

Item No. 308.01: Application for Environmental Clearance under EIA notification dated 14.09.2006 for Area development project namely “Aerotropolis Residential Project” near IT City and Aero City, SAS Nagar, Punjab, by M/s Greater Mohali Area Development Authority (GMADA), (Proposal No. SIA/PB/MIS/69508/2021).

GMADA has applied for Environmental Clearance under EIA Notification dated 14.09.2006 for establishment of Area & Township development project namely “Aerotropolis Residential Project” near IT City and Aero City, SAS Nagar, Punjab. The total land area of the project is 1653.06 acres (668.97 Ha). The project is covered under activity 8 (b) and category B1 of the schedule appended with the EIA notification dated 14.09.2006.

GMADA was issued Terms of Reference for carrying out EIA study for obtaining Environment Clearance under EIA notification dated 14.09.2006 vide letter SEIAA/MS/2021/4799 dated 01.10.2021.

GMADA undertake that the information given in the application are true to the best of his knowledge & belief and no facts have been concealed thereof. Further, he is aware that in case, if any information submitted was found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at their risk and cost.

GMADA has submitted the Form 2, conceptual layout plan, EIA report after incorporating compliance of Terms of Reference and other additional documents along with processing fee as per Govt. of Punjab notification dated 27.06.2019 amounting to Rs. 20,06,911/-, (Rs.5,01,651/- vide UTR No. PUNBR52021091314586 dated 13.09.2021 & Rs.15,05,260/- vide UTR No. HDFCR52022031553 dated 15.03.2022). The adequacy of the fee deposited by the Project Proponent has been checked & verified by the supporting staff of SEIAA.

PPCB vide letter no. 2607 dated 27.04.2022 submitted the latest construction status report with the details as under:

"It is further intimated that as per the brief project report submitted along with the application, the proposed project is planned to be developed over an area of 1653.06 Acres (Residential 'Area @ 600.35 acres, EWS @ 82.20 acres, Commercial Area @ 128.60 acres, Amenities area @ 95.29, Park area @ 151.62 acres, Road area @ 485 acres, sector road area @ 109.81 acres) adjoining to IT city and Aerocity Scheme in Mohali. Pocket-wise detail is as under:

Pocket	Residential	EWS	Commercial	Amenities	Parks	Roads	Sector Road	Total
A	260.74	34.20	50.26	38.05	59.0	245.69	22.31	710.25
B	75.46	9.76	8.42	16.64	20.20	53.86	22.0	206.34
C	65.32	8.75	50.04	9.0	20.57	61.1	27.7	242.48

D	198.83	29.49	19.88	31.6	51.85	124.55	37.8	494
Total	600.35	82.20	128.6	95.29	151.62	485.2	109.81	1653

As per the brief project report water demand during the operation phase will be 25.51 MLD out of which 17.008 MLD fresh water will be met through borewell & Canal water and 8.50 MLD will be met by recycling of treated wastewater. Approximately 21.69 MLD of wastewater will be generated which will be treated in Sewage treatment Plant based on SBR or suitable technology of capacity 22 MLD proposed to be constructed within the proposed project. The treated wastewater will be used for flushing, landscaping and non-potable uses. The PP has proposed 8 DG sets of 500 KVA capacity for power back up. The project proponent has proposed that the solid waste will be handled as per the provisions of the Solid Waste Management Rules, 2016.

The project site was visited by officer of the Board along with Sh. Varinder Kumar, SDO, GMADA on 31/3/2022 and it was observed as under:

1. No proper demarcation has been done of the proposed site. As per the site shown by the representative, the site is divided into 4 pockets pocket A, B, C & D. The Pocket A is located adjoining to Village Bakarpur, Naraingarh Pocket B is located adjoining to Village Matran, Bari, Pocket C is located adjoining to Siaun, Patton, Pocket D is located adjoining to Village Manakpur Kallar. The Pocket D is located at a distance of around 300-400m from the Aero Business Park By M/s Landchester Infrastructure Associates, Village Manakpur Kallar, Mohali which is approved for establishment of Orange & Green category industries. However, presently no industry has been established within the Aero Business Park. No natural drain passes through the project site, however treated waste-water from STP, diggian flows through a open drain passing from Block- B & thereafter reaching village Mattran.
2. No site development has been started at the site. Plot of the land acquired under the project is agriculture land.
3. As per the boundary limits site shown by the project proponent during the visit, there is no MAH industry/cement plant/ grinding unit/ rice sheller/ saila plant/ stone crushing/ screening cum washing unit/ hot mix plant/ brick kiln within a radius of 250 m from the boundary of the proposed site of the project. No air polluting industries is located within a radius of 100m from the boundary of the proposed site. Therefore, the site of the project is conforming to the sitting guidelines laid down by the Govt. of Punjab, Department of Science Technology and Environment vide order dated 25/07/2008 as amended on 30/10/2009.

It is further intimated that the capacity of the existing terminal STP of Mohali is already short for the present domestic effluent being generated from the area and more effluent load can't be permitted without the adequate capacity of the terminal STP. Further, the project proponent has not submitted any alternate scheme for the disposal of treated effluent.

Furthermore, the Pocket D of this project is located at a distance of around 300- 400m from Aero Business Park developed by M/s Landchester Infrastructure Associates, Village Manakpur Kahar, Mohali which is

approved for the establishment of Orange & Green category of industries (In the said project site, Rice Sheller/ Salla, Jaggery Units etc. can also be established being in in Orange/ Green category). But presently no industry has been established within the Aero Business Park.

Deliberations during 220th meeting of SEAC held on 16.05.2022.

The meeting was attended by the following:

- (i) Er. Ranjiv Manakotla, Division Engineer, GMADA.
- (ii) Mr. Devendra Singh, EIA Coordinator, M/s Global Managements & Engineer Consultants International Jaipur, Rajasthan.

SEAC allowed the Environmental Consultant of the Project Proponent to present the salient features of the project. He, thereafter, presented the case as under

<u>S.N</u> <u>o</u>	<u>Description</u>	<u>Details</u>
1	Basic Details-	
1.1	Name of Project & Project Proponent:	Project Name - "Aerotropolis Project" Project Proponent- Greater Mohali Area Development Authority (GMADA)
1.2	Proposal:	SIA/PB/MIS/69508/2021
1.3	Location of Project:	The project is located at Village Bakarpur, Rurka, Safipur, Matran, Siaun, Manauli, Patton, ChauMajra & SainiMajra Tehsil Mohali & Village Chatt, Naraingarh, Tehsil- Dera Bassi, District- S.A.S Nagar, State- Punjab
1.4	Details of Land area & built-up area:	Total Plot Area- 6689696.47 sqm No built-up area has been mentioned as this is an area development project.
1.5	Category under EIA notification dated 14.09.2006	Category – B1 8 (b) Township and Area Development Project.
1.6	Cost of the project	Rs. 826.53 Crore
2.	Site Suitability Characteristics	
2.1	Whether project is suitable as per the provisions of Master Plan:	Yes, the project falls in Residential & Mix Use zone as per Master Plan, SAS Nagar.
2.2	Whether supporting document submitted in favour of statement at 2.1, details thereof:	Land area of 1653.06 acres has been acquired by the Department of Housing & Urban Development, Punjab. A copy of land acquisition documents for acquiring the land area falling under Pocket A, B, C & D situated at aforementioned villages submitted.

	(CLU/building plan approval status)	
3	Forest, Wildlife and Green Area	
3.1	Whether the project required clearance under the provisions of Forest Conservations Act 1980 or not:	No, self-declaration to the effect that no land is covered under the provision of the Forest Conservation Act,1980 is submitted.
3.2	Whether the project required clearance under the provisions of Punjab Land Preservation Act (PLPA) 1900.	No, self-declaration in this regard submitted.
3.3	Whether project required clearance under the provisions of Wildlife Protection Act 1972 or not:	No, self-declaration in this regard submitted.
3.4	Distance of the project from the Critically Polluted Area.	No, self-declaration in this regard submitted.
3.5	Whether the project falls within the influence of Eco-Sensitive Zone or not.	No Eco-Sensitive Zone is present near the project site.
3.6	Green area requirement and proposed No. of trees:	Green Belt Area -61.133 Ha (151 acres) No. of Plants to be planted – 1500 trees per Hectare
4.	Configuration & Population	
4.1	Proposal & Configuration	Details as per the conceptual plans of Pocket-A, B, C&D submitted.
4.2	Population details	
5	Water	

5.1	Total fresh water requirement:	18026.460 KLD fresh water			
5.2	Source:	From Bore well & Canal			
5.3	Whether Permission obtained for abstraction/supply of the fresh water from the Competent Authority (Y/N) <i>Details thereof</i>	As per chapter no. 5 of Punjab Guidelines for Ground Water Extraction and Conservation 2020, Urban Local Bodies and Panchayati Raj Institutions, Improvement Trusts and Area Housing and Urban Development Authorities and Place of Worship are exempted from seeking permission for Ground Water Extraction and Conservation.			
5.4	Total wastewater generation:	Total waste water generation: 23434.89 KLD			
5.5	Treatment methodology: <i>(STP capacity, technology & components)</i>	<p>-Capacity -2 STP (1x12 MLD) & (1x10 MLD)</p> <p>-Technology- Sequential Batch Reactor Technology - SBR Technology</p> <p>The complete biological operation is divided into cycles. Each cycle is of 3 – 5 hr duration, during which all treatment steps take place.</p> <p>Cyclic operation:</p> <p>A basic cycle comprises</p> <ul style="list-style-type: none"> • Fill-Aeration (F/A) • Settlement (S) • Decanting (D) <p>During the period of a cycle, the liquid is filled in the SBR Basin up to a set operating water level. Aeration Blowers are started for aeration of the effluent. After the aeration cycle, the biomass settles under perfect settling conditions. Once Settled the supernatant is removed from the top using a DECANTER. Solids are wasted from the tanks during the decanting phase. These phases in a sequence constitute a cycle, which is then repeated.</p> <p>Chlorine Contact Tank</p> <p>The Effluent from the SBR basins will be collected in Chlorine Contact Tank. The supernatant thus collected will get disinfected in Chlorine Contact Tank by adding suitable dose of chlorine and finally it is utilized for flushing, general washing and green belt development.</p>			
5.6	Treated wastewater for flushing purpose:	Treated wastewater for flushing purpose: 9013.23 KLD			
5.7	Treated wastewater for green area in summer, winter and rainy season:	Season of watering	Rate of watering	Plantation area	Total Water required
		summer season	5.5 litre per sq m	611339.82 sq m	3362.36 KLD

		winter season	1.8 litre per sq m	611339.82 sq m	1100.41 KLD			
		monsoon season	0.5 litre per sq m	611339.82 sq m	305.66 KLD			
5.8	Utilization/Disposal of excess treated wastewater.	Excess Treated Water of 8641.55 KLD will be supplied to farmers for Agriculture use. No agreement executed with the farmers for utilization of treated wastewater has been submitted.						
5.9	Cumulative Details:							
	Sr. No	Total water Requirement	Total wastewater generated	Treated wastewater	Flushing water requirement	Green area requirement	Fire Station and other utility	Excess treated waste water to Farmers land.
	1	27039.69 KLD	23434.89 KLD	21091.40 KLD	9013.23 KLD	3336.62 KLD	100 KLD	8641.55 KLD
5.10	Rain water harvesting proposal:	Total 40 number of rain water harvesting pits shall be constructed to recharge rain water.						
6	Air							
6.1	Details of Air Polluting machinery:	No Air polluting machineries except DG set will be installed which will be provided with adequate stack height.						
6.2	Measures to be adopted to contain particulate emission/Air Pollution	1. A dust control plan will be implemented viz. regular daily spraying of water on the roads and dust emission area in the project site. 2. Regular maintenance of vehicles and equipment will be carried out. 3. The vehicles having PUC will be used during the construction period. Vehicles will run under limited speed to prevent SPM generation.						
7	Waste Management							
7.1	Total quantity of solid waste generation	47823.15 kg/day						
7.2	Details of management and disposal of solid waste (Mechanical Composter/Compost pits)	Estimated quantity of solid waste generation from the project during operation phase is 47.81 TPD. The solid waste will comprise of biodegradable waste i.e. domestic waste, food waste, horticultural waste etc. Recyclable waste like plastic, paper, tin, glass etc. Different coloured bins will be used for collection of biodegradable and non – biodegradable waste as per MSW rules, 2000. Private sweepers and MSW handlers will be appointed by the RWA for door-to-door collection. Bio-degradable wastes will be composted in onsite organic waste converter.						

7.3	Details of management of plastic waste generated from project	Non-biodegradable fraction like plastic, tin, glass etc. will be sold to local recyclers. Horticultural waste shall be collected and disposed of with biodegradable waste. Rest inert MSW will be handed over to Municipal Corporation for final disposal.			
7.5	Details of management of Hazardous Waste.	There will not be any generation of hazardous waste from the project except used Oil from DG sets (Hazardous Waste category 5.1). The same shall be stored in HDPE tanks and will be sold to the authorized vendors in the region.			
8	Energy Saving & EMP				
8.1	Power Consumption:	During construction phase -The estimated electrical load will be 100 KVA. The supply will be sourced from Punjab State Power Corporation Ltd. During Operation phase - The estimated electrical load is 190 MVA. The supply will be sourced from Punjab state Power Corporation Ltd.			
8.2	Energy saving measures:	No suitable energy saving measures to be adopted has been submitted.			
8.3	Details of activities under Environment Management Plan:	S No	Particulars	Proposed Capital Cost (In lacs)	Recurring Cost in (In lacs)
		1.	Management of Air pollution	25.0	4.0
		2.	Sewage Treatment Plant & laying sewer lines	10000	250
		3.	Environment Monitoring and Management	4.0	4.0
		4.	Energy conservation plan	150	15
		5.	Rain Water Harvesting (Recharge Pits & Drains)	331	20
		6.	Green Belt & Park Development	600	100
		Total		11110	373

During meeting, the Committee observed that the Project Proponent has not submitted the details of built-up area as per approved FAR and basis for estimating the population, water requirement, flushing requirement, etc. Further, it was informed by the Project Proponent that the excess treated wastewater of 8641.55 KLD is being disposed of to farmers. However, no details for disposing of the treated wastewater to farmers were given in the proposal. Further, the details for the management of Solid Waste have also

not been provided. The Committee also observed that the Project Proponent has also not provided the details of the land area under litigation.

After detailed deliberations, the Committee decided to defer the case till the reply of the below mentioned observations:

1. The Project Proponent shall submit the details of the built-up area to be constructed based on approved FAR.
2. The Project Proponent shall submit the details and basis for estimating the population viz a viz water and flushing requirements as per the norms laid down by the Central & State Govt.
3. The Project Proponent shall submit the complete scheme with supporting documents for the utilization and disposal of the excess treated wastewater.
4. The Project Proponent shall submit the proper mechanism for management and treatment of the solid waste being generated from the project.
5. The Project Proponent shall submit the Solid Waste Management Plan and earmark dedicated area in the layout plan for the same.
6. The Project Proponent shall submit the details of the land area of project falling under litigation in an annotated form.
7. The Project Proponent shall propose adequate proposal for adoption of energy conservation measures.
8. The Project Proponent shall submit the revised EMP after incorporating the above said activities.

The case was then considered in the 227th meeting of SEAC held on 22.08.2022 and lastly in 256th meeting of SEAC held on 21.08.2023, wherein the Committee after detailed deliberations, decided to defer the case till reply of the below mentioned observations:

- (i) The Project Proponent has considered the total water requirement @150 lpcd and flushing water requirement @40 lpcd which needs to be revised to @180 lpcd for total water requirement and @45 lpcd as flushing water requirement, in compliance to the guidelines for preparation of water balance for building construction, township and area development projects.
- (ii) The Project Proponent shall specify the No. of beds for Hospitals for estimating the water requirement, in reference to the document titled as "Estimation of Water Requirement for Drinking & Domestic Use" of NBC, 2016 issued Central Ground Water Authority.
- (iii) The Project Proponent shall increase the No. of Rain Water Harvesting pits and submit the detailed proposal for management & disposal of storm water.
- (iv) As per water balance, the project proponent proposed to utilize the excess treated wastewater within the project for other activities. However, no details regarding the same has been submitted. The Project Proponent shall submit the details for treatment and disposal of excess treated wastewater.

- (v) The Project Proponent has submitted the calculation for planting trees by taking into account 1 Tree/80 sqm of green area and 1 Tree/225 sqm of the built-up area. The Project Proponent shall submit the revised calculation by considering 1 Tree/80 sqm of total land area of the project.
- (vi) The Project Proponent shall submit the detailed scheme for management and disposal of inorganic fraction of Solid Waste and earmark dedicated space for SWM.
- (vii) The Project Proponent shall submit the details of activities along with their budget provisions in the Environment Management Plan.
- (viii) The Project Proponent shall submit an undertaking that the land area of 262.51 acres under litigation is under the possession of GMADA.

The Project Proponent submitted the point wise reply of the observations through Parivesh Portal.

Deliberations during 302nd meeting of SEAC held on 04.11.2024.

The meeting was attended by the following on behalf of Project Proponent.

- (i) Er. Himanshu Sandhu, Divisional Engineer, GMADA.
- (ii) Mrs. Jyoti Rani, EC- Coordinator M/s Eco Paryavaran Laboratories & Consultant Pvt Ltd.

The Committee observed that the total land area of the Project is 1653.06 acres, out of which 15 acres of land in Pocket-A is under litigation (8.06 acres of land under Group Housing-1, 3.47 acres of land under Mixed Use 1 and 3.47 acre under Mixed Use 2). The planning has been done for 1638.06 acres of land excluding the land under litigation. The project is covered under Category- 8(b) of the schedule appended with EIA Notification dated 14.09.2006.

The Committee perused the construction status report furnished by PPCB vide letter No. 2607 dated 27.04.2022, wherein it has been mentioned that no site development has been started at the site. Further, the site of the project is conforming to the siting guidelines laid down by the Govt. of Punjab, Department of Science Technology and Environment vide order dated 25/07/2008 as amended on 30/10/2009.

The Committee further observed that the site of the project falls in Residential and Mix Use Zone as per Master Plan of SAS Nagar. The Committee further observed that the total water requirement of the project shall be 26494 KLD, out of which fresh water requirement will be 17405 KLD and flushing water requirement will be 9089 KLD. The total waste water generated from the project shall be 21195 KLD, which shall be treated in the STP of 25 MLD capacity to be installed in two modules (10 MLD in Pocket A & 15 MLD in Pocket D for Pocket B, C& D). The project proponent has earmarked the location of the proposed STPs on the layout plan and proposed two rows of tree plantation around the boundary wall of both the STPs to avoid odour nuisance.

The total treated waste water generation shall be 20771 KLD out of which 9089 KLD shall be utilized for flushing during summer, winter & rainy seasons. Further, 2940 KLD treated waste water shall be utilized in the green area of 5,34,468.5 sqm. during summer season, 962 KLD during winter season & 267 KLD

during rainy season. The excess treated waste water of 8742 KLD generated during summer season, 10720 KLD during winter season and 11415 KLD during rainy season shall be disposed of into GMADA trunk sewer to be laid along PR 7 and PR 9 Roads followed by new terminal STP of capacity of 126 MLD to be setup in Sector 102, SAS Nagar. The trunk sewer will manage the excess treated waste water being generated from the several GMADA Project namely Aerotropolis, Aerocity, IT City & upcoming Projects on PR 7 & PR 9 roads covering Sectors 83- Alpha, 102-Alpha & several sites falling in the villages of Naraingarh, Bakarpur, Chau Majra, Patton, Drari. Further, the design statement for laying of trunk sewer and installation of terminal STP of 126 MLD has already been prepared and DNIT is under preparation. Further, the laying of trunk sewer along PR 7 & PR 9 roads as well as setting of new terminal STP shall be completed within a time frame of 2 years. The project proponent i.e. GMADA further submitted an undertaking that no possession shall be given to any of the plot owners till the completion of the laying of trunk sewer and installation of terminal STP.

The Committee further observed that the Project Proponent shall plant 82870 trees along internal roads, external roads and parks. The plantation shall be done with native tree species such as Ashoka, Amaltas, Jamun, Jakranda and Silver oaks. Further, the project proponent has submitted the layout plan by earmarking the trees to be planted.

The Committee further observed that the 83 TPD of Solid Waste shall be generated from the project which includes the 23 TPD of solid waste to be generated by the Bulk Waste Generators (Group Housing, EWS, School, Institution & Hospital). The Bulk Waste Generators shall take care of the waste generated from their respective site as per SWM Rules, 2016. The remaining 60 TPD of Solid Waste generated in the project area (Biodegradable Waste- 30 TPD, Non-Biodegradable Waste - 27 TPD and Inert Waste - 3 TPD) will be managed by GMADA. The Biodegradable Waste shall be converted into manure using aerobic composting drums installed at Centralized Resource Management Centre (RMC) of overall 35 TPD capacity by providing separate centralized facilities of individual capacity (15 TPD & 20 TPD). The manure is proposed to be used on green area under various pockets within project premises. Further, the recyclable component of the Non-Biodegradable Waste will be handed over to authorized Waste recyclers after compaction and bailing. The non-recyclable component of non-biodegradable waste shall be managed through co-processing in cement plants or road construction and combustible waste managed at waste processing plants. Further, the Inert Waste shall be disposed of at Sanitary Landfill Site to be developed by Municipal Corporation, S.A.S. Nagar. Further, the Punjab Govt. vide Gazette Notification dated 12/07/2012 has acquired 50 acres of land in village Samgouli, Tehsil Derabassi, District S.A.S. Nagar for setting up of solid waste management facility on behalf of GMADA. GMADA has also earmarked 3.75 acres of land (2.25 acres in Pocket-D & 1.5 acres in Pocket-A) for collection, storage and segregation of solid waste. The project proponent has also submitted process flow chart for managing Biodegradable, Non-Biodegradable & Inert Waste. The project proponent has earmarked the location of the Resource Management Centres (RMCs) on the layout plan and proposed two rows of tree plantation around the boundary wall of RMCs to avoid odour nuisance.

Further, 113 kg/day of Bio-Medical Waste to be generated by hospital site will be handed over to authorised agency as per Bio-Medical Waste Management Rules, 2016.

The project proponent submitted the revised Environment Management Plan with details as under.

S. No.	Description	Capital Cost (Rs. Lakhs)	Recurring Cost (Rs. Lakhs/ Annum) Construction phase	Recurring Cost (Rs. Lakhs/ Annum) Operation phase
1.	Wastewater Management (Installation of STP of overall capacity 25 MLD based on SBR Technology including civil work)	4,000	20	120
2.	Air & Noise Pollution Management (Installation of 4 anti-smog guns, tarpaulin sheets/ barricading, water sprinklers, etc.)	20	2	5
3.	Development of green belt (No. of trees: 82,863 and cost of one tree Rs. 1,000 per tree including tree guard, Compost etc.)	830	--	30
4.	Rain water recharging (87 Pits @ Rs. 3 lakhs per pit)	261	2	20
5.	Miscellaneous (Environmental monitoring cost, first aid, sanitation etc.)	25	9	15
6.	Solid Waste Management	500	5	50
7.	Energy Conservation Measures (Provision of 2,500 solar lights in parks @ Rs. 10,000 per light)	250	5	20
8.	Additional Environmental Activities (Implementation of Supply of Tertiary Treated Water Scheme in which tertiary treated water from GMADA Sector 83 STP shall be supplied to Sectors 56 to 80, 88, 89 of Mohali for horticulture/irrigation purpose)	800	--	--
Total		Rs. 6,686 Lakhs ~ Rs. 66.86 Crores	Rs. 43 Lakhs/ annum	Rs. 260 Lakhs/ annum

Besides above, the Committee was apprised about the National Green Tribunal Order dated 09.08.2024 in O.A No. 93/2024 (CZ) titled as “Pranjal Karera Vs Union of India and Ors” wherein the Hon’ble Tribunal directed the MoEF&CC to appraise all Building and Construction Projects that are located in whole or in part within 5 Km. of the Protected Area notified under Wildlife Protection Act, 1972, Critically Polluted

Areas and Severally Polluted Areas as identified by CPCB, Eco-Sensitive Areas notified under section-3 (2) of the Environment (Protection) Act, and the projects located at Interstate Boundaries, as Category A project and to be appraised by the Central Level by the Sectoral Expert Appraisal Committee.

The Environmental Consultant of the Project Proponent informed that the present proposal attracts one of the provisions of General Conditions, as the project is located at a distance of around 2 km from the interstate boundary of Chandigarh. However, the MoEF&CC, Govt. of India has not issued any guidelines to comply with said NGT Order so far.

The Committee examined the proposal and decided to defer the case till the receipt of reply of the below mentioned observation:

- (i) The Project Proponent shall submit the detailed Solid Waste Management (SWM) Action Plan in compliance of SWM rules, 2016. Adequate land is required to be earmarked and geo-tagged clearly on layout plan for setting up of various components of SWM.
- (ii) The Project Proponent shall submit detailed Action Plan for the management of C & D Waste.
- (iii) The Project Proponent shall check and revise the details of Sanitation Facilities required during construction phase of the project in the Environment Management Plan, in compliance of "Prohibition of Employment as Manual Scavengers & their Rehabilitation Act, 2013."
- (iv) The Project Proponent shall check and revise the green cover plan by planting at least 90% trees of indigenous species including minimum 20% fruit trees. Besides, Micro- Forest based on Miyawaki Technique should also be grown for creating long life Sustainable Eco-system.
- (v) The Project Proponent shall take up Solid Waste Management & Liquid Waste Management activities including requisite infrastructure/machineries/behaviour change awareness/ IEC & capacity building with five years operation & maintenance in Gram Panchayat/ Urban Local Body/ other organizations through dedicated agency/ NGO/ CBO/ SHG etc for visible impact and creating a Model of," Garbage Free- Clean -Green Pollution Free".
- (vi) The Project Proponent must see the overall project layout to evaluate the environmental concerns. The smaller/part area of the project for which the EC is being sought, do not serve the purpose of environmental evaluation.
- (vii) The Project Proponent informed that treated water drain is passing through Block-B and reaching at Village Matran. The Project Proponent shall submit the solution of this opened drain.
- (viii) The Project Proponent had earlier proposed 2 STPs (1 x 12 MLD) & (1 x 10 MLD) whereas now the STP of 12 MLD has been replaced with 15 MLD Plant. The same needs to be clarified.
- (ix) The site for Aerotropolis Residential Project near IT City and Aero City, SAS Nagar, Mohali, Punjab falls in the Master Plan of SAS Nagar, then construction of two separate STP (10 MLD) in Pocket-A for Block-A and 15 MD for Block B, C, D in Block-D is not a good solution as per environmental point of view. The Project Proponent shall take whole sewerage to main STP Plant of GMADA for treatment which will avoid the odour and nuisance.

- (x) The Project Proponent earlier constructed separate STPs for IT City and Aero City adjoining to this project. The Project Proponent on clarification informed that these separate STPs were constructed as these two cities were conceived in 2012 but after 12 years no STP is constructed for the city for disposal of excess final effluent and is disposed in open nearby drains in Mohali which is health hazard. Now the Project Proponent informed that an STP of 126 MLD will be constructed in Sector 102, SAS Nagar which will manage excess sewer of Aerotropolis City, IT City, Aero City etc. within period of 2 years. If excess water from IT City and Aero City is not taken to STP Plant within last 12 years how it will be possible for GMADA to complete the 126 MLD STP Plant in Sector 102, Mohali and lay the sewer line on PR-7 & PR-9 roads as per undertaking given by XEN GMADA Mr. Sandhu. Therefore, in the interest of environment and sanitation purpose that a STP should be constructed in Sector 102, Mohali and whole the sewerage from Aerotropolis City Blocks-A, B, C, D and IT City, Aero City should be taken through main sewer at one point for treatment to avoid number of STP's for every city/block/pocket. The Project Proponent also mentioned that six number more Blocks E, F, G, H, I, J are coming up in Aerotropolis City in due course of time, disposal for the same may be kept in mind while designing sewerage system for Blocks A, B, C & D.
- (xi) The Project Proponent has taken the requirement of water @180 LPCD whereas it should not be more than 135 LPCD as per guidelines of SEIAA and CPHEEO Manual Chapter 2-2.8.2.5. The same needs to be clarified.

Deliberations during 303rd meeting of SEAC held on 12.11.2024.

The meeting was attended by the following on behalf of Project Proponent:

- (i) Er. Himanshu Sandhu, Divisional Engineer, GMADA.
- (ii) Mrs. Jyoti Rani, EC- Coordinator M/s Eco Paryavaran Laboratories & Consultant Pvt Ltd.

The Project Proponent has submitted the reply of the ADS raised by SEAC in its 302nd meeting held on 04.11.2024 on Parivesh Portal on 08.11.2024. The Committee perused the pointwise reply of the ADS.

The Committee observed that the total land area of the Project is 1653.06 acres, out of which 15 acres of land in Pocket-A is under litigation (8.06 acres of land under Group Housing-1, 3.47 acres of land under Mixed Use 1 and 3.47 acre under Mixed Use 2). The planning has been done for 1638.06 acres of land excluding the land under litigation. The project is covered under Category- 8(b) of the schedule appended with EIA Notification dated 14.09.2006.

The Committee perused the construction status report furnished by PPCB vide letter No. 2607 dated 27.04.2022, wherein it has been mentioned that no site development has been started at the site. Further, the site of the project is conforming to the siting guidelines laid down by the Govt. of Punjab, Department of Science, Technology and Environment vide order dated 25/07/2008 as amended on 30/10/2009.

The Committee further observed that the site of the project falls in Residential and Mix Use Zone as per Master Plan of SAS Nagar. The Committee further observed that the total water demand of the project has been estimated as 26494 KLD (11122 KLD for Pocket A & 15372 KLD for Pocket B, C & D) based on the norms finalised by SEIAA, out of which fresh water demand will be 17405 KLD (7301 KLD for Pocket A & 10104 KLD for Pocket B, C & D) and flushing water demand will be 9089 KLD (3821 KLD for Pocket A & 5268 KLD for Pocket B, C & D). The total waste water generated from the project shall be 21196 KLD (8898 KLD for Pocket A & 12298 KLD for Pocket B, C & D), which shall be treated in the 2 STPs (STP of 10 MLD capacity to be installed in Pocket A adjacent to the existing STP of 15 MLD capacity of Aerocity to treat the waste water generation of Pocket A & STP of 15 MLD capacity to be installed in Pocket D to treat the waste water generation of Pocket B, C & D). The Project Proponent informed that installation of single centralized STP of 25 MLD capacity is not technically feasible due to availability of land, topography/slope of the area within the project. Further, the project proponent has proposed two rows of tree plantation around the boundary wall of both the STPs to avoid odour nuisance.

The total treated waste water generation shall be 20772 KLD (8720 KLD from Pocket A & 12052 KLD from Pocket B, C & D) out of which 9089 KLD shall be utilized for flushing during summer, winter & rainy seasons. Further, 2940 KLD treated waste water shall be utilized in the green area of 5,34,468.5 sqm. during summer season, 963 KLD during winter season & 267 KLD during rainy season. The excess treated waste water of 8743 KLD generated during summer season, 10720 KLD during winter season and 11416 KLD during rainy season shall be disposed of into GMADA trunk sewer proposed to be laid along PR 7 and PR 9 Roads followed by proposed terminal STP of capacity of 126 MLD to be setup in Sector 102, SAS Nagar. The trunk sewer will manage the excess treated waste water being generated from the several GMADA Projects namely Aerotropolis, Aerocity, IT City & upcoming Projects on PR 7 & PR 9 roads covering Sectors 83- Alpha, 102-Alpha & several sites falling in the villages of Naraingarh, Bakarpur, Chau Majra, Patton, Drari. Further, the design statement for laying of trunk sewer and installation of terminal STP of 126 MLD has already been prepared and DNIT is under preparation. The Project Proponent has submitted the breakup of estimated 126 MLD of excess treated waste water of various projects. Further, the Project Proponent has submitted an undertaking that that no possession shall be given to any of the plot owners till the completion of proposed STPs of 10 MLD & 15 MLD within the project premises in two years' time from the date of grant of EC and further laying of trunk sewer along PR 7 & PR 9 roads followed by installation of terminal STP of 126 MLD in Sector 102 A Mohali within time frame of 5 years from the date of grant of EC.

The Project Proponent has proposed 3932 No. Rain Water Recharging Pits within the project for the management of storm water. The excess storm water/overflow of Pockets A, B, C & D shall be discharged into storm water drainage line already laid along PR 9 road having outfall in N-Choe.

The Committee further observed that the Project Proponent shall plant 82870 trees along internal roads, external roads and parks. The plantation shall be done with native tree species such as Ashoka, Amaltas, Jamun, Kikar, Sheesham, Jakranda, Silver oak etc. Further, the project proponent has submitted the layout plan by earmarking the trees to be planted.

The Committee further observed that the 83 TPD of Solid Waste shall be generated from the project which includes the 23 TPD of solid waste to be generated by the Bulk Waste Generators (Group Housing,

EWS, School, Institution & Hospital). The Bulk Waste Generators shall take care of the waste generated from their respective site as per SWM Rules, 2016. The remaining 60 TPD of Solid Waste generated in the project area (Biodegradable Waste- 30 TPD, Non-Biodegradable Waste - 27 TPD and Inert Waste - 3 TPD) will be managed by GMADA. The Project Proponent has submitted detailed Solid Waste Management Proposal by mentioning the quantification, composition & disposal of waste. The Biodegradable Waste (30 TPD) shall be converted into manure using aerobic composting drums installed at Centralized Resource Management Centre (RMC) of overall 35 TPD capacity by providing separate centralized facilities of individual capacity (15 TPD & 20 TPD). The manure is proposed to be used on green area under various pockets within project premises. Further, the recyclable component of the Non-Biodegradable Waste will be handed over to authorized Waste recyclers after compaction and bailing. The non-recyclable component of non-biodegradable waste shall be managed through co-processing in cement plants or road construction and combustible waste managed at waste processing plants. Further, the Inert Waste shall be disposed of at Sanitary Landfill Site to be developed by Municipal Corporation, S.A.S. Nagar. GMADA has also earmarked 3.75 acres of land (2.25 acres in Pocket-D & 1.5 acres in Pocket-A) for collection, storage and segregation of solid waste. The project proponent has also submitted process flow chart for managing Biodegradable, Non-Biodegradable & Inert Waste. Further, the Google Earth Image showing the RMC with coordinates for SWM has been marked on the layout plan. The Project Proponent has also proposed two rows of tree plantation around the boundary wall of RMCs to avoid odour nuisance.

The project proponent has submitted the revised layout plan by earmarking the boundary of Pocket A, B, C & D of "Aerotropolis Residential Project", location of proposed STPs of 10 MLD & 15 MLD capacity for Pocket A & Pocket B, C & D respectively, location of existing STP of Aerocity, location of RMCs proposed for SWM of Pocket A & Pocket B, C & D respectively and location of land under litigation in Pocket A. The project proponent has also submitted the revised zonal development plan by earmarking the trunk sewer for carrying the excess treated waste water of GMADA Projects namely Aerotropolis, Aerocity, IT City & upcoming Projects on PR 7 & PR 9 roads, location of proposed terminal STP of 126 MLD capacity, storm water drainage line already laid along PR 9 road having outfall in N-Choe to take care of the excess storm water/overflow of Pockets A, B, C & D.

The Project Proponent further submitted that no demolition work will be involved and hence, no demolition waste shall be generated from the project. Only construction waste will be generated which will be disposed of as per C & D Waste Management Rules, 2016.

Further, 113 kg/day of Bio-Medical Waste to be generated by hospital site will be handed over to authorised agency as per Bio-Medical Waste Management Rules, 2016.

The Project Proponent has informed that the cost of providing the Sanitation Facilities has already been taken care of in the Environment Management Plan and also submitted the details of energy conservation measures.

The Project Proponent has informed that the drain reaching to Village- Matran (near boundary of Block-B of the proposed project) is temporary drain (Kachha Nala) made by farmers for supply of treated water for irrigation purpose from the terminal STP, Chandigarh located in Village- Diggian. Since GMADA has

acquired the said land for establishment of the proposed project, it was informed that the drain shall be closed during development work.

Besides above, the Committee was apprised about the National Green Tribunal Order dated 09.08.2024 in O.A No. 93/2024 (CZ) titled as “Pranjal Karera Vs Union of India and Ors” wherein the Hon’ble Tribunal directed the MoEF&CC to appraise all Building and Construction Projects that are located in whole or in part within 5 Km. of the Protected Area notified under Wildlife Protection Act, 1972, Critically Polluted Areas and Severally Polluted Areas as identified by CPCB, Eco-Sensitive Areas notified under section-3 (2) of the Environment (Protection) Act, and the projects located at Interstate Boundaries, as Category A project and to be appraised by the Central Level by the Sectoral Expert Appraisal Committee.

The Environmental Consultant of the Project Proponent informed that the present proposal attracts one of the provisions of General Conditions, as the project is located at a distance of around 2 km from the interstate boundary of Chandigarh. However, the MoEF&CC, Govt. of India has not issued any guidelines to comply with said NGT Order so far. The Committee was also apprised about the Draft Notification dated 07.11.2024 issued by MoEF&CC, Govt. of India, in compliance of the NGT Order dated 09.08.2024, for adhering to the judgement of the Supreme Court dated 12.12.2003 regarding applicability of prior Environmental Clearance for various Building Construction Projects. Further, the Ministry purposed further amendments in the notification of Govt. of India in the erstwhile Ministry of Environment & Forest dated 14.09.2006 in Item 8 of the Schedule mentioning that General Conditions shall not apply in Category 8 (a)-Building & Construction Projects & 8 (b)-Township & Area Development Projects.

After detailed deliberations, the Committee decided to forward the case to SEIAA with the recommendation to grant Environmental Clearance to the “Aerotropolis Residential Project” to be developed in the land area of 1638.06 acres, SAS Nagar, Punjab subject to the standard conditions and also subject to the directions issued by Hon’ble NGT vide Order dated 09.08.2024 in O.A No. 93/2024 (CZ) titled as “Pranjal Karera Vs Union of India and Ors”.

Further, a complaint from the residents of #5061, Block-F, Aerocity, Mohali, SAS Nagar has been received against the project w.r.t. ownership of land and initiation of construction activities. The complainants have requested not to grant the EC to the project for its Block-A, B, C & D and to take action against the negligent officers. Copy of the complaint is as per **Annexure-A- to the agenda of 308th meeting of SEIAA.**

Deliberation during 308th meeting of SEIAA held on 28.01.2025

The meeting was attended by the following:

1. Er. Himanshu Sandhu, Divisional Engineer, GMADA.
2. Dr. Sandeep Garg, Managing Director, M/s Eco Paryavaran Laboratories & Consultant Pvt Ltd.
3. Mrs. Jyoti Rani, EC- Coordinator M/s Eco Paryavaran Laboratories & Consultant Pvt Ltd.

The Environmental Consultant presented the salient features of the project and informed that the project has been proposed as per conceptual plan.

In reply to observations / queries / suggestions by SEIAA, the project proponent informed / submitted / undertook as under:

1. To the complaint raised by resident of #5061, Block-F, Aerocity, Mohali, SAS Nagar, project proponent vide letter no. GMADA-DE(PH-1)/2025/3411 dated 20.01.2025, had submitted reply to SEIAA. It has also submitted the undertakings no. GMADA/DE(PH-1)/2025/3511 dated 28.01.2025 and has affirmed that the construction of roads as alleged by the complainant is actually grid roads already mentioned in the Master Plan of the area. Further, these grid roads and the sewerage being laid down along these roads is not the part of project. The land area measuring 1638.06 acres does not involve any grid road area. Also, updated pocket wise KML file was submitted with details of the areas as under:
 Pocket- A: 695.25 acres
 Pocket- B: 206.39 acres
 Pocket- C: 242.54 acres
 Pocket- D: 493.88 acres
2. The project proponent has also submitted the undertaking vide no. GMADA/DE(PH-1)/2025/ 3512 dated 28.01.2025 and affirmed that 27 MLD STP based on SBR technology in 2 modules of capacity (11 MLD in Pocket A and 16 MLD in Pocket D) has been proposed within the project area to treat domestic wastewater generation from the project. Also, a 10 MLD Ultrafiltration (UF) + Reverse Osmosis (RO) system will be provided to treat 9 MLD of flushing water in the project. It shall install Electric Vehicle charging stations within the project premises to promote sustainable development and to install Fire extinguishing equipment in and around the project premises to ensure compliance with fire safety standards and to address any fire related emergencies.
3. The project proponent has informed that the population given is as per GMADA norms. However, the capacity of the STPs to be installed has been increased from 25 MLD to 27 MLD as mentioned at sr. no. 2 above as per advise of SEIAA.
4. The project proponent has submitted revised EMP as under:

S. No.	Description	Capital Cost (Rs. Lakhs)	Recurring Cost (Rs. Lakhs/ Annum) Construction phase	Recurring Cost (Rs. Lakhs/ Annum) Operation phase
1.	Wastewater Management (Installation of STP of overall capacity 27 MLD based on SBR Technology including civil work)	4,000	20	120
2.	Air & Noise Pollution Management (Installation of 4 anti-smog guns, tarpaulin sheets/ barricading, water sprinklers, etc.)	20	2	5
3.	Development of green belt (No. of trees: 82,870 and cost of one tree Rs. 1,000 per tree)	830	--	30

	including tree guard, Compost etc.)			
4.	Rain water recharging (87 Pits @ Rs. 3 lakhs per pit)	261	2	20
5.	Miscellaneous (Environmental monitoring cost, first aid, sanitation etc.)	25	9	15
6.	Solid Waste Management	500	5	50
7.	Energy Conservation Measures (Provision of 2,500 solar lights in parks @ Rs. 10,000 per light)	250	5	20
8.	Additional Environmental Activities (Implementation of Supply of Tertiary Treated Water Scheme in which tertiary treated water from GMADA Sector 83 STP shall be supplied to Sectors 56 to 80, 88, 89 of Mohali for horticulture/irrigation purpose)	800	--	--
Total		Rs. 6,686 Lakhs	Rs. 43 lakhs/annum	Rs. 260 lakhs/annum

5. The project proponent informed SEIAA regarding Energy Conservation Plan, detail of which is as under:

S. No.	Description of Energy Conservation	Energy Conserve (KW per year)	Estimated Cost of power per KW	Cost of Solar Savings (in Lakhs)
1	2500 Solar lights in Parks	10,80,000	Rs. 7 per KW	Rs. 76
2	Group Housing and EWS Sites	1,51,47,360		Rs. 1,060
3	Individual plots	1,20,24,000		Rs. 842
	Total Energy Conservation	2,82,51,360 KW per year		Rs. 1,978 Lakhs ~ Rs. 20 Crores

During the meeting, SEIAA discussed the Draft Notification dated 07.11.2024 issued by MoEF&CC, Govt. of India, in compliance of the NGT Order dated 09.08.2024 in O.A No. 93/2024 (CZ) titled as “Pranjal Karera Vs Union of India and Ors” regarding applicability of prior Environmental Clearance for various Building Construction Projects. SEIAA observed that the Ministry proposed further amendments in the notification of Govt. of India in the erstwhile Ministry of Environment & Forest dated 14.09.2006 in Item 8 of the

Schedule mentioning that General Conditions shall not apply in Category 8 (a)-Building & Construction Projects & 8 (b)-Township & Area Development Projects. The final notification in this regard is yet to be notified by the MoEF&CC.

The comprehensive response of GMADA submitted above were carefully noted by SEIAA. However, an opportunity will also be rendered to the complainants by SEIAA separately.

After detailed deliberation, SEIAA decided as under:

- i) SEIAA decided to accept the recommendations of SEAC and grant Environmental Clearance for area development project namely “Aerotropolis Residential Project” near IT City and Aero City, SAS Nagar, Punjab, by M/s Greater Mohali Area Development Authority (GMADA) for total land area of 66,28,994 sqm., and built-up area of 83,25,029 sq.m, along-with standard and special conditions as proposed by SEAC and additional / amended conditions of SEIAA, subject to finalization of the draft notification dated 07.11.2024 of MoEF&CC, Govt. of India vide which it intended to omit the general conditions for environmental clearance of projects pertaining to Category 8 (a)-Building & Construction Projects & 8 (b)-Township & Area Development Projects. If the above said draft notification is not promptly finalized by the MoEF&CC, then guidance may be sought from MoEF&CC in light of National Green Tribunal Order dated 09.08.2024 in O.A No. 93/2024 (CZ) titled as Pranjali Karera Vs Union of India and Ors and draft notification dated 07.11.2024 issued by MoEF&CC.

Additional conditions

- a. The AEA activities as proposed by the project proponent will be carried out within a period of 2 Years. The project proponent will provide a six monthly cost-wise break-up for AEA activities from the start of construction and shall submit the six-monthly progress compliance report in this regard to SEIAA duly verified by the PPCB.
- b. The Project Proponent will plant 82,870 saplings of indigenous tree species as far as possible, of minimum 8 feet height. The plantation will commence at the earliest and be completed within 2 years from the date of grant of EC. The Project Proponent shall maintain geotagged inventory of plants, once the plants get established beyond 30 cm of pole girth at breast height.