climate Change, 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. Subrata Chowdhury, President
   b) Contact no. : 011-26856118, 011-26850546/47
   c) E-mail ID : subrata.chowdhury@herorealty.in

7. The Chief Town Planner, Department of Town & Country Planning, 6th Floor, PUDA Bhawan, Phase-8, Mohali
8. Monitoring Cell, Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhavan, Jorbagh Road, New Delhi - 110 003.

Sd -

Member Secretary (SEIAA)