Item no.125.12: Application for environmental clearance under EIA notification dated 14.09.2006 for establishment of group housing project namely "Punjab Legislators Flats" in the revenue estate of New Chandigarh, Mullanpur, Majri, S.A.S Nagar Mohali by M/s Punjab Legislators Co– Operative House Building Society Ltd, SCO 662, Sector 70, Mohali Proposal No. SIA/PB/NCP/71644/2017

The facts of the case are as under:

M/s Punjab Legislators Co–Operative House Building Society Ltd has applied for obtaining environmental clearance under EIA notification dated 14.09.2006 for establishment of group housing project namely "Punjab Legislators Flats" in the revenue estate of New Chandigarh, Mullanpur, Majri, S.A.S Nagar Mohali. The project is covered under category building construction 8 (a) of the Schedule appended to the said notification.

The case was considered by the SEAC in its 160th meeting held on 22.12.2017, which was attended by the following on behalf of the project proponent:

- (i) Sh. Rajesh Ahuja, Technical Advisor, Promoter Company
- (ii) Sh. Harpreet Pal Singh, Office Secretary, Promoter Company
- (iii) Sh. Sital Singh, CEO, M/s CPTL, Chandigarh, Environment consultant of the promoter company.
- (iv) Sh. Sumitava Dutta, FAE, M/s CPTL, Chandigarh, Environment consultant of the promoter company.

Sh. Harpreet Pal Singh submitted an authority letter wherein he alongwith Sh. Rajesh Ahuja, Technical Advisor & Sh. Deepak Gupta, Environmental Advisor have been authorized by S. Laal Singh, President of the Promoter Company to attend the meeting of SEAC 22.12.2017.The same was taken on record by the SEAC.

Environmental Engineer, PPCB, RO, Mohali was requested vide email dated 18.12.2017 to send the latest construction status of the project site. The SEAC members were apprised that the visit report has been sent by EE, PPCB, RO, Mohali through letter no. 5768 dated 19/12/2017 and the report is as under:-

M/s Punjab Legislators Co-operative Housing Building Society Ltd. at Chandigarh was visited by AEE on 19.12.2017 and Sh. Sahil, representative of the promoter company was contacted. During the visit, it was observed as under:

1. The proposed site of the promoter company is located on Chandigarh-Siswan Road, Kharar, SAS Nagar. As per the boundaries of the proposed site shown by the representative of the promoter company, the project is abutting to the Chandigarh-Siswan Road on one side and vacant land on all the three sides.

- 2. The promoter company has not yet demarcated the site of the project with boundary wall.
- 3. As per the boundary of the site shown by the representative, there is no air polluting industry located within the radius of 500 m from the site of the project.

The SEAC allowed the project proponent to present the salient features of the project. The Environmental Consultant of the promoter company thus presented the salient features of the project as under: -

- The total plot area of the project is 10120.8 sqm and the total built up area of the Project is 40548 sqm. The proposal is to construct 120 flats having population @900 persons.
- GMADA, PUDA Bhawan, SAS Nagar has issued allotment letter to the President, PUNJAB LEGISLATORS CO–OPERATIVE HOUSE BUILDING SOCIETY LTD, C/o Shiromani Akali Dal, Building no. 06, Sector 28(B), Chandigarh vide no. 35649 dated 17.08.2017 wherein allotment of land measuring 2.50 acres in Ecocity-Phase-2 (Extension), New Chandigarh for the purpose of construction of 119 multi-storeyed flats have been allotted subject to certain conditions mentioned therein.
- The total water requirement will be 90 KLD which includes fresh water requirement @ 63KLD. The fresh water requirement will be met through supply from GMADA.
- The total wastewater generation from the project will be 72 KLD, which will be treated in a STP of capacity 100 KLD to be installed at project site including wet weather flow. The treated waste water 72 KLD will be used in three different seasons as under:

In summer season, the project proponent has proposed to utilize 27 KL/day of treated wastewater for flushing purpose, 31 KLD for green area & 14 KLD will be discharged into MC sewer. In winter season, 27 KL/day of treated wastewater for flushing purpose, 10 KLD for green area & 35 KLD will be discharged into MC sewer. In rainy season, 27 KL/day of treated wastewater for flushing purpose, 3 KLD for green area & 42 KLD will be discharged into MC sewer.

- About 5597 sqm area has been earmarked for green area development in the site.
- The project proponent has submitted letter no.2523 dated 06.12.2017 issued by Divisional Engineer(PH-2), GMADA wherein it has been mentioned that GMADA will take the load of this pocket at the time of execution and connection for sewer and water shall be given as per norms. The said letter has been issued on the request by the society for environment clearance.
- The total quantity of solid waste generation will be 240 kg/day. Solid waste will be collected separately as biodegradable and Non-biodegradable waste as per the MSW Rules, 2016 and the waste will be segregated through chute system. Biodegradable waste will be sent to approved site. The project proponent has proposed to provide mechanical composter. The non-biodegradable waste & Recyclable waste will be sold to authorized venders. Inert waste will be sent to Municipal dumping site.
- The total load of electricity required for said project will be 850 KW which will be taken from the PSPCL. There is a proposal to install silent 2 nos. DG Sets (1 X 240 KVA & 1x 125 KVA) as stand-by arrangement.
- The project proponent has also proposed to provide rain water harvesting pits to recharge the rain water.
- Solar energy will be used for street light as well as in the parks in phased manner.
- > LED lamps and energy efficient electrical gadgets shall be used.
- > As per the energy saving detail, total energy saved per day will be 141 KW/h.
- Used oil to be generated from the DG sets will be stored in HDPE tanks and sold to the authorized recyclers.
- The ambient air as well as ground water monitoring has been got done for all the parameters as prescribed in the NAAQM and IS: 10500. The concentration of all the parameters is found in the permissible limits.
- President will be responsible for implementation of EMP till the handing over of the project to GMADA or association of residents.
- For implementation of EMP, Rs. 68.5 lacs as capital cost, Rs. 6 lacs as recurring cost & Rs. 5.90 lacs /annum for monitoring of air, noise & water as recurring cost will be incurred in construction phase whereas in operation phase, Rs. 9.5 lacs as recurring cost, Rs. 6.90 lacs /annum for monitoring of

air, noise & water as recurring cost will be incurred.

- The project proponent has proposed to spent Rs. 5 lacs towards CSR activities and President will be responsible for its implementation. The list of activities are as under: -
- a) Providing jobs to nearby people will be given priority
- b) Widening of road in the vicinity of the project.
- c) Providing toilets in government schools
- d) Environmental Awareness Camps in the 10 km area.

The SEAC observed that the following clarifications/documents are required to be submitted by the project proponent:-

<u>Sr.</u>	<u>Observations</u>			
<u>no.</u>				
1.	The project proponent submitted that total population is 600 instead of			
	900.Due to typographical error, it has been mentioned as 900.			
2.	The SEAC asked the project proponent to submit the details of the water			
	consumption for residents, Non-residents and Visitors as per the SEIAA, Punjab			
	Guidelines.			
3.	The project proponent has to submit the design & maintenance plan for			
	recharging of ground water. The recharge well design should be site specific			
	with the details of the total number of recharge wells to be provided.			
4.	Declaration to the effect that chemicals will not be used in lawns as well as for			
	horticulture/gardening purposes and only herbal pesticides and fertilizers will			
	be used.			
5.	The project proponent has kept Rs. 5 lac as an amount to be spent under CSR			
	activity which is too less in comparison to the 2% of project cost. The Project			
	proponent agreed to enhance the amount to be spent on CSR activities from			
	Rs. 5 lac to Rs. 10 lac. The SEAC further told the project proponent that			
	instead of spending it on different activities making it complicated, specific			
	plan be submitted so that utilization of funds under CSR be take place in			
	proper manner.			
6.	The project proponent has proposed to provide STP with MBBR technology.			
	The SEAC observed that SBR Technology is preferred over MBBR technology.			
7.	The SEAC observed that the source of water to be used for construction			
	purpose has not been mentioned and desired that only treated waste water			

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		should be used for construction activities.
	8.	The project proponent submitted the analysis report of shallow water strata
		from a depth of 110 feet whereas he himself is stating that first aquifer is at a
		depth of 30-40 feet in the area, as such, the sample is not representative.
		Thus, the project proponent shall collect the ground water sample from
		shallow / first aquifer water so as to generate the baseline data.
	9.	The project proponent has to submit the details of storm water management
		plan during implementation of EMP in construction phase.

After deliberations, the SEAC decided to recommend the case to SEIAA for grant of environmental clearance subject to the submission of satisfactory reply to the observations alongwith the supporting documents and after submission of the same, approval is accorded by the Chairman, SEAC on record file of the project.

Thereafter, the project proponent vide its letter dated 02.01.2018 submitted the reply to the observations alongwith the supporting documents. The details of the observations as raised by SEAC and reply given by the project proponent are as under:-

<u>Sr.</u>	Observations	Reply submitted by the Project
<u>no.</u>		<u>Proponent</u>
10	The project proponent submitted	The project proponent submitted that
	that total population is 600 instead	details in water calculations have been
	of 900.Due to typographical error, it	corrected by taking population @ 600
	has been mentioned as 900.	persons.
1	The SEAC asked the project	The project proponent submitted that
	proponent to submit the details of	details of the water consumption as
	the water consumption for	under:-
	residents, Non-residents and	The total water requirement will be 112
	Visitors as per the SEIAA, Punjab	KLD which includes fresh water
	Guidelines.	requirement @ 54 KLD. The fresh water
		requirement will be met through supply
		from GMADA. The total wastewater
		generation from the project will be 81
		KLD, which will be treated in a STP of
		capacity 100 KLD (based on 200 ltr

		water consumption) to be installed at
		project site including wet weather flow.
		The treated waste water 65 KLD (@80
		% of 81 KLD after treatment) will be
		used in three different seasons as
		under:
		In summer season, the project
		proponent has proposed to utilize 27
		KL/day of treated wastewater for
		flushing purpose, 31 KLD for green area
		& 7 KLD will be discharged into MC
		sewer. In winter season, 27 KL/day of
		treated wastewater for flushing purpose,
		10 KLD for green area & 28 KLD will be
		discharged into MC sewer. In rainy
		season, 27 KL/day of treated
		wastewater for flushing purpose, 3 KLD
		for green area & 35 KLD will be
		discharged into MC sewer.
12	The project proponent has to	The project proponent has submitted
	submit the design & maintenance	the external services layout plan for
	plan for recharging of ground	recharging of ground water wherein
	water. The recharge well design	design of recharge pit, recharge well
	should be site specific with the	and desilting chamber has been
	details of the total number of	mentioned. The project proponent has
	recharge wells to be provided.	also submitted the calculations of rainy
		days @45.60, 24 mm average rainfall
		and 2 numbers of recharging pits to be
		provided inside the premises as
		mentioned in Annexure-II submitted by
		the project proponent.
13	Declaration to the effect that	The project proponent has submitted
	chemicals will not be used in lawns	an undertaking to the effect no
	as well as for	chemicals will be used. Only herbal

	horticulture/gardening purposes	pesticides will be used.
	and only herbal pesticides and	
	fertilizers will be used.	
14	The project proponent has kept Rs.	The project proponent has submitted an
	5 lac as an amount to be spent	undertaking to the effect that their
	under CSR activity which is too less	society will spend a minimum amount of
	in comparison to the 2% of project	Rs.10 lacs towards CSR for providing
	cost. The Project proponent agreed	sports facilities in Government Senior
	to enhance the amount to be spent	Secondary School located in the Village
	on CSR activities from Rs. 5 lac to	Mullanpur Garibdas, District Mohali.
	Rs. 10 lac. The SEAC further told	
	the project proponent that instead	
	of spending it on different activities	
	making it complicated, specific plan	
	be submitted so that utilization of	
	funds under CSR be take place in	
	proper manner.	
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1!	The project proponent has	The project proponent has submitted
1!	The project proponent has proposed to provide STP with	The project proponent has submitted that STP based on SBR technology will
15	The project proponent has proposed to provide STP with MBBR technology. The SEAC	The project proponent has submitted that STP based on SBR technology will be provided.
1!	The project proponent has proposed to provide STP with MBBR technology. The SEAC observed that SBR Technology is	The project proponent has submitted that STP based on SBR technology will be provided.
15	The project proponent has proposed to provide STP with MBBR technology. The SEAC observed that SBR Technology is preferred over MBBR technology.	The project proponent has submitted that STP based on SBR technology will be provided.
15	The project proponent has proposed to provide STP with MBBR technology. The SEAC observed that SBR Technology is preferred over MBBR technology. The SEAC observed that the source	The project proponent has submitted that STP based on SBR technology will be provided. The project proponent has submitted
15	The project proponent has proposed to provide STP with MBBR technology. The SEAC observed that SBR Technology is preferred over MBBR technology. The SEAC observed that the source of water to be used for	The project proponent has submitted that STP based on SBR technology will be provided. The project proponent has submitted that treated waste water will be used
15	The project proponent has proposed to provide STP with MBBR technology. The SEAC observed that SBR Technology is preferred over MBBR technology. The SEAC observed that the source of water to be used for construction purpose has not been	The project proponent has submitted that STP based on SBR technology will be provided. The project proponent has submitted that treated waste water will be used for construction activities.
15	The project proponent has proposed to provide STP with MBBR technology. The SEAC observed that SBR Technology is preferred over MBBR technology. The SEAC observed that the source of water to be used for construction purpose has not been mentioned and desired that only	The project proponent has submitted that STP based on SBR technology will be provided. The project proponent has submitted that treated waste water will be used for construction activities.
15	The project proponent has proposed to provide STP with MBBR technology. The SEAC observed that SBR Technology is preferred over MBBR technology. The SEAC observed that the source of water to be used for construction purpose has not been mentioned and desired that only treated waste water should be	The project proponent has submitted that STP based on SBR technology will be provided. The project proponent has submitted that treated waste water will be used for construction activities.
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15	The project proponent has proposed to provide STP with MBBR technology. The SEAC observed that SBR Technology is preferred over MBBR technology. The SEAC observed that the source of water to be used for construction purpose has not been mentioned and desired that only treated waste water should be used for construction activities. The project proponent submitted	The project proponent has submitted that STP based on SBR technology will be provided. The project proponent has submitted that treated waste water will be used for construction activities. The project proponent submitted the
15	The project proponent has proposed to provide STP with MBBR technology. The SEAC observed that SBR Technology is preferred over MBBR technology. The SEAC observed that the source of water to be used for construction purpose has not been mentioned and desired that only treated waste water should be used for construction activities. The project proponent submitted the analysis report of shallow	The project proponent has submitted that STP based on SBR technology will be provided. The project proponent has submitted that treated waste water will be used for construction activities. The project proponent submitted the analysis report dated 26.12.2017 of the
15	The project proponent has proposed to provide STP with MBBR technology. The SEAC observed that SBR Technology is preferred over MBBR technology. The SEAC observed that the source of water to be used for construction purpose has not been mentioned and desired that only treated waste water should be used for construction activities. The project proponent submitted the analysis report of shallow water strata from a depth of 110	The project proponent has submitted that STP based on SBR technology will be provided. The project proponent has submitted that treated waste water will be used for construction activities. The project proponent submitted the analysis report dated 26.12.2017 of the shallow water strata from a depth of 45
15	The project proponent has proposed to provide STP with MBBR technology. The SEAC observed that SBR Technology is preferred over MBBR technology. The SEAC observed that the source of water to be used for construction purpose has not been mentioned and desired that only treated waste water should be used for construction activities. The project proponent submitted the analysis report of shallow water strata from a depth of 110 feet whereas he himself is stating	The project proponent has submitted that STP based on SBR technology will be provided. The project proponent has submitted that treated waste water will be used for construction activities. The project proponent submitted the analysis report dated 26.12.2017 of the shallow water strata from a depth of 45 feet and the concentration of various
15	The project proponent has proposed to provide STP with MBBR technology. The SEAC observed that SBR Technology is preferred over MBBR technology. The SEAC observed that the source of water to be used for construction purpose has not been mentioned and desired that only treated waste water should be used for construction activities. The project proponent submitted the analysis report of shallow water strata from a depth of 110 feet whereas he himself is stating that first aquifer is at a depth of	The project proponent has submitted that STP based on SBR technology will be provided. The project proponent has submitted that treated waste water will be used for construction activities. The project proponent submitted the analysis report dated 26.12.2017 of the shallow water strata from a depth of 45 feet and the concentration of various parameters were found to be within

	sample is not representative. Thus,	
	the project proponent shall collect	
	the ground water sample from	
	shallow / first aquifer water so as	
	to generate the baseline data.	
18	The project proponent has to	The project proponent has submitted
	submit the details of storm water	the basement ceiling plumbing layout
	management plan during	nlan and bacement drainage layout plan
	implementation of EMP in	alongwith details towards reply to this
	construction phase.	observation. The details are as under:-
		 Design continuous period of rainfall = 2 days Rainfall intensity = 100 mm in 2 days Area contributing to storm water = ~40% of total site Area Run-off coefficient = 0.2 Storm water available = ~81 m3 Storm water handling Shallow unlined surface impoundments of ~150 m3 effective storage capacity with following details; network of kucha drains connecting to floor of the surface impoundments to have graded
		 gravel packing allowing for natural gravity seepage (groundwater recharge) nearness to the septic tank to be avoided the water to be suitably used to meet construction water requirement

The reply submitted by the project proponent was taken on record and

the Chairman SEAC accorded approval on file to forward the case to SEIAA with the recommendations to grant environmental clearance for establishment of group housing project namely "Punjab Legislators Flats" Mohali in a total plot area 10120.8 sqm having total built up area as 40548 sqm in the revenue estate of New

Chandigarh, Mullanpur, Majri, S.A.S Nagar subject to the following conditions in addition to the proposed measures:

<u>PART-A – Conditions common for all the three phases i.e. Pre-Construction</u> <u>Phase, Construction Phase and Operation Phase & Entire Life:</u>

- (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) Environmental Management Cell shall be formed which will supervise and monitor the environment related aspects of the project.

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 firefighting equipment's etc. as per National Building Code including protection measures from lightning.
- (iv) Provision shall be made for the housing of construction labor 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, 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) The project proponent will provide sewer connectivity at his own cost in case sewer line is not laid to the project site from the main sewer before commissioning of the project.
- ix) Adequate treatment facility for drinking water shall be provided, if required.
- x) 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.
- xi) The project proponent will provide dual plumbing system for reuse of treated wastewater for flushing/ HVAC purposes etc. and color 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

- xii) 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.
- xiii) Separation of drinking water supply and treated sewage supply should be done by the use of different colors.
- xiv) (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)** Solar power plant will be installed by utilizing at least 30% of the open roof top area in the premises shall be installed for utilizing maximum solar energy. Also, LED lights shall be provided as proposed for illumination of common areas instead of CFL lights or any other conventional lights/ bulbs.
- xv) 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.
- xvi) 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. The project proponent shall comply with the provisions of Solid Waste Management Rules, 2016.
- xvii) 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.
- xviii) 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.

(i) **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 112 KLD, out of which 54 KLD of fresh water requirement will be met through ground water and remaining 58 KLD will be met through recycling of treated wastewater
- (iii) a) The total wastewater generation from the project will be 81 KLD, which will be treated in an STP of capacity@ 100 KLD (based on SBR technology & taking consumption 200 per capita) to be installed at project site including wet weather flow. As proposed, reuse of treated wastewater and discharge of surplus treated wastewater@65 KLD shall be as below:

Season	Reuse for	For green area	Discharge into sewer
	flushing (KLD)	(KLD)	(KLD)
Summer	27	31	7
Winter	27	10	28
Rainy	27	3	35

- 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 onto land for plantation to be developed as per Karnal Technology/ into sewer after maintaining the proper record.
- (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. Storm water other than roof top area will be treated before recharging.
- (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. 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 equipment's 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.

PARTC – 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

i) 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.68.5 lacs towards capital investment and Rs. 10 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

- i) 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. 6.90 lacs/annum as 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 of Rs.10 lacs for providing sports facilities in Government Senior Secondary School located in the Village Mullanpur Garibdas.
- 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.

The case is placed before the SEIAA for consideration.