

Ref No. Mannat/EIA/2024/91

Date: 17/12/2024

Shalimar Corp Limited

11th Fit. Transum. Shalimar Corporate Park.
Vibruti Khone, Gorné Nagar.
Lucknow - 226010 INDIA.
Tel : 0522 - 4030444
Fax: 0522 - 4030413
DN: U701000L1988Pt.C390006

To.

### Regional Office,

Ministry of Environment, Forest & Climate Change Kendriya Bhawan, 11th Floor, Sector-H, Aliganj, Lucknow-226024.

Telefax: 0522-2324043

Subject: Post Environmental Clearance Compliance of Proposed Group Housing Project "Shere Shalimar Mannat" at Village Muhammadpur Chauki, Nawabganj, Barabanki, U.P. (Post-Monsoon Season, 2024)

Ref: EC Identification No. EC23B038UP169879, File No 7547-7345, Dated 19.12.2023.

Dear Sir.

This is to inform you that our project has been accorded Environmental Clearance from SEIAA, UP, vide EC Identification No. EC23B038UP169879, File No 7547-7345, Dated 19.12.2023.

We are herewith submitting point wise compliance as per conditions mentioned in the Environmental Clearance (Post-Monsoon Season, 2024) with latest Environmental Monitoring reports, in prescribed format along with the necessary Annexure for your kind consideration.

We hereby request your good office to kindly release compliance certificate at the earliest.

Thanking you,

Yours Sincerely,

For, Shalimar Corp Ltd.

Authorized Signatory

Encl: As above

Copy to:

- 1. CEO (Circle-05), UPPCB, TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow (U.P.)
- 2. Member Secretary, SEIAA, Directorate of Environment, Vineet Khand 1, Gomti Nagar, Lucknow, UP.



### **COMPLIANCE REPORT**

Group Housing Project "Shere Shalimar Mannat" at Khasra No.- 52,53,54A, 54B, 55,59,105,110-119, 121,123-128, 131, 139-144, Village-Muhammadpur Nawabganj, Barabanki, U.P.,

**Project Proponent** 

M/s Shalimar Corp. Ltd.



**Environment Consultant** 

### Sawen Projects & Laboratories Pvt. Ltd.

### **NABL & OSHAS Accredited**

H. Off.: 417 A&B, 409 A, 4th Floor, Sahara Shopping Centre, Faizabad Road, Lucknow - 226016 (U.P.)

Telefax: 0522-2341312; Mobile: 7379444471-73

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NABET Accreditation Number: NABET/EIA/2225/RA 0210: Valid Upto: 29.03.2025

Lab: SAWEN Projects & Laboratories Pvt. Ltd (NABL Accreditation Number-TC-5505)

Sr.	Conditions	Status
No.	onal Conditions	
Addition 1.		Total Electric load: 3700 KW
1.	The project proponent shall submit within the next 3 months the details of solar	20% Electric load i.e.: 740 KW
	power plant and solar electrification details within the project	Solar Heat Gain Coefficient (SHGC), Window Glazing U-value, and Overall Roof Assembly U-value) meet the baseline criteria of ECBC/IGBC/GRIHA
2.	The project proponent shall ensure to plant broad leaf trees and their maintenance. The	Green Area: 9921.69 m <sup>3</sup> Landscaping is proposed as per CPCB guidelines.
	CPCB guidelines in this regard shall be followed.	List of trees and details attached as Annexure-1.
3.	The project proponent shall submit within the next 3 months the details on quantification of year wise CER activities along with cost and other details. CER activities must not be less 2% of the project cost. The CER activities should be related to mitigation of Environmental Pollution and awareness for the same like water harvesting pits and carbon sequestration parks / designed ecosystems .At least one school in the vicinity of project area should be provided with rooftop solar plant, toilets	The Ministry of Environment, Forest and Climate Change has firmed up guidelines that will require every corporate seeking Environment clearance to set aside up to 2% of its capital investment for Corporate Environment Responsibility (CER).  The guidelines make it mandatory for companies to set aside funds for CER over and above what is required for executing the environment management plan in a project affected area.  Sustainable development has many important components like social, economic, environmental, etc. and these components are closely inter- related and mutually reenforcing. Therefore, the general structure of EIA document, under Appendix-III to the notification, prescribes inter-alia public consultation, social impact assessment and R&R action plan besides
	in public place or in school of nearby villages and if there is a girl" s school then girls toilet properly equipped with overhead water tank should be constructed.	environment management plan (EMP).  The cost of CER is to be in addition to the cost

months the details of segregation plan of MSW.  * A Door to Door and floor to floor system through service lift provided for collection of solid waste generated.  * Adequate number of colored bins (green and Blue - separate for Bio-degradable and Non Bio-degradable) provided.  * Provision of temporary storage of solid waste shall be done for 48 hours at site.  * Recyclable waste sold to authorized contractor/agencies.  * Hazardous waste (Spent Oil) & e-waste will be stored at separate place. Used oil will be sold off to authorized recyclers while there will be buy-back arrangements with the supplier for DG Set batteries.  * Litter bin will also be provided in open areas like commercial spaces, parks & play grounds etc.  * Fig 24: Management Plans Baggans	<ul> <li>A Door to Door and floor to floor system through service lift provided for collection of solid waste generated.</li> <li>Adequate number of colored bins (green and</li> </ul>	5. The project proponent shall submit within the next 3 months the details of Total Municipal waste: 3871 Kg/day.
6. The project proponent shall Total fresh water Requirement: 492 KLD	degradable) provided.  Provision of temporary storage of solid waste shall be done for 48 hours at site.  Recyclable waste sold to authorized contractor/agencies.  Hazardous waste (Spent Oil) & e-waste will be stored at separate place. Used oil will be sold off to authorized recyclers while there will be buyback arrangements with the supplier for DG Set batteries.  Litter bin will also be provided in open areas like commercial spaces, parks & play grounds etc.	A Door to Door and floor to floor system through service lift provided for collection of solid waste generated.  Adequate number of colored bins (green and Blue - separate for Bio-degradable and Non Bio-degradable) provided.  Provision of temporary storage of solid waste shall be done for 48 hours at site.  Recyclable waste sold to authorized contractor/agencies.  Hazardous waste (Spent Oil) & e-waste will be stored at separate place. Used oil will be sold off to authorized recyclers while there will be buyback arrangements with the supplier for DG Set batteries.  Litter bin will also be provided in open areas like commercial spaces, parks & play grounds etc.
5. The project proponent shall It is being complied.	5. The project proponent shall submit within the next 3 months the details of Total Municipal waste: 3871 Kg/day.	T ANO IN HIADAVEIDED DIAD
	<ul> <li>4. The project proponent shall submit within the next 3 months the details of estimated during the construction period and its management plan.</li> <li>5. The project proponent shall submit within the next 3 months the details of</li> </ul> Total construction waste generated @ 40 kg/sq.m of Built-up (1, 67,227.62 m2) is 6689.1 MT. Tit is being complied. Total Municipal waste: 3871 Kg/day.	4. The project proponent shall submit within the next 3 months the details of estimated construction waste generated during the construction period Construction waste generated during the construction period Construction waste generating from the site will be managed through C&D waste management rules, 2016. Total construction waste generated @ 40 kg/sq.m of Built-up (1, 67,227.62 m2) is 6689.1 MT.

	ensure that waste water is	STP treated water for reuse: 246 KLD
	properly treated in STP and	Total waste water generated: 594 KLD
	maximum amount should be	Capacity of STP: 800 KLD
	reused for gardening flushing system and washing etc. For	Technology of STP: Phytorid Technology
	reuse of water for irrigation	246 KLD of Treated water reuse for gardening flushing
	sprinkler and drip irrigation	system and washing etc.
	system shall be installed and	, e
	maintained for proper function.	For reuse of treated water irrigation sprinkler and drip
	Part of the treated sewage, if	irrigation installed and regularly maintained for proper
	discharged to sewer line, shall	functioning.
	meet the prescribed standards for the discharge.	Remain treated water is discharged to sewer line as per
	Tor the discharge.	the prescribed standards.
		STP outlet test report Annexed as <i>Annexure-2</i>
7.	Under any circumstances	It is being complied.
	untreated sewage shall not be	
	discharged to municipal sewer	The total waste water generated is 594 KLD for which
	line.	800 KLD STP installed for the treatment of waste water.
8.	The project proponent will	It has been complied.
	ensure that proper dust control	
	arrangements are made during	Measures:
	construction and proper display board is installed at the site to	<ul> <li>The dust emissions are being controlled by regular sprinkling of water during earthwork and</li> </ul>
	inform the public the steps	construction cement bags are placed in covered
	taken to control air pollution as	areas.
	per air act 1981 (as amended)	<ul> <li>Sand and bricks shall be covered with gunny</li> </ul>
	and the Construction and	bags to avoid dispersion of material in air.
	Demolition Waste	The approach roads to the proposed site are good
	Management Rules, CAQM guidelines.	metaled roads, therefore during material handling there shall be least spread of dust in the
	guidennes.	environment.
		■ Scaffolding are covered, hosing down road
		surfaces and cleaning of vehicles especially
		during the dry season.
		Vehicles transporting loose construction material     About the accuracy.
		should be covered.  Compaction of soil during various construction
		activities.
		Any dry, dusty materials stored in sealed
		containers or under tarpaulin to prevent from
		blowing.
	A certificate from Forest	Not applicable
9.	A certificate from Forest Department shall be obtained	Not applicable
	that no forest land is involved	There is no forest land involved in the project.
<u> </u>		F 'J'

	and if forest land is involved the project proponent shall obtain forest clearance and permission of Central and State Government as per the provisions of Van Sanrakshan evam Samvardhan Adhiniyam,2023 and submit before the start of work.	
10.	If the proposed project is situated in notified area of ground water extraction, where creation of new wells for ground water extraction is not allowed, requirement of fresh water shall be met from alternate water sources other than ground water or legally valid source and permission from the competent authority shall be obtained to use it.	Ground water NOC achieved from the Ground water Department. NOC Certificate no. NOC042105
11.	Provision for charging of electric vehicles as per the guidelines of GoI / Go. UP should be submitted within the next 3 months.	Provision for Electric Vehicle Charging Infrastructure (EVCI) as per the guidelines of Gol / GOUP is also proposed in the project.  Based on the occupancy pattern and total parking provisions in the premises of the various building types, charging infrastructure shall be provided EVs which is currently assumed to be 20% of all "vehicle holding capacity" / "parking capacity" at the premises.  Additionally, the building premises will have an additional power load equivalent to the power required for all the charging points to be operated simultaneously with safety factor of 1.25.
12.	PP should display EC granted to them on their website. 6-monthly compliance report should be displayed on their website and to be given every six month to residents / occupants of the building.	It is being complied.
13.		Complied.  1. EC Identification No.: EC23B038UP169879 2. File No.: 7547-7345 3. Project Type: Expansion 4. Category: B 5. Project/Activity including Schedule No.: 8(a) Building and Construction projects

	and void.	6. Name of Project: Construction of Proposed Expansion of Group Housing Project "Shere Shalimar Mannat, at village Muhammadpur Nawabganj, Barabanki,U.P. 7. Name of Company/Organization: M/S SHALIMAR
		CORP. LTD  8. Location of Project: UTTAR PRADESH  9. TOR Date: N/A
		EC letter annexed as Annexure -2
14.	Project proponent is advised to explore the possibility and getting the cement in a closed container rather through the plastic bag to prevent dust emissions at the time of loading/unloading.	It has been complied.  Dust emissions are being controlled by regular sprinkling of water during earthwork and construction cement bags are placed in covered areas.  Getting cement in a closed container rather through the plastic at the time of loading/unloading.
15.	ensure that there will be no use of "Single use of Plastic" (SUP).	It is being complied.
16.	Supreme Court order dated 13/01/2020 in IA no. 158128/2019 and 158129/2019 in Writ petition no. 13029/1985 (MC Mehta Vs. GoI and others) anti-smog guns shall be installed to reduce dust during excavation.	
17.	The project proponent will ensure that there is no mismatch/deviation between the project proposal submitted to SEIAA for environmental clearance and maps/drawings were approved by concerned development authority. In case of any mismatch/deviation, amended environmental clearance will be obtained by project proponent. In case of failure, the granted environmental clearance shall automatically deem to be cancelled.	There is no mismatch/deviation between the project proposal submitted to SEIAA for environmental clearance and maps/drawings were approved by concerned development authority.  Maps/Drawing are attached as <i>Annexure-3</i>
18.	The proponent should provide	It will be complied.

electric vehicle charging facility as per the requirements at ground level and allocate the safe and suitable place in the premises for the same.

The project proponent should develop green belt in the housing scheme as per the plan submitted and also follow the guidelines CPCB/Development authority for green belt as per the norms. The project proponent will prepare working plan of plantation/green belt development showing type of plant species and their spacing in consultation with subject expert/ forest department and submit to the forest department and concerned regulatory authority and ensure their survival and sustainability

It has been complied.

The green area 9921.69 m<sup>2</sup> provided, for green development.

To ensure a permanent green shield around the periphery planting is recommended in two phases.

- In the first phase one row of evergreen and fast growing trees (which grows up to 10-15m) shall be planted at 3.0 m interval along with fast growing ground covers to enhance the water holding capacity, improve the organic content and check the soil erosion.
- In the second phase after eighteen months, second row of trees with large leaf surface area with large ever green canopy and longer life span shall be planted at 5.0 m intervals.

### **Greenbelt Design for Site**

The selection of plant species for the development depends on various factors such as climate, elevation and soil. The selection of the trees is based on their phenology (thus road side trees will not have leaf fall during summer and rainy seasons when shade is most needed).

The criteria of the species are based on pollution mitigation capacity (including Particulate matter), large leaf surface area, deep root system and less litter fall. Faster growing trees with lighter canopy will be planted alternatively with relatively slow growing trees with wider canopy. Trees of about 6 m heights will be planted at 3 m intervals, 2.5 m away from the road curbing as per CPCB guidelines. Trees will be planted along the outer periphery at centerline of road between the set back line and the boundary of the plots. Palms and shrubs will be planted along the roads and around recreational lawns.

#### **List of Plant:**

### 1. General Pollution Abatement

Tectona grandis (Teak)
Dalbergia sissoo (Shisham)

	T	
		Butea monosperma (Palash)
		Azadirachta indica (Neem)
		Cassia fistula (Amaltas)
		Bauhinia variegata (Kachnar)
		Leucaena leucocephala (Subabul)
		Madhuca longifolia (Mohua)
		Mangifera indica (Aam)
		Millettia pinnata (Karanj)
		Tamarindus indica (Imli)
		Terminalia bellirica (Baheda)
		Terminalia chebula (Harda)
		Terminalia elliptica (Saj)
		Syzygium cumini (Jamun)
		2. Air Pollution Attenuation
		Ficus glomerata (Guler)
		, ,
		Terminalia tomentosa (Asan)
		Acacaia auriculiformis (Babul)
		Polyalthia longifolia (Debdaru)
		Ficus benghalensis (Banyan)
		Mangifera indica (Aam)
		Nerium oleander (Kaner)
		3. Dust Absorbers
		Azadiarchta indica (Neem)
		Melia azaderach (Mahaneem)
		Butea monosperma (Palash)
		Cassia fistula (Amaltas)
		Bauhinia variegate (Kachnar)
		Terminalia arjuna (Arjun)
		Refer Annexure-1
20.	Project proponent should	It is being Complied.
	invest the CSR amount as per	
	the proposal and submit the	
	compliance report regularly to	
	the concerned	
	authority/Directorate of	
	environment.	
21.	Proponent shall provide the	It has been complied.
۷1.	dual pipeline network in the	it has been complied.
	project for utilization of treated	We installed dual pipeline network in the project for
	water of STP for different	
		utilization of treated water of STP for different purposes,
	purposes and also provide the	like flushing, car washing, gardening, etc.
	monitoring mechanism for the	
	same. STP treated water not to	
	be discharged outside the	
	premises without the	
	permission of the concerned	

authority.

will 22. The project proponent ensure full exploitation of potential of rain water harvesting for storage and recharging and also treated wastewater in order to reduce the withdrawal of fresh water and accordingly use the three sources of water supply namely stored rain water, treated wastewater and the fresh water. The project proponent shall also provide a flow measuring device along with flow integrator monitoring the various sources of water supply namely fresh water, treated waste water and stored harvested rain water. The project proponent will submit revised water mass balance in the light of above to the directorate of Environment and the concerned regulatory authorities.

It is being complied.

The rainwater will be collected through piped drains and conveyed into rainwater harvesting system. All storm water drains have been designed for adequate size and slope such that there shall not be any flooding in the site. It shall be ensured that no wastewater shall enter into storm water drainage system

Peak Run off				
Max, Rainfall intensity 40mm/hr				
Locatio n	Runoff coefficien t	Area (m²)	Rainfall Intensit y	Peak run off in m <sup>3</sup> /hr
				•
Roof area	0.8	15621.3	0.04	500
Paved area	0.6	39257.2 1	0.04	942
Green area	0.2	9897.26	0.04	79
	Total Run	off m³/hr	•	1521

Total Runoff =1521 m3/hr (considering maximum rainfall @ 40 mm/hr)

Retention Time for storm water: 1/3 hrs,

Volume of runoff = 1521/3 = 507 m

Dimensions of a Recharge pit: (3m x 4m) and depth 3 m. Dimensions of a desilting tank (0.9m x 1.2m) and depth 1m.

Size of a single Recharge pit =  $(3 \times 4 \times 3) \times m3 + (0.9 \times 1.2)$ 

x 1) m3 = 37m3

Hence No. of pits required =  $393/37 = 13.7 \sim 14$  pits

**Provided: 15 Pits** 

No. of pits required for roof top harvesting:

Retention time for storm water: 1/3 hrs

Volume of runoff: 500/3 = 167 m3

Dimension of a single recharge pit as described above:

37 m3

No of pits required to cater roof top runoff: 167/37 = 4.5

 $pits = \sim 5pits$ 

Already constructed: 3 pit

23. The project proponent will ensure the quality of

It is being complied.

	construction water as per	
	standards and specifications of	
	relevant codes in order to	
	prevent possible corrosion in	
	concrete, reinforcements and	
	·	
	other structural components in	
	order to avoid adverse social	
	and environmental impacts.	
24.	The project proponent will	It is being complied.
	ensure exploitation of	
	maximum possible potential of	15 KVA Capacity Solar plant installed
	solar energy generation in the	
	proposed project area and	Solar energy Use:
	prefer to use it instead of	
	conventional electricity in	<ul> <li>Solar lights in open areas and landscaped area</li> </ul>
	order to reduce the Green	with 50% dual lighting system.
		• 50% street lighting will be powered by solar
	House Gas Emission causing	
	climate change.	lighting.
		<ul> <li>Passive solar cooling, utilizing building shading</li> </ul>
		through overhangs.
		Photographs annexed as <i>Annexure-5</i>
25.	The project proponent will	It is being complied.
	make necessary arrangement to	
	get Structural auditing	Structure stability certificate annexed as <i>Annexure-6</i>
	conducted by an expert	
	institution once in 5 years	
	during life span of the building	
	to ensure safe life of the	
	residents and prevent	
	environmental and social	
	hazards.	
Standa		onditions prescribed by MoEF&CC
	itory compliance	multions prescribed by Morr &CC
		T4 1 1
1.	The project proponent shall	It has been complied.
	obtain all necessary clearance/	
	permission from all relevant	We are obtaining all the necessary permission.
	agencies including town	
	planning authority before	
	commencement of work. All	
	the construction shall be done	
	in accordance with the local	
	building byelaws.	
2.	The approval of the Competent	It has been complied.
	Authority shall be obtained for	2 mas soon compiles.
	structural safety of buildings	We follow National building code, for structural safety
	due to earthquakes, adequacy	of buildings.
	i due to carmquakes, adequacy	or oundings.
	of firefighting equipment etc.	For structure stability certificate refer Annexure-6

	as per National Building Code	And for Fire NOC Annexure-7
	including protection measures from lightning etc.	Documents annexed as Annexure-6
3.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.	Not applicable
4.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Not applicable
5.	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	It has been complied. CTE: Ref. No. 63810/UPPCB/Lucknow(UPPCBRO)/ CTE/BARABANKI/2019. CTE certificate annexed as <i>Annexure-8</i>
6.	The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.	It has been complied. The Ground water NOC is achieved from the Ground water Department. NOC Certificate No. NOC042105 NOC attached as <i>Annexure-3</i>
7.	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.	The total electrical load demand of the entire project is
8.	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.	It has been complied.  Fire NOC annexed as <i>Annexure-7</i>
9.	The provisions of the Solid	It has been complied.

Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.

Total Municipal waste generated: 3871 kg/day

Total E-waste generated: 3.2 kg/day

Horticulture waste: 37 kg/day STP Sludge: 23 kg/ day

- Door to Door and floor to floor system through service lift shall be provided for collection of solid waste generated.
- Adequate number of colored bins (green and Blue - separate for Bio-degradable and Non Biodegradable) are proposed to be provided.
- Provision of temporary storage of solid waste shall be done for 48 hours at site.
- Recyclable waste will be sold to authorized contractor/agencies.
- Hazardous waste (Spent Oil) & e-waste will be stored at separate place. Used oil will be sold off to authorized recyclers while there will be buyback arrangements with the supplier for DG Set batteries.
- Litter bin will also be provided in open areas like commercial spaces, parks & play grounds etc.

10. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

It is being complied.

### **Energy Efficient Features:**

Suitable energy optimization will be adopted during the calculation of energy load of the proposed project. Light Emitting Diode (LEDs) will be used in place of incandescent and halogen lamps in all common areas and basement parking.

- Maximum utilization of natural light.
- LEDs & T-5 lighting fixtures in the common areas and Truelite fluorescent lamps in basements.
- Use of solar lights partly in open areas and landscaped area.
- Glazing glass: to keep the U value, SHGC, VT as per ECBC.
- External glazing will be below 40% of the total vertical surface as per ECBC.
- U-values of the roof, external wall and fenestration of the building will meet the requirements as specified in the Energy.
- Follow Measures (Solar Heat Gain Coefficient (SHGC), Window Glazing U-value, and Overall Roof Assembly U-value) meet the baseline criteria of ECBC/IGBC/GRIHA.

		<ul> <li>Ensure that the interior, exterior, common and parking area lightening power densities (LPD) meet the baseline values through "building area method."</li> </ul>
2. Air o	quality monitoring and preserva	tion:
1.	Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.	It is being complied.
2.	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.	It is being complied.  The other major source of pollution during operational phase will be emissions from DG sets.  During the post construction phase, cars, scooter/motorcycle will be owned by the residents of proposed complex. Vehicular emissions will be major sources of air pollution on approach road, bypass road and will depend upon the traffic density on the road at particular time.  Quantum and dispersion of pollution from vehicular emission will depend upon the following.  Volume of traffic at the roads  Meteorological conditions.  Emission sources from automobiles engines (petrol/diesel)  Mitigation Measures  1. In the proposed complex, green belt is being developed in the form of Parks and along the internal roads, which will also works as barrier for the movement of pollutants.  2. Required capacity DG sets will be provided at the Commercial Area & Common facilities in case of power failure.  3. High Speed diesel (HSD) will be used which will result in lower emissions and increased efficiency.
3.	The project proponent shall install system to carryout Ambient Air Quality	It is being complied.  Ambient air quality parameters recommended for

monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 andPM25) covering upwind and downwind directions during the construction period.

monitoring the project are Particulate Matters (PM10, PM2.5), Carbon Monoxide (CO), Oxides of Nitrogen (NOx) and Sulphur Dioxide (SO2).

These are to be monitored, right from the commencement of construction activity at selected locations on site, excavation works, residential areas near the project site etc.

Data is generated once in a season excluding monsoon at the monitoring locations in accordance with the National Ambient Air Quality Standards formulated by MoEF through Notification on November 18, 2009.

Air monitoring report annexed as *Annexure-10* 

4. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well the site. These as measures shall include screens building the under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height).Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

It is being complied.

During the excavation of channels, foundations, unloading of construction material, cement bags and mixing of cement with other building materials, fugitive dust emissions may be emitted at construction site. It may be noted that these emissions would be in the form of coarse particulate matter and will be settled down ultimately in the closed vicinity of construction site. Therefore, no significant impact is anticipated due to dust emission during development and construction phase.

### **Mitigation measures**

- The excavated soil is being stored and used in landscaping.
- The dust emissions are being controlled by regular sprinkling of water during earthwork and construction cement bags are placed in covered areas. Sand and bricks shall be covered with gunny bags to avoid dispersion of material in air.
- The approach roads to the proposed site are good metaled roads, therefore during material handling there shall be least spread of dust in the environment.
- Scaffolding are covered, hosing down road surfaces and cleaning of vehicles especially during the dry season
- It is mandatory for all automobiles vehicles to maintain the quality of exhaust emissions within permissible standards.
- The ambient air quality is being monitored regularly to ensure that the activities at site are

		<ul><li>Pollution provision a</li></ul>	ng the ambient environment. under Check (PUC) at entry gate.	certificate
5.	Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.	It is being complied	ed.	
6.	Wet jet shall be provided for grinding and stone cutting.	It is being complied	ed.	
7.	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.	It is being complied.		
8.	All construction and	It is being complied	ed.	
	demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All	from labour camp construction waste		vities. The
	demolition and construction	Construction	<b>Total construction waste</b>	409
	waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.	waste material	generated @ 40 Kg/sq.m of change of the built up (10214.75)	( <b>MT</b> )
		Soil, Sand & Gravel	0.35	143
		Bricks & Masonry	0.3	123
		Concrete	0.25	102
		Metal	0.05	20
		Bitumen	0.0204	8
		Wood	0.0204	4
		identifies and char proposed activities for collection, has arising. Construct suitably reused management plan.	ent plan is being implement aracterize every waste associates and which identifies the plandling, and disposal of elion waste/ debris is being colon site as per construct.	ented that ciated with procedures ach waste llected and
9.	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection)	emissions	G sets will comply with the a	

	scribed for air and noise sion standards.	<ul> <li>provided as per norms.</li> <li>Back up DG sets will be used only during power failure.</li> <li>Regular monitoring of emissions from DG sets and ambient air quality will be carried out as per norms.</li> <li>DG sets will be installed in the basement to minimize the vibration and impact on ambient noise.</li> <li>DG room will be treated acoustically as per norms to control the noise from DG sets.</li> <li>Pumps, Compressors, DG sets etc. will be properly maintained for fuel efficiency and noise control.</li> </ul>
		<ul> <li>Personal protective equipment will be provided to the maintenance staff working in high noise areas.</li> </ul>
		Environment monitoring report annexed as Annexure-
DG thro as Aco	e gaseous emissions from set shall be dispersed ough adequate stack height per CPCB standards. oustic enclosure shall be	It is being complied.  DG set capacity: 500 KVA (3 Nos.)  Stack height: 6 meter + Building height
mit The exh per Cer	vided to the DG sets to igate the noise pollution. e location of the DG set and aust pipe height shall be as the provisions of the atral Pollution Control ard (CPCB) norms.	Adequate height of stacks will provided to the DG sets as per guidelines of CPCB to facilitate the dispersion of flue gases into the atmosphere.  We planned the location of the DG set and exhaust pipe height as per the provisions of the Central Pollution Control Board (CPCB) norms.  DG set test report annexed as <i>Annexure-11</i>
ven Nat Ind		It is being complied.
	ality monitoring and preser	
wat allo dra wet Che land sust	uld be maintained for uring unrestricted flow of ter. No construction shall be towed to obstruct the natural inage through the site, on that and water bodies. Eck dams, bio-swales, dscape, and other tainable urban drainage	It is being complied.  The project area falls in the drainage basin of Gomti River but is outside any flood plain. Runoff during rains makes way to natural drain and in storm water drains laid in the area.  During construction phase, there is no impact anticipated on the drainage pattern of the project area.
	tems (SUDS) are allowed maintaining the drainage	

	pattern and to harvest rain	
	water.	
2.	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.	It is being complied.
3.	Total fresh water use shall not exceed the proposed requirement as provided in the project details.	It is being complied. Fresh water consumption is 492 KLD (Ground water) only. Unit has installed the flow meter to measure the water quantity per day.
4.	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.	It is being complied.  Fresh water: 492 KLD (Ground water) Reuse of treated effluent from STP -246 KLD Total water requirement: 738KLD  Runoff before Construction: Total runoff before construction = Runoff Coefficient x Area (m2) x Rainfall intensity = 0.2 x 24338.96 x 0.04 = 195 m³/hr  Rain water from paved and green areas will percolate naturally through capillary action and augment the water table. RWH will be initially done only from the roof top. However the rain water pits have been proposed for the whole area. Runoff from green and other open areas will be done only after permission from CGWB. Total Rain Water Harvesting Pits will be 14 in number. To measure the quantity flow meter are installed at the inlet & outlet.
5.	A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available.	Water test report Annexed as Annexure-12  It is being complied.  Source: Primarily through private tankers arranged by the contractor  Near the Project site Surface water test report annexed as Annexure-13

6.	This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.  At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.	It is being complied. Open space provided: 49,032.04 m <sup>2</sup> Paved area: 39,110.35 m <sup>2</sup>
7.	Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation car washing, thermal cooling, conditioning etc. shall be done.	It is being complied.  Dual pipe plumbing is installed to control the fresh water extraction.
8.	Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.	<ul> <li>Using low flushing systems- using efficient water saving toilets with dual flush systems thus saving about 50 % of water.</li> <li>Sensor based fixtures – this reduces about 0.4 lit per flush.</li> <li>Low flow faucets along with other water saving devices resulting in 25 – 50% water.</li> <li>Low flow shower with rates at 7.5 lpm @ 80 psi.</li> <li>Other pressure reducing devices to reduce from 80 psi to 65 and 50 psi thus reducing water consumption by 10 – 25%.</li> <li>Use of Recycled Water         <ul> <li>To reduce the total water requirement, to reduce the dependability on ground water sources, to follow the guidelines of MoEF and to protect the environment, it is recommended to adopt recycling of treated effluent from On-site STP for flushing, horticulture, generator set cooling and any other low end uses.</li> </ul> </li> </ul>
9.	Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap Aerators etc.) for water conservation shall be incorporated in the building	It is being complied.

10.	plan.  Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	activity.	complied.  ter through  ked concrete	-		
11.	The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.	Rain water harvesting recharge pits/storage tank provided for ground water recharge as per the CGW norms.				
12.	A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where	conveyed water drain slope such It shall be storm water	nter will be cointo rainwath have been that there she ensured that drainage sy	er harvestin designed all not be and the motern all mot	ng system. for adequa ny flooding water shal	All stor te size ar g in the sit
	ground water recharge is not feasible, the rain water should		Pea Max, Rainfal	ak Run off		
	be harvested and stored for	Locatio	Runoff	Area	Rainfall	Peak
	reuse. The ground water shall not be withdrawn without approval from the Competent Authority.	n	coefficien t	(m <sup>2</sup> )	Intensit y	run off in m³/hr
		Roof area	0.8	15621.3 9	0.04	500
		Paved area	0.6	39257.2 1	0.04	942
		Green	0.2	9897.26	0.04	79

area

rainfall @ 40 mm/hr)

Total Runoff m<sup>3</sup>/hr

Total Runoff =1521 m3/hr (considering maximum

**1521** 

		Retention Time for storm water: 1/3 hrs, Volume of runoff = 1521/3 =507 m3 Dimensions of a Recharge pit: (3m x 4m) and depth 3 m. Dimensions of a desilting tank (0.9m x 1.2m) and depth
		Dimensions of a Recharge pit: (3m x 4m) and depth 3 m.
		_ = =
		Difficultions of a desirting tank (0.5m x 1.2m) and depth
	I	1m.
	!	
		Size of a single Recharge pit = $(3 \times 4 \times 3) \times 3 \times 4 \times 3 \times 3$
1		x 1) m3
		= 37m3
		Hence No. of pits required = 393/37= 13.7~14 pits <b>Provided: 15 Pits</b>
		No. of pits required for roof top harvesting:
		Retention time for storm water: 1/3 hrs
	!	Volume of runoff: $500/3 = 167 \text{ m}3$
		Dimension of a single recharge pit as described above:
	!	37 m3
		No of pits required to cater roof top runoff: $167/37 = 4.5$
		pits = ~ 5pits
	!	Already constructed: 3 pit
		Timona, construction o pit
13.	All recharge should be limited	It is being complied.
13.	to shallow aquifer.	t is being complied.
14.	1	It is being complied.
17.	during construction phase of	Use of water through private tankers for construction
	the project.	activity.
15	1 0	
15.		it is being complica.
	* *	
	S	
1.0	5	Total balance and the d
16.	*	
		it is being compiled.
	_	Fresh material 402 VI D (Core 1
		l '
		<u> </u>
	1 - 1	,
	$\mathcal{E}$	
1	_	
	I six monthly Monitoring	Volume of runoff = $1521/3 = 507 \text{ m}$
	•	
	reports.	Dimensions of a Recharge pit: (3m x 4m) and depth 3 m.
	•	Dimensions of a desilting tank (0.9m x 1.2m) and depth
	•	Dimensions of a desilting tank (0.9m x 1.2m) and depth 1m.
	•	Dimensions of a desilting tank (0.9m x 1.2m) and depth
16.	Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.	It is being complied.  It is being complied.  It is being complied.  It is being complied.  Fresh water: 492 KLD (Ground water) Reuse of treated effluent from STP -246 KLD Total water requirement: 738KLD Total Runoff =1521 m3/hr (considering maximum rainfall @ 40 mm/hr) Retention Time for storm water: 1/3 hrs, Volume of runoff = 1521/3 =507 m3

		07.0
		= 37m3
		Hence No. of pits required = 393/37= 13.7~14 pits
17.	Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, not related water shall be disposed in to municipal drain.	It is being complied. Phytorid technology for sewage treatment plant has been provided for utilization of the treated water in its different process to reduce the requirement of the fresh water consumption  Detailed STP Document annexed as <i>Annexur-14</i>
18.		It is being complied.
	water drains.	
19.		It is being complied.  800 KLD STP (Phytorid technology) for sewage treatment plant has been provided for treatment of waste water generated within the premises and utilization of the treated water in its different process to reduce the requirement of the fresh water Consumption.  Treated water reused on site for landscape, flushing, cooling tower, and other end-uses.  Refer Annexure-14
	Forest and Climate Change. Natural treatment systems shall	
20.	Periodical monitoring of water quality of treated sewage shall	It is being complied.
	be conducted. Necessary measures should be made to mitigate the odor problem from STP.	
21.	Sludge from the onsite sewage treatment, including septic	It is being complied.
	tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Centre Public Health and Environmental	Estimated STP sludge: 23 Kg/day

	I				1
	Engineering Organization (CPHEEO) Manual on				
	(CPHEEO) Manual on Sewerage and Sewage				
	Treatment Systems, 2013.				
4. Noise	e monitoring and prevention:				
1.	Ambient noise levels shall	It is being con	mplied.		
1.	conform to residential	10 10 001118 001			
	area/commercial area/industrial	Noise attribu	ited to roads	depends on	factors such as
	area/silence zone both during			-	of the vehicles
	day and night as per Noise	plying on			deceleration/gear
	Pollution (Control and	changes by			on the level of
	Regulation) Rules, 2000.				rface (IRC: 104-
	Incremental pollution loads on				ern for sensitive
	the ambient air and noise	receptors, i.e.	, hospitals, ed	ucational inst	itutions, etc.
	quality shall be closely				
	monitored during construction				d has specified
	phase. Adequate measures				uses for day and
	shall be made to reduce				o the timing of
	ambient air and noise level	exposure and	areas designa	ned as sensitiv	ve.
	during construction phase, so as to conform to the stipulated	Area code	Category	Limita in	decibels (dB
	standards by CPCB / SPCB.	Alea code	Category	A)	decibers (db
				Day Time	Night
				Duy Time	Time
		A	Industrial	75	70
		В	Commercia	65	55
			1		
		С	Residential	55	45
		D	Silent	50	40
			zonse		
		Source: (	entral Pollut	ion Control B	Board, New Delhi
		As per Noise	(Control and l	Regulation) R	tules, 2000.
		_	ring data anne	-	
2.	Noise level survey shall be	It is being con			
	carried as per the prescribed		1		
	guidelines and report in this				
	regard shall be submitted to				
	Regional Officer of the				
	Ministry as a part of six-				
	monthly compliance report.				
3.	Acoustic enclosures for DG	It is being con	mplied.		
	sets, noise barriers for ground-		91 1		itt1
	run bays, ear plugs for			• -	ti vibration pads
	operating personnel shall be		ousuc enclo	sures to co	ntrol the noise
	implemented as mitigation	generated.	reannal protec	tiva aquinma	nt (DDE) will be
	measures for noise impact due	Aucquate per	sonner protec	uve equipine	nt (PPE) will be

	to ground sources.	provided to the personnel engaged in D.G. Set room.
		Proposed rows of plantation will further restrict the noise
		on either side of the plantation.
5. Ener	gy Conservation measures:	
1.	Compliance with the Energy	It is being complied.
	Conservation Building Code	<b>Energy Efficient Features:</b>
	(ECBC) of Bureau of Energy	Suitable energy optimization will be adopted during the
	Efficiency shall be ensured.	calculation of energy load of the proposed project. Light
	Buildings in the States which	Emitting Diode (LEDs) will be used in place of
	have notified their own ECBC,	incandescent and halogen lamps in all common areas
	shall comply with the State	and basement parking.
	ECBC.	<ul><li>Maximum utilization of natural light.</li></ul>
		■ LEDs & T-5 lighting fixtures in the common
		areas and Truelite fluorescent lamps in
		basements.
		<ul> <li>Use of solar lights partly in open areas and</li> </ul>
		landscaped area.
		• Glazing glass: to keep the U value, SHGC, VT as
		per ECBC.
		• External glazing will be below 40% of the total
		vertical surface as per ECBC.
		U-values of the roof, external wall and
		fenestration of the building will meet the
		requirements as specified in the Energy.
		Follow Measures (Solar Heat Gain Coefficient  (SUCC) Window Claring II value and Overall
		(SHGC), Window Glazing U-value, and Overall Roof Assembly U-value) meet the baseline
		criteria of ECBC/IGBC/GRIHA.
		CHIEHA OF ECDC/IODC/ORITIA.
		Ensure that the interior, exterior, common and parking
		area lightening power densities (LPD) meet the baseline
		values through "building area
2.	Outdoor and common area	It is being complied.
	lighting shall be LED.	it is some compiled.
		LED lighting in the common areas
3.	Concept of passive solar	It is being complied.
	design that minimize energy	
	consumption in buildings by	Passive solar cooling, utilizing building shading through
	using design elements, such as	overhangs.
	building orientation,	Use of Solar power for water heating, street light and
	landscaping, efficient building	open area.
	envelope, appropriate	Use of solar energy for street lighting and signage.
	fenestration, increased day	
	lighting design and thermal	Building envelope measures (Solar Heat Gain
	mass etc. shall be incorporated	Coefficient (SHGC), Window Glazing U-value, and
	in the building design. Wall,	Overall Roof Assembly U-value) meet the baseline
	window, and roof u-values	criteria of ECBC/IGBC/GRIHA.
	window, and roof u-values	CHICHA OF ECDC/IODC/OKINA.

	shall be as per ECBC	Photographs attached Defor Annayung 5
	specifications.	Photographs attached- Refer <i>Annexure-5</i>
4.	Energy conservation measures	It is being complied.
	like installation of CFLs/ LED	For energy conservation Solar Heating, Day Lighting,
	for the lighting the area outside	Design Natural Ventilation, Thermal Transfer value of
	the building should be integral	Building Material, Energy
	part of the project design and	Efficient Building Services and Equipment, Public Area
	should be in place before	Lighting
	project commissioning.	Exterior Lighting, use of sensors etc. are adopted.
5.	Solar, wind or other	It is being complied.
5.	· · · · · · · · · · · · · · · · · · ·	it is being complied.
	Renewable Energy shall be	
	installed to meet electricity	
	generation equivalent to 1% of	
	the demand load or as per the	
	state level/ local building bye-	
	laws requirement, whichever is	
	higher.	
6.	Solar power shall be used for	It is being complied.
0.	lighting in the apartment to	it is some compiled.
		To reduce the power lead on grid 50% street lighting
	reduce the power load on grid.	To reduce the power load on grid 50% street lighting
	Separate electric meter shall be	will be powered by solar lighting. LEDs will be used in
	installed for solar power. Solar	place of sodium lamps.
	water heating shall be provided	
	to meet 20% of the hot water	Passive solar cooling, utilizing building shading through
	demand of the commercial and	overhangs
	institutional building or as per	
	the requirement of the local	Use of Solar power for water heating, street light and
	building bye-laws, whichever	open area.
	is higher. Residential buildings	open wew.
		Photographs attached Defer Annayure 5
	are also recommended to meet	Photographs attached- Refer <i>Annexure-5</i>
	its hot water demand from	
	solar water heaters, as far as	
	possible.	
6. Was	te Management :	
1.	A certificate from the	It is being complied.
	competent authority handling	
	municipal solid wastes,	Solid waste generated from the project after full
	indicating the existing civic	occupancy will be mainly domestic waste. The solid
	capacities of handling and their	waste so generated shall be first segregated as plastic,
	adequacy to cater to the	glass, paper and other waste separately.
	M.S.W. generated from project	The recyclable inorganic waste will be sold to registered
		1
	shall be obtained.	buyers. The biodegradable wastes will be transferred
		into a designated collection point for disposal by
		municipal authority/hired agency.
		Total Solid waste generated: Approx. 3871Kg/day
		(3.8T/day)

		Horticulture Waste: 37 Kg/Day
		E-Waste: 3.2 Kg/Day
		STP sludge of waste water): 23 kg/day
		<ul> <li>A Door to Door and floor to floor system through service lift shall be provided for collection of solid waste generated.</li> <li>Adequate number of colored bins (green and Blue - separate for Bio-degradable and Non Bio-degradable) are proposed to be provided</li> <li>Provision of temporary storage of solid waste shall be done for 48 hours at site.</li> <li>Recyclable waste will be sold to authorized contractor/agencies.</li> <li>Hazardous waste (Spent Oil) &amp; e-waste will be stored at separate place. Used oil will be sold off to authorized recyclers while there will be buyback arrangements with the supplier for DG Set batteries.</li> <li>Litter bin will also be provided in open areas like commercial spaces, parks &amp; play grounds etc.</li> </ul>
2.	Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	It is being complied.
3.	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.	It is being complied.  The solid waste generated will be first segregated as plastic, glass, paper and other waste separately. The recyclable inorganic waste will be sold to registered buyers. The biodegradable wastes will be transferred into a designated collection point for disposal by municipal authority/hired agency.
4.	Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.	It is being complied.  Organic waste: Waste vegetables and foods etc. Inorganic waste: Papers, cartons, Thermocol, plastics, polythene bags, glass etc.  The biodegradable wastes will be transferred into a designated collection point for disposal by municipal

		authority/hired agency.
5.	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.	It is being complied.  The recyclable inorganic waste will be sold to registered buyers.
6.	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.	It is being complied.  Hazardous waste (Spent Oil) & e-waste will be stored at separate place. Used oil will be sold off to authorized recyclers while there will be buy-back arrangements with the supplier for DG Set batteries.  Used / spent oil from DG sets will be sold to registered recyclers.
7.	Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.	It is being complied.  Use of fly ash in building construction.
8.	Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.	It is being complied.
9.	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.	It is being complied.  The construction waste generated is being reused within the project area. The slash material is not being treated as waste as it has salvage value, which will earn revenue to the project. Thus, burning of construction waste which causes health hazard to the construction labors is not envisaged.  Waste Management:  Waste management plan is being implemented that

10.	Used CFLs and TFLs should	identifies and characterize every waste associated with proposed activities and which identifies the procedures for collection, handling, and disposal of each waste arising.  Construction waste/ debris is being collected and suitably reused on site as per construction waste management plan.  It is being complied.
10.	be properly collected and	Total E waste: 3.2 Kg/day
	disposed off/sent for recycling	E-waste will be handed over to authorized dealers.
	as per the prevailing guidelines/ rules of the	
	regulatory authority to avoid	
	mercury contamination.	
	Green Cover:	
1.	No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).	No tree cutting involve in this projet.
2.	A minimum of 1 tree for every 80 sqm of land should be	It is being complied.
	planted and maintained. The	Green area: 9921.69 sqm.
	existing trees will be counted	-
	for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.	The selection of plant species for the development depends on various factors such as climate, elevation and soil. The selection of the trees is based on their phenology (thus road side trees will not have leaf fall during summer and rainy seasons when shade is most needed).  The criteria of the species are based on pollution mitigation capacity (including Particulate matter), large leaf surface area, deep root system and less litter fall. Faster growing trees with lighter canopy will be planted alternatively with relatively slow growing trees with wider canopy. Trees of about 6 m heights will be planted at 3 m intervals, 2.5 m away from the road curbing as per CPCB guidelines. Trees will be planted along the outer periphery at centerline of road between the set back line and the boundary of the plots. Palms and shrubs will be planted along the roads and around

		recreational lawns.
3.	Where the trees need to be cut	It is being complied.
	with prior permission from the	
	concerned local Authority,	
	compensatory plantation in the	
	ratio of 1:10 (i.e. planting of 10	
	trees for every 1 tree that is	
	cut) shall be done and	
	maintained. Plantations to be	
	ensured species (cut) to species	
	(planted). Area for green belt	
	development shall be provided	
	as per the details provided in	
	the project document.	
4.	Topsoil should be stripped to a	It is being complied.
т.	depth of 20 cm from the areas	it is being compiled.
	proposed for buildings, roads,	
	paved areas, and external	
	services. It should be	
	stockpiled appropriately in	
	designated areas and reapplied	
	during plantation of the	
	proposed vegetation on site.	
8.	Transport:	
1.	A comprehensive mobility	It is being complied.
	plan, as per MoUD best	to is coming complicati
	practices guidelines (URDPFI),	Road network:
	shall be prepared to include	A well-planned road network both within the
	motorized, non-motorized,	township and connecting to the nearest highway
	public, and private networks.	or main road plan to establish so that proper
	Road should be designed with	communication links are establish.
	due consideration for	<ul> <li>Adequate parking provisions are made to cater</li> </ul>
	environment, and safety of	the occupants as well as visitors.
	users. The road system can be	1
	designed with these basic	■ The parking provisions will take into
	criteria.	consideration the two wheelers and four
	a. Hierarchy of roads with	wheelers. It is also desirable to design parking
	proper segregation of vehicular	facilities with basement / stilts parking to reduce
	and pedestrian traffic.	the heat island effect. When inevitable the
	b. Traffic calming measures.	surface parking planned should cover issues to
	c. Proper design of entry and	address heat island effect.
	exit points.	<ul> <li>Elimination of risks to children and old people in</li> </ul>
	d. Parking norms as per local	crossing the internal roads to reach play areas
	regulation.	and recreational facilities.
		<ul> <li>Traffic calming is required. The tools of traffic</li> </ul>
		calming include:-
		<ul> <li>Installation of speed humps by raising the surface</li> </ul>
		of the street in certain spots.

Narrowing the street to give drivers the feeling they are in a crowded place, which will make them slow down and totally or partially blocking half the entrance to a side street so drivers cannot turn in but still can come out. Speed table, build outs etc. Space for vehicles at the entrance gate for checking before entry. Parking Facility: Provided: 1331 ECS + 298 parking space for two wheelers in EWS Vehicles hired for bringing It is being complied. construction material to the site Properly tuned construction machinery and vehicles in should be in good condition and should have a pollution good working condition with low noise and emission check certificate and should will be used and engines will be turned off when not in conform to applicable air and use. noise emission standards be Vehicle use during construction phase, will properly operated only during non-peak check (PUC) and in good condition. hours. A detailed traffic management It is being complied. and traffic decongestion plan shall be drawn up to ensure It is observed from the traffic count that the maximum that the current level of service capacity of the road utilized near site in the morning and evening peak hours are about 56% and 59% respectively. of the roads within a 05 kms The vehicle from the project will increase car and two radius of the project is wheeler traffic load along the road during peak hours. maintained and improved upon after the implementation of the However, since present load is lean, increase in traffic project. This plan should be load may not lead to traffic congestion problem. based on cumulative impact of all development and increased **Mitigation Measures:** habitation being carried out or The project complex has a bell shaped traffic entry/exit from service lane on NH-28 (Faizabad Road) on North proposed to be carried out by the project or other agencies in of the project site. The internal roads of 18m, 15m, 14m, this 05 Kms radius of the site 9m, &6m wide are provided within the project site. The in different scenarios of space entry/exit points have been marked on the layout plan. and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the

	participation of these	
	departments.	
	Human health issues :	
1.	All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.	<ul> <li>Contractors will be advised to provide dust masks for the employed labour</li> <li>Dust suppression through water sprinkling using water trucks, handheld sprays and automatic sprinkler systems.</li> <li>Vehicles transporting loose construction material should be covered.</li> <li>Compaction of soil during various construction activities.</li> <li>Any dry, dusty materials stored in sealed containers or under tarpaulin to prevent from blowing.</li> <li>Vehicle trips to be minimized to the extent possible.</li> <li>Tyre washing at entry and exit points to prevent transportation of soil and dust, to and fro from</li> </ul>
2.	For indoor air quality the ventilation provisions as per National Building Code of India.	<ol> <li>the site.</li> <li>It is being complied.</li> <li>Perform a building flush out before occupancy.</li> <li>Contaminants such as CO, CO2 and VOCs to be dispersed by providing adequate ventilation.</li> <li>Ventilation for the basement to flush out the stale air.</li> </ol>
5.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	<ul> <li>4. Use of Green Seal low VOC paints</li> <li>It is being complied.</li> <li>This stage is crucial to both on site and off site emergency planning and requires to systematically identifying what emergencies could arise. These should range from small events, which can be dealt with by onsite personnel without outside help to the largest event for which it is practical to have a plan. Experience has shown that for every occasion that the full potential of an accident is realized, there are many occasions when some freak event occurs or when a developing incident is made safe before reaching full potential.</li> <li>The assessment of possible incidents should produce a report indicating.</li> <li>The worst events considered\The route to those worst events</li> </ul>

- The time scale to lesser events along the way
- The size of lesser events if their development is halted
- The relative likelihood of events
- The consequences of each event\

It is not easy to control any disaster if contingency plans are not available. For effective control of disaster adequate manpower, technical know- how, alertness and internal help are the prime requirements. It is always better to take preventive measures to avoid any disaster. In the proposed project following prevention measures will be taken to prevent disaster:

- 1. Design, manufacture and construction of the building will be as per national and international codes as applicable in specific cases and laid down by the appropriate statutory authorities.
- 2. Routes for escape during disaster are provided.

### **Guidelines for Disaster Management Plan**

A Disaster Management Plan (DMP) is formulated for better and safe management. The DMP will include the following elements:

- Assessment of the size and nature of the events foreseen and the probability of their occurrence.
- Formulation of the plan and liaison with authorities, including the emergency services.
- Appointment of key personnel and their duties and responsibilities
- Action on-site
- Action off-site

Provision shall be made for the housing of construction labour within the site with necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to removed after completion of the project.

It is being complied.

Use of Mobile toilets & Mobile STP during construction phase and reutilization of treated water for construction purposes.

Provision as per Construction safety:

- Provision of Safety Committee Meeting
- Safety In-charge wherein 500 or more workers are employed
- Provision of Crèche facility wherein 40 or more woman workers are employed.
- Medical and first aid facility with Ambulance and trained driver.
- Canteen wherein 250 or more woman workers

		ara amplayad		
		<ul><li>are employed.</li><li>Sanitary and safe drinking water facilities.</li></ul>		
7.	Occupational health surveillance of the workers shall be done on a regular basis.	It is being complied.		
8.	A First Aid Room shall be provided in the project both during construction and operations of the project.  It is being complied.  Medical and first aid facility with Ambula trained driver is provided.			
10	. Corporate Environment Respon	sibility:		
1.	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	It is being complied.  The Ministry of Environment, Forest and Climate Change has firmed up guidelines that will require every corporate seeking Environment clearance to set aside up to 2% of its capital investment for Corporate Environment Responsibility (CER).  The guidelines make it mandatory for companies to set aside funds for CER over and above what is required for executing the environment management plan in a project affected area. Sustainable development has many important components like social, economic, environmental, etc. and these components are closely inter- related and mutually reenforcing. Therefore, the general structure of EIA document, under Appendix-III to the notification, prescribes inter-alia public consultation, social impact assessment and R&R action plan besides environment management plan (EMP)  The cost of CER is to be in addition to the cost envisaged for the implementation of the EIA/EMP which includes the measures for the pollution control, environmental protection and conservation, R&.R, wildlife and forest conservation/protection measures including the NPV and Compensatory Afforestation, required, if any, and any other activities, to be derived as part of the EIA process.  Some of the activities which can be carried out in CER, are infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and		

		works, a	avenue plantat	ion, plantation in community areas,	
2.	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violati on of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	It is bei	ng complied.		
3.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall	It is being complied.			
		<b>Environmental Management Cell (EMC)</b>			
	be set up under the control of senior Executive, who will directly to the head of the	environment management cell are given in			
	organization.	S.No	Designatio	Proposed Responsibility	
			n	1 Toposed Responsibility	
		1.	President of Society	Overall responsibility for environment management and decision making for all environmental issues	
		2.	Secretary	Hires a consultant and fulfils all legal requirements as per MoEF/ UPPCB/ CPC	
		3.	Supervisor	Ensure environmental monitoring as per appropriate procedures.	

### EMC:

The developer shall continue an Environmental Management Cell after handover of the flats or any other suitable appointed authority. The EMC shall be responsible for the Implementation of environmental management plans and pollution control measures within the proposed project. EMC shall have regular meetings and look after the following:

- 1. Operation, maintenance and monitoring of the sewage system.
- 2. Arrange periodical monitoring of air pollution, noise pollution.
- 3. Maintenance of roads, gardens, roadside plantations and aesthetic development along roadsides and parks.
- 4. Checking of Firefighting arrangements and first-aid boxes.
- 5. Checking of security arrangements.
- 6. Maintenance of records of power consumption for lifts, pump house, street lighting and for other common services.
- 7. Keep records of expenditure on maintenance of lifts, parks, sub-station equipment s including replacement of bulbs and tubes for street lighting and common area.
- 8. Take immediate action in case of emergency arising due to accident, fire, gas leakage or any natural disaster.
- 9. Updating of Emergency Action Plan.
- 10. Disaster Management Plan
- 11. Corporate Social Responsibility Scheme

4. Action plan for implementing environmental **EMP** and conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress implementation of action plan be reported shall to Ministry/Regional Office along with the Six Monthly Compliance Report.

It is being complied.

To assess whether the implemented EMP is adequate, periodic environmental audits will be conducted by the Environmental Division. These audits will be followed by corrective action plans (CAP) to correct various issues identified during the audits.

Monitoring program has the underlying objective to ensure that the intended environmental mitigations are realized and these results in desired benefits to the target population causing minimal deterioration to the environmental parameters. Such program targets proper implementation of the EMP. The broad objectives are:

- To evaluate the performance of mitigation measures proposed in the EMP.
- To evaluate the adequacy of Environmental Assessment.
- To suggest ongoing improvements in management plan based on the monitoring and to

		devise fresh monitoring on the basis of the improved EMP.  To enhance environmental quality through proper implementation of suggested mitigation measures.  To meet the requirements of the existing environmental regulatory framework and community obligations.  The purpose of environmental monitoring is to evaluate the effectiveness of implantation of Environmental Management Plan (EMP) by periodically monitoring the important environmental parameters within impact area, so that any adverse effects are detected and timely action can be taken.
	Miscellaneous:	
1.	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.	It is being complied.
2.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	It is being complied.
3.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	It is being complied.
4.	The project proponent shall submit six-monthly reports on	Agreed;

Compliance Report: Group Housing Project "Shere Shalimar Mannat" at Khasra No.- 52,53,54A, 54B, 55,59,105,110-119, 121,123-128, 131, 139-144, Village- Muhammadpur Nawabganj, Barabanki, U.P., M/s Shalimar Corp. Ltd.

	the status of the compliance of	
	the stipulated environmental	
	conditions on the website of	
	the ministry of Environment,	
	Forest and Climate Change at	
	environment clearance portal.	
5.	The project proponent shall	Agreed;
	submit the environmental	
	statement for each financial	
	year in FormV to the	
	concerned State Pollution	
	Control Board as prescribed	
	under the Environment	
	(Protection) Rules, 1986, as	
	amended subsequently and put	
	on the website of the company.	
6.	The project proponent shall	Agreed.
	inform the Regional Office as	
	well as the Ministry, the date	
	of financial closure and final	
	approval of the project by the	
	concerned authorities,	
	commencing the land	
	development work and start of	
	production operation by the	
	project.	
7.	The project authorities must	It is being complied.
	strictly adhere to the	
	stipulations made by the State	
	Pollution Control Board and	
	the State Government.	
8.	The project proponent shall	It is being complied.
	abide by all the commitments	
	and recommendations made in	
	the EIA/EMP report,	
	commitment made during	
	Public Hearing and also that	
	during their presentation to the	
	Expert Appraisal Committee.	
9.	No further expansion or	Agreed.
	modifications in the plant shall	
	be carried out without prior	
	approval of the Ministry of	
	Environment, Forests and	
	Climate Change (MoEF&CC).	
10.	Concealing factual data or	Agreed.
	submission of false/fabricated	

Compliance Report: Group Housing Project "Shere Shalimar Mannat" at Khasra No.- 52,53,54A, 54B, 55,59,105,110-119, 121,123-128, 131, 139-144, Village- Muhammadpur Nawabganj, Barabanki, U.P., M/s Shalimar Corp. Ltd.

	data may result in revocation	
	of this environmental clearance	
	and attract action under the	
	provisions of Environment	
	(Protection) Act, 1986.	
11.	The Ministry may revoke or	Agreed.
	suspend the clearance, if	
	implementation of any of the	
	above conditions is not	
	satisfactory.	
12.	The Ministry reserves the right	Agreed;
	to stipulate additional	
	conditions if found necessary.	
	The Company in a time bound	
	manner shall implement these	
	conditions.	
13.	The Regional Office of this	Agreed.
	Ministry shall monitor	
	compliance of the stipulated	
	conditions. The project	
	authorities should extend full	
	cooperation to the officer (s) of	
	the Regional Office by	
	furnishing the requisite data /	
	information/monitoring	
	reports.	
14.	The above conditions shall be	It will be complied.
1 11	enforced, inter-alia under the	it will be complied.
	provisions of the Water	
	(Prevention & Control of	
	•	
	Pollution) Act, 1974, the Air	
	(Prevention & Control of	
	Pollution) Act, 1981, the	
	Environment (Protection) Act,	
	1986, Hazardous and Other	
	Wastes (Management and	
	Transboundary Movement)	
	Rules, 2016 and the Public	
	Liability Insurance Act, 1991	
	along with their amendments	
	and Rules and any other orders	
	passed by the Hon'ble Supreme	
	Court of India / High Courts	
	and any other Court of Law	
	relating to the subject matter.	
15.	Any appeal against this EC	Agreed;
15.	shall lie with the National	rigical,
	bilair ite with the ranollar	

Compliance Report: Group Housing Project "Shere Shalimar Mannat" at Khasra No.- 52,53,54A, 54B, 55,59,105,110-119, 121,123-128, 131, 139-144, Village- Muhammadpur Nawabganj, Barabanki, U.P., M/s Shalimar Corp. Ltd.

Green Tribunal, if preferred,
within a period of 30 days as
1
prescribed under Section 16 of
the National Green Tribunal
Act, 2010.



#### **List of Plant:**

#### 1. General Pollution Abatement

Tectona grandis (Teak)

Dalbergia sissoo (Shisham)

Butea monosperma (Palash)

Azadirachta indica (Neem)

Cassia fistula (Amaltas)

Bauhinia variegata (Kachnar)

Leucaena leucocephala (Subabul)

Madhuca longifolia (Mohua)

Mangifera indica (Aam)

Millettia pinnata (Karanj)

Tamarindus indica (Imli)

Terminalia bellirica (Baheda)

Terminalia chebula (Harda)

Terminalia elliptica (Saj)

Syzygium cumini (Jamun)

#### 2. Air Pollution Attenuation

Ficus glomerata (Guler)

Terminalia tomentosa (Asan)

Acacaia auriculiformis (Babul)

Polyalthia longifolia (Debdaru)

Ficus benghalensis (Banyan)

Mangifera indica (Aam)

*Nerium oleander* (Kaner)

#### 3. Dust Absorbers

Azadiarchta indica (Neem)

*Melia azaderach* (Mahaneem)

Butea monosperma (Palash)

Cassia fistula (Amaltas)

Bauhinia variegate (Kachnar)

Terminalia arjuna (Arjun)



#### 1st Year Plan to 5th Year Plan

- Company should provide all necessary facilities for irrigation of greenbelt in good condition and necessary maintenance of irrigation facilities should be done regularly.
- Company should regularly assess survival rate of planted trees & shrub and if required necessary re-plantation should be done to ensure healthy & dense greenbelt area in its premises.
- Company should do fertilization as required for healthy greenbelt development.
- For plantation, if required, company should acquire saplings from local private/government (Forest & Other) nursery.
- Company should ensure survival rate above 80% to ensure adequate greenbelt and canopy cover in 35% of its total area at any time.

#### **Management Period**

- The properly designed greenbelt area, irrigation facilities, Sapling storage & maintenance area and storage for greenbelt development resources/tools etc. should be provided in construction phase prior to commissioning of plant operation. The necessary structural maintenance should be done throughout the extent of operation phase.
- The greenbelt development guidelines and five-year program should be initiated with inception of construction phase of project and should be implemented & practiced as routine throughout the project life

#### Annexure-2

#### **STP** outlet Test report



# SAWEN PROJECTS & LABORATORIES PVT. LTD.

Regd. Off: 409-A. Sahara Shopping Centre, Ayodhya Road, Lucknow - 226016 (U.P.)
Contact: 0522 - 4574575, 2341312, 4235437 Mobile: 7379444471 - 72 - 73, 7007012249
Website: www.sawenconsultancyservices.com E-mail: splpl lko@gmail.com,
E-mail: drajesh\_singh@yahoo.com, consultancy\_sawens@yahoo.com, consultancy\_sawens@gmail.com
ISO 9001, 2008 OHSAS 18001:2007 CERST-REPORT
CIN No.: U24233UP2009PTC037307

Sample Code No.: SPLPL-4671A

Source: STP Outlet Plant

Sample collected on: 04.12.2024

Sample received on: 04.12.2024

Date of Test: 04.12.2024-17.12.2024

Sampling Done By: Mr. Dhirendra

Sampling Procedure No.: SPLPL-SOP-18

Nature of Sample: STP Outlet Water

Report No.: SPLPL/ STP/4671A/24

Issue Date: 18.12.2024

Type of Test Conducted: Physico Chemical Analysis

Packing seal & Signature: Plastic Jarican with seal and

signature

Condition of the Sample: Clear Water in Plastic Jarican

Quantity: 5 liters

Name & Address of Industry: M/s Shalimar Mannat, Nawabganj, Barabanki, U.P.

SI,	PARAMETERS TESTED	TEST PROTOCOL	OBSERVED VALUE (mg/l)	MoEF&CC Effluent Discharge Standards for Sewage Treatment Plant (w.e.f 13.10.2017) Concentration not to exceed
13	pH	4500-H- B APHA 24th Edition 2023	7.32	6.5 to 9.0
2,	Total Suspended Solids (TSS).(mg/L)	2540 D APHA 24° Edition 2023	42.0	50 mg/L
3.	Chemical Oxygen Demand, COD (mg/L)	5220 B APHA 24th Edition 2023	65.3	
4.	Bio-chemical Oxygen Demand, BOD (mg/L)	IS 3025(Part-44):1993; (Reaff 2009)	13.7	20mg/L
5.	Oil & Grease (mg/L)	5520 B APHA 24th Edition 2023	2.5	
-	Company of the Compan	THE RESIDENCE OF A SALE IN CASE OF THE SALE OF THE SAL	- W. S.	

#### Note:

1. This report refers only to the Job/ submitted for testing. It should not be reproduced except in full.

 Unused balance of samples shall be destroyed after one month from the date of issue of test report, unless otherwise specified

Interpretation: The above tested sample does confirm to Standard of STP treated water w.r.t above tests.

For Sawen Projects & Laboratories Pvt. Ltd.

(Salvendra Singh) Authorized Signatory

Total Environment Services

MONITORING & TESTING • WATER • EFFLUENT • AIR • STACK/FUGITIVE EMISSION • SOIL • NOISE • FOOD & NUTRITION
 GEO TECHNICAL INVESTIGATION • R&D • PHARMACEUTICALS • COSMETIC • MOBILE SOIL/WATER/FERTILIZER TESTING KIT
 Securing Environmental Clearances From MOEF/SEIAA • Securing NOC from SPCB • EIA • ESIA/SIA • ESG • EMP • OMP • Env. Energy Audit
 DPR • Feasibility Reports • Water & Effluent Management Studies • E Waste Management • Municipal Solid Waste Management • Hazardous Waste Management • Bio Medical Waste Management • RR Survey/Poverty & Social Impact Assessment Report • Rock Engineering Report • Risk Assessment • Disaster Management Plan • Pollution Control Systems (Turnkey Basis) • ETP s • WTP's • STP's • APCS • R.O. Systems • Rain Water Harvesting

Laboratories: Hall No. 2, 10 & 14, LDA Commercial Complex, Vibhav Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

# Annexure-3 Ground water NOC



#### Form 8 (C)

[See Rule B(1)]

# AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW / EXISTING WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

#### AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO: NOC042105 VALID FROM 09/02/2023 TO 08/02/2028

(UIS10(1) of the Ultar Pradesh Ground Water Management and Regulation Act, 2019)

Name of the Owner	SHEO JANAM CHALDHARI		
Designation Vq	CEO	Company Name कंपनी का नाम	Shallmar Corp Ltd.
Cempany Address कंपनी का पता	A203, F.F., Sefderjung Enclave DELHI South Dehi	Authorization Letter ভাষিকার তম	Download
Address of the Applicant	11TH FLOOR, TITANIUM, SHALIMAR CORPORATE PARK, VIBHUTI KHAND, GOMTI NAGAR, LUCKNOW	Application No.	BR8K1232NBU00
Date of Submission	14/12/2022	Specimen Signature	
Location Particulars			
District	Bonsbanki	Mock	BANKI
Plot No./Khasca No.	62,644,548,116,116,117,118,121,123,124	Municipality/Corporation	No
Ward No./Holding No.			NA
Particular of the Exist	ing Well and Pumping Device		
Date of Construction/Sinking of the Well	09/10/2010		
Type of Well	Tube WalirBering	Depth of the Well (In motor)	\$3.00
Purpose of well	Bulk User	Assembly Bize(For Tube Well)	
Strainer Position (For Tub	e West)		
Type of Pump Used	Submersible	H.P. of the Pump	7.50
Operational Device	Electric Motor	Rate of Withdrawel (m <sup>2</sup> /hr.)	50.00
Date of Energization (In C		18/10/2019	

Maximum Allowable Rate of Withdrawal (m <sup>3</sup> /hr.):	50.00	Maximum Allowable Running Hours Per Day:	3.00
Maximum Allowable Annual Extraction of Ground Water:	54750	Recharge Required	27375.00

- This No-Objection certificate authorizes the owner applicant juser) to sink a well in the location specified at SL (2) for extraction of
  ground water at a rate not exceeding that as shown at SL (3), for Fourning Mours per day as shown at SL (3k), and for maximum
  allowable arrival extraction of ground water as shown at SL (3k) and is valid subject to the observance of the conditions statistic overland.
- Holder of this NOC is hereby directed to assure annual recharge of 27375.00 cubic meter, as specified under the application form within the given time parter.

#### GENERAL CONDITIONS:

- Holder of this NOC is hereby directed to fill from 1(A) for registering his/her well within 90 days as mentioned in application form shall only started wher registration of his/her NOC.
- . In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- All Users abstracting ground water in excess of 100 mO/d shall be required to submit impact assessment report prepared by an accredited
  consultant from CGWA and National Accreditation Board for Education and Training (NABET). The report should slightlight environmental risks
  and proposed management strategies to exerceme any sign 5 carry environmental issues such as ground water level decline, land subsidence
  etc. within three months of completion of the same to Ground Water Department Litter Pradesh. The list of accredited inchiduals/ institutions
  is available on the official web-portal of CGWA.
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall offer digital water flow melies
  (conforming to BESIS standards) soving telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet
  of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is
  proved. The rate of extraction of ground water from the well shall not exceed to the recorded rate from water meters.
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the attraction so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No charge of location, design, rate of withdrawal and pumping device in respect of the axisting wall of this certificate shall be made without puts permission of the Competent Authority. Any deviction in this record shall lead to cancellation of this registration.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage, this registration is liable for cancellation.
- The Certificate of Authorization NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with bifurnary shall be mandatory for user. Depth and zone tapped
  of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made
  excludible to this office on monthly basis.
- · Guidelines for Installation of Piezometers and their Monitoring

Preparation is a borewell fubewell used only for measuring the water level by lowering the taper sounder or automotic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

- The placement is to be installed constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The dismeter of the placemeter should be about 4" to 6".
- The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more
  than one piezometers are installed the second piezometer should moretor the shallow ground water regime. It will facilitate shallow as
  well as deeper ground water adulter marrisonna.
- . Not of pisconariors to be constructed & Type of water level monitoring mechanism shall be as per below table:

97.00	Commence of Commence of the American Street Commence of the Co	No of plezometers required	Monitring Mechanism	
5.No	Cuartum of Ground water withdrawal (cumiday)		Merall	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 60	1	t	0
- 3	50-500	3	.0	3
4	>500	2	u u	2

- The measuring frequency should be mortfuly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
- For measurement of water level sounder or automatic water level recorder (AWLR): Digital Automatic water level recorder (DWLR): with telemetry system should be used for accuracy.
- The measurement of water level in piecemeter should be taken, only after the pumping from the surrounding table wells has been storaged for about four to six hours.
- All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Mostoring System for Ground Weter Department, Ulter Privatesh, and for its systemics.

- The ground water quality has to be monitored twice in a year during pre-monscon (MayOune) and post-monscon (October-November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 if capacity bottle) to the concerned Director, Ground Water Department, Uttar Prodests, for chemical analysis.
- A Permanent display board should be installed at piezometer. Tube walls size for previding the location, piezometer tube wall number, depth and zone tapped of piezometer tube well for standard referencing and identification.
- Any other site specific requirement regarding safety and access for measurement may be taken care of.
- . Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage. this permit is liable for concellation.
- SPECIFIC CONDITIONS:
- (A) For Industrial User: No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- I) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ID All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- II) All industries abstracting ground water in axcess of 100 m<sup>3</sup>/cf shall be required to undertake annual water audit through Confederation of Indian Industries (CIII/ Federation Indian Chamber of Commerce and Industry (FICCII/ National Productivity Council (NPCI/ PHD Chamber of Commerce & Industries / Leghu Udyog Bhared certified auditors and submit audit reports within three months of completion of the same to Ground Water Department Uter Prodesh, All such industries shall be required to reduce their ground water use by at least 20% over the next five years through appropriate means.
- In) Construction of observation well(s) ipiletometer (s) within the premises and restallation of appropriate water level monitoring mechanism as
  mentioned in General Condition no.10 shall be manufatory for industries drawing/ proposing to shaw more than 10 m<sup>3</sup> stay of ground water
  and. Monitoring of water level shall be done by the project proposent. The piezometer lobservation well jobal be constructed at a minimum
  distance of 50 m from the bore well-production well. Depth and equifer zone tapped in the prezentater shall be the same as that of the
  pumping well wells. Monitory water level data shall be submitted online to the Ground Water Department, U.P.
- v) The proportent shall be required to adopt roof too rain water harvesting/rechange in the project premises, industries which are likely to
  pollute ground water (chemical, pharmaceutical, dives, pigments, paints, textiles, tannery, pesticides/insecticides, tertilizens, slaughter house,
  explosives etc.) shall store the harvested roin water in earlines storage tanks for user in the inclusing.
- vi) Injection of treated/untreated waste water into aquifer system is strictly profibiled.
- vii) industries which are likely to cause ground water politrice is a.g. Terming, Staughter Houses, Dyn. Chemical Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water politrice.
- . (B) Infrastructural User: The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- ii) In case of infrastructure projects that require develoring, proporent shall be required to carry out regular monitoring of develoring discharge rate (using a digital water flow meter) and authoritize data entire to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proporent for two years, for inspection or reporting as required by District Ground Water Management Council.
- II) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m<sup>3</sup> (day: The water from STP shall be utilized for toller flushing, car washing, gardening etc.

Data :23/02/2023

Place Barabanki

This certificate is electronically generated and does not require digital signature

#### Annexure-4

ENVIRONMENTAL CLEARANCE

> (Pro-Active and Responsive Facilitation by Interactive, Single-Window Hub, and Virtuous Environmental

PARIVESH



#### Government of India Ministry of Environment, Forest and Climate Change (Issued by the State Environment Impact Assessment Authority(SEIAA), UTTAR PRADESH)

To:

The Director

M/S SHALIMAR CORP. LTD

Titanium Block, 11th Floor, Shalimar Corporate Park, Vibhuti Khand, Lucknow, U.P. -226016

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

#### Sir/Madam.

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/UP/INFRA2/414710/2023 dated 17 Jan 2023. The particulars of the environmental clearance granted to the project are as below.

1. EC Identification No.

EC23B038UP169879

2. File No.

7847-7345

3. Project Type

Expansion

4. Category

Project/Activity including Schedule No. 5.

5(a) Building and Construction projects

6. Name of Project

Construction of Proposed Expansion of Group Housing Project Shere Shairman Mannat, at village Muhammadpur Nawabganj, Barabanki, U.P.

Name of Company/Organization

M'S SHALIMAR CORP. LTD

Location of Project

UTTAR PRADESH

9. TOR Date

N/A

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 19/12/2023

(e-signed)
Ajay Kumar Sharma
Member Secretary
SEIAA - (UTTAR PRADESH)



Note: A velid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH Please quote identification number in all future correspondence.

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#### State Level Environment Impact Assessment Authority, Uttar Pradesh

Directorate of Environment, U.P.

Virget Khand-1, Goryti Nagar, Lucknow- 229010 EMail dasapilic@pahas.com, seisoap@yahas.com Phone no-0522-2300541

Reference- MoEFCC Proposal no- SIA/UP/INFRA2/414710/2023 & SEIAA, U.P. & File no-7547-7345

Sub: Environmental Clearance for Proposed Expansion of Group Housing Project "Shere Shallmar Mannet" at Khasra No. - 52, 53, 54 A, 54 B, 55, 59, 105, 110-119, 121, 123-128, 131, 139-144, Village-Muhammadpur Nawabgani, Barabanki, U.P., M/s Shallmar Corp. Ltd.

Dear Sir.

This is with reference to your application / letter dated 14-11-2022, 24-11-2022, 17-01-2023, 23-01-2023, 03-07-2023, 30-10-2023 on above mentioned subject. The matter was considered by 806° SEAC. in meeting held on 03-11-2023 and 782" SEIAA meeting held on 11-12-2023.

A presentation was made by the project proponent along with their consultant M/s ENV DAS (India) Pvt. Ltd., Lucknow to SEAC on D3-11-2023.

#### Project Details Informed by the Project Proponent and their Consultant

The project proponent, through the documents and presentation gave following details about

- 1. The environmental dearance is sought for Expansion of Group Housing Project "Shere Shalimar Mannat" at Khasra No.- 52, 53, 54 A, 54 B, 55, 59, 105, 110-119, 121, 123-128, 131, 139-144, Village-Muhammadpur Nawabganj, Barabanki, U.P., M/s Shalimar Corp. Ltd.
- 2. The environmental clearance for the first proposal was issued by SEIAA, U.P. vide letter no. 51/Parya/5EAC /3663/2016, dated 12/12/2017 for the pict area 84,604 m1 and built up area 1,04,526.72 m respectively.
- 3. The environmental dearance for the expansion proposal was issued by SEIAA, U.P. vide letter no. 764/Parya/SEAC /5865-5724/2019, dated 09 February 2021 for the plot area 84,604 m<sup>3</sup> and built up area 1,57,012.87 m2.
- 4. The Terms of Reference for the present proposal were issued by SEIAA, U.P vide Letter No. 328/Parya/SEIAA/7345/2022, dated 13/012023. EIA report submitted by the project proponent on 17/01/2023

5. Comparative details of existing and expansion proposal-

Particulars	As per EC issued vide letter no.764/Parya/SEAC /5865-5724/2019 DATED 09 February 2021	New Proposal
Total Plot area	84,604 m <sup>2</sup>	84,604 m <sup>2</sup>
Net Land area	74,945 m <sup>2</sup>	74,945 m <sup>2</sup>
Development Area for Group Housing (including school &LIG/EWS)	71,241 m <sup>2</sup>	71,241 m <sup>2</sup>
Land Area only for Group Housing (Phase-1)	48,702.96 m <sup>2</sup>	48,702.96 m <sup>2</sup>
Net Effective Land Area (Land Area for Group Housing) (Phase-1 & Extension)	64,775.86 m <sup>3</sup>	64,775.86 m <sup>2</sup>
Primary School	2000 m*	2000 m <sup>2</sup>
Land for LIG/EWS	4,465.14 m <sup>2</sup>	4,465.14 m <sup>2</sup>

Commercial Development	3,704 m <sup>2</sup>	3,704 m <sup>2</sup>
Green Area required	9716.37 m <sup>2</sup>	9716.37 m <sup>2</sup>
Green Area achieved	9897.26 m2	9921.69 m2
Ground Coverage Permissible	21,951.44 m2	21,951.44 m2
Ground Coverage Proposed	15,621.39 m2	15,743.82 m2
Open Area	49,154.47 m2	49,032.04 m2
Area Under Roads & other services	39.257.21 m2	39,110 35 m2
Stilt Area	14.654.00 m2	15,743.82 m2
Basement Area	22.257.62 m2	28,471.83 m2
Maximum Building Height	32.85 m	32.85 m
Total Nos. of Block/ Towers	41	41
Units	1200 (2BHK&3BHK) (S+10)	1200 (2BHK+study & 3BHK) (S+10)
Permissible FAR (2.5)	1,37,196 m2	1,37,196 m2
Total FAR Area	1,11,190.7 m2	1,14,100.92 m2
Total Non-FAR Area	36,911.62 m2	44,215.65 m2
Built-up Area	1,57,012.87 m2	1,67,227.62 m2
6. Land use details:		and the same
Description	Presen	it (Sq. m)

Description	Present (Sq. m)	
Ground Coverage	15,743.82	
Green Area	9,921.69	
Paved Area	39,110.35	
Total	64,775,86	

7. Salient features of the expansion project:

Trees Required	Required (1 Tree/ 80 m <sup>2</sup> of Open Area): 514Trees Proposed: 520 Trees (Plantation has already been started after issuance of EC and is being done continuously.)
Parking facilities	Required: 1320 ECS Provided: 1331 ECS + 298 parking space for two wheelers in EWS
Power requirement& source	Power requirement: 3700KW Source: From UPPCL
Power backup (DG Sets)	Operation Phase: 3 x 500 KVA
Waterrequirement & source	Fresh water: 492 KLD (Ground water) Reuse of treated effluent from STP -246 KLD Total water requirement: 738KLD
Sewage Treatment & Disposal	Amount of waste water: 594KLD Capacity of STP: 800 KLD Technology: Phytorid
Total solid waste generated	Total Municipal waste generated: 3871 kg/day Total E-waste generated: 3.2 kg/day Horticulture waste: 37 kg/day STP Sludge: 23 kg/ day
Estimated population to step in Residents: 7200 (Including EWS) Visitors: 720 Staff: 400 (Including Commercial) School Student :200 & Staff: 50	
Project Cost	150 Cr
Rain water harvesting pits	05 nos.

8. Water & waste water details:

492 KLD Fresh Water for domestic uses

Flushing	169 KLD
Horticulture / Landscape	77 KLD
Total Water Requirement	738 KLD
Source of water - Ground water	
Waste water - 594KLD	
STP Capacity - 800 KLD	
STP Technology- Phytorid	

#### 9. Landscape plan:

Landscape area	9897.26 sqm. (15%)	
Required trees (1 tree/ 80 m2 of Open area)	614Trees	
Open area-		
Proposed:	620 Trees (Plantation has already been started after issuance of EC and is being done continuously.)	

10. The project proposal falls under category-8(b) of EIA Notification, 2006 (as amended).

Based on the recommendations of the State Level Expert Appraisal Committee Meeting (SEAC) held on 03-11-2023 the State Level Environment Impact Assessment Authority (SEIAA) in its Meeting held 11-12-2023 discussed the matter and recommended grant of environmental clearance on the proposal as above alongwith standard environmental clearance conditions prescribed by MoEF&CC, Gol and following additional conditions:

#### Additional Conditions:

- The project proponent shall submit within the next 3 months the details of solar power plant and solar electrification details within the project.
- The project proponent shall ensure to plant broad leaf trees and their maintenance. The CPCB guidelines in this regard shall be followed.
- 3. The project proponent shall submit within the next 3 months the details on quantification of year wise CER activities along with cost and other details. CER activities must not be less 2% of the project cost. The CER activities should be related to mitigation of Environmental Pollution and awareness for the same like water harvesting pits and carbon sequestration parks / designed ecosystems. At least one school in the vicinity of project area should be provided with rooftop solar plant, toilets in public place or in school of nearby villages and if there is a girl's school then girls toilet properly equipped with overhead water tank should be constructed.
- The project proponent shall submit within the next 3 months the details of estimated construction waste generated during the construction period and its management plan.
- 5. The project proponent shall submit within the next 3 months the details of segregation plan of MSW.
- 6. The project proponent shall ensure that waste water is properly treated in STP and maximum amount should be reused for gardening flushing system and washing etc. For reuse of water for irrigation sprinkler and drip irrigation system shall be installed and maintained for proper function. Part of the treated sewage, if discharged to sewer line, shall meet the prescribed standards for the discharge.
- 7. Under any circumstances untreated sewage shall not be discharged to municipal sewer line.
- The project proponent will ensure that proper dust control arrangements are made during construction and proper display board is installed at the site to inform the public the steps taken to control air pollution as per air act 1981 (as amended) and the Construction and Demolition Waste Management Rules, CAQM guidelines.
- A certificate from Forest. Department, shall be obtained that no forest land is involved and if forest land is involved the project proponent shall obtain forest clearance and permission of Central and State Government as per the provisions of Van Sanrakshan evam Samvardhan Adhiniyam,2023 and submit before the start of work.

- 10. If the proposed project is situated in notified area of ground water extraction, where creation of new wells for ground water extraction is not allowed, requirement of fresh water shall be met from alternate water sources other than ground water or legally valid source and permission from the compotent authority shall be obtained to use it.
- Provision for charging of electric vehicles as per the guidelines of Gol / GoUP should be submitted within the next 3 months.
- PP should display EC granted to them on their website. 6-monthly compliance report should be displayed on their website and to be given every six month to residents / occupants of the building.
- 13. EC is granted with the condition that EC is valid only for the building plan which has been submitted by PP for seeking EC. In case approved building plan is different from the one submitted for seeking EC then this EC will stand null and void.
- 14. Project proponent is advised to explore the possibility and getting the cement in a closed container rather through the plastic bag to prevent dust emissions at the time of loading/unloading.
- 15. Project proponent should ensure that there will be no use of "Single use of Plastic" (SUF).
- 16. In compliance to Hon'ble Supreme Court order dated 13/01/2020 in IA no. 158128/2019 and 158129/2019 in Writ petition no. 13029/1985 (MC Mehta Vs. Gol and others) anti-smog guns shall be installed to reduce dust during excavation.
- 17. The project proponent will ensure that there is no mismatch/deviation between the project proposal submitted to SEIAA for environmental clearance and maps/drawings were approved by concerned development authority. In case of any mismatch/deviation, amended environmental clearance will be obtained by project proponent. In case of failure, the granted environmental clearance shall automatically deem to be cancelled.
- 18. The proponent should provide electric vehicle charging facility as per the requirements at ground level and allocate the safe and suitable place in the premises for the same.
- 19. The project proponent should develop green belt in the housing scheme as per the plan submitted and also follow the guidelines of CPCB/Development authority for green belt as per the norms. The project proponent will prepare working plan of plantation/green belt development showing type of plant species and their spacing in consultation with subject expert/ forest department and submit to the forest department and concerned regulatory authority and ensure their survival and sustainability.
- Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.
- 21. Proponent shall provide the dual pipeline network in the project for utilization of treated water of STP for different purposes and also provide the monitoring mechanism for the same. STP treated water not to be discharged outside the premises without the permission of the concerned authority.
- 22. The project proponent will ensure full exploitation of potential of rain water harvesting for storage and recharging and also breated wastewater in order to reduce the withdrawal of fresh water and accordingly use the three sources of water supply namely stored rain water, treated wastewater and the fresh water. The project proponent shall also provide a flow measuring device along with flow integrator for monitoring the various sources of water supply namely fresh water, treated waste water and stored harvested rain water. The project proponent will submit revised water mass balance in the light of above to the directorate of Environment and the concerned regulatory authorities.
- 23. The project proponent will ensure the quality of construction water as per standards and specifications of relevant codes in order to prevent possible corrosion in concrete, reinforcements and other structural components in order to avoid adverse social and environmental impacts.
- 24. The project proponent will ensure exploitation of maximum possible potential of solar energy generation in the proposed project area and prefer to use it instead of conventional electricity in order to reduce the Green House Gas Emission causing climate change.
- 25. The project proponent will make necessary arrangement to get Structural auditing conducted by an expert institution once in 5 years during life span of the building to ensure safe life of the residents and prevent environmental and social hazards.

#### Standard Environmental Clearance Conditions prescribed by MoEF&CC:

#### 1. Statutory compliance:

- The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightning etc.
- The project proponent shall obtain forest clearance under the provisions of Forest (Conservation).
   Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- 4. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.
- The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
- A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- All other statutory degrances such as the approvals for storage of diesel from Chief Controller of Explosives, fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponeds from the respective competent authorities.
- The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

#### 2. Air quality monitoring and preservation:

- Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25) covering upwind and downwind directions during the construction period.
- 4. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- 6. Wet jet shall be provided for grinding and stone cutting.
- 7. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise mission standards.

- 10. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- 11. For indoor air quality the ventilation provisions as per National Building Code of India.
- 3. Water quality monitoring and preservation:
  - The natural drain system should be maintained for ensuring unrestricted flow of water. No
    construction shall be allowed to obstruct the natural drainage through the site, on wetland and
    water bodies. Check dams, bio-wates, landscape, and other sustainable urban drainage systems
    (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
  - Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
  - Total fresh water use shall not exceed the proposed requirement as provided in the project details.
  - The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured
    and recorded to monitor the water balance as projected by the project proponent. The record
    shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
  - 5. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the beforce water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
  - At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use
    of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as
    penylous surface.
  - Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation car washing, thermal cooling, conditioning etc. shall be done.
  - Use of water saving devices/ futures (viz. low flow flow flow flow flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
  - Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow flucets tap aerators etc) for water conservation shall be incorporated in the building plan.
  - Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
  - 11. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
  - 12. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
  - 13. All recharge should be limited to shallow aquifer.
  - No ground water shall be used during construction phase of the project.
  - 15. Any ground water dewatering should be properly managed and shall conform to the a approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
  - 16. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

- 17. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing. AC make up water and gardening. As proposed, not related water shall be disposed in to municipal drain.
- 18. No sewage or untreated effluent water would be discharged through storm water drains.
- 19. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
- Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odor problem from STP.
- Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed
  and disposed as per the Ministry of Urban Development, Centre Public Health and Environmental
  Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

#### 4. Noise monitoring and prevention:

- Ambient noise levels shall conform to residential area/commercial area/industrial area/silence
  zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000.
  Indemental pollution loads on the ambient air and noise quality shall be closely monitored
  during construction phase. Adequate measures shall be made to reduce ambient air and noise
  level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
- Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

#### 5. Energy Conservation measures:

- Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- 2. Outdoor and common area lighting shall be LED.
- Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
- Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state levely local building bye-laws requirement, whichever is higher.
- 6. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

#### Waste Management

A certificate from the competent authority handling municipal solid wastes, indicating the
existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from
project shall be obtained.

- Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approved of competent authority.
- Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
- All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs. Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amerided as on 27th August, 2003 and 25<sup>th</sup> January, 2016. Ready mixed concrete must be used in building construction.
- Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- 10. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

#### 7. Green Cover:

- No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree
  felling shall be with prior permission from the concerned regulatory authority. Old trees should
  be retained based on girth and age regulations as may be prescribed by the Forest Department.
  Plantations to be ensured species (cut) to species (planted).
- A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- 3. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:30 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- 4. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

#### 8. Transport:

- A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
  - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - b. Traffic calming measures.
  - c. Proper design of entry and exit points.
  - d. Parking norms as per local regulation.
- Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

3. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this QS Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

#### 9. Human health issues:

- 1. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- 2. For indoor air quality the ventilation provisions as per National Building Code of India.
- 3. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- 4. 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, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- 5. Occupational health surveillance of the workers shall be done on a regular basis.
- 6. A First Aid Room shall be provided in the project both during construction and operations of the project.

#### 10. Corporate Environment Responsibility.

- The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- 2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- 3. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- 4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

#### 11. Miscellaneous:

- 1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- The copies of the environmental degrance shall be submitted by the project proponents to the Heads of local bodies, Fanchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

- 3. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- 4. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- 5. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Poliution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- 6. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- 7. The project authorities must strictly achieve to the stipulations made by the State Pollution Control Board and the State Government.
- 8. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- 9. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- 10. Concealing fectual data or submission of false/febricated data may result in revocation of this environmental dearance and attract action under the provisions of Environment (Protection) Act,
- 11. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 12. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 13. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- 14. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act. 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Han'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- 15. Any appeal against this EC shall be 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.

Concealing factual data and information or submission of false/fabricated data and failure to comply with any of the conditions stipulated in the Prior Environmental Clearance attract action under the provision of Environmental (Protection) Act, 1985.

This Environmental Clearance is subject to ownership of the site by the project proponents in confirmation with approved Master Plan for Barabanki. In case of violation; it would not be effective and would automatically be stand cancelled.

The project proponent has to ensure that the proposed site in not a part of any nodevelopment zone as required/prescribed/identified under law, in case of the violation this permission shall automatically deemed to be cancelled. Also, in the event of any dispute on ownership or land use of the proposed site, this Clearance shall automatically deemed to be cancelled.

Further project proponent has to submit the regular 6 monthly compliance report regarding general & specific conditions as specified in the E.C. letter and comply the provision of EIA notification 2006 (as Amended).

These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006 including the amendments and rules made thereafter.

#### Copy, through email, for information and necessary action to -

- Additional Chief Secretary, Department of Environment, Forest and Climate Change, Government of Uttar Pradesh, Lucknow (email – psforest2015@gmail.com)
- Joint Secretary, Ministry of Environment, Forest and Climate Change, Government of India, 3rd Floor, Prithvi-Block, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003 (email – sudheer.ch@gov.in)
- Deputy Director General of Forests (C), Integ rated Regional Office, Ministry of Environment, Forest and Climate Change, Kendriya Bhawan, 5th Floor, Sector "H", Aliganj, Lucknow – 226020 (email – rocz.lko - mef@nic.in)
- 4. District Magistrate, Barabanki
- Member Secretary, Uttar Pradesh Pollution Control Board, TC-12V, Paryavaran Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow-226010 (email – ms@uppcb.com)
- 5. Copy to Web Master for uploading on PARIVESH Portal.
- 7. Copy for Guard File.

(Ajay Kumar Sharma)
Member Secretary, SEIAA

Signature Not Verified
Digitally signed by Alex Kumer Shame
Designation: Member Secretary
Date and Time: 1275/2023 7:25 27 PM

# Annexure-5 Solar Plant





Shere's Shalimar Mannat – 15 KVA Solar Plant Installed on Tower-E Rooftop

#### Annexure-6

#### **Structure stability Certificate**





Prof.K.K.Pathak, FIE

Email: kkpathak.clv@iitbhu.ac.in

## Department of Civil Engineering

Ref: IT(BHU)/CE/KrKP/23-24/Shalimar/Mannat/02

Date: 20/01/2024

To, M/s Shalimar Corp Ltd. 11th Floor, Titanium, Shalimar Corporate Park, Vibhuti Khand, Gonsti Nagar, Lucknoss

Subject: Vetting of Structure Design and Drawings of Existing Block K and L of Group Housing "Shere's Shalimar Mannat at Khasra No.52, 53, 54A, 54B, 55, 59, 105, 110-119, 121, 123-128, 131 & 139-144, Village Mohimmadpur Chanki, Tehshil Nawahgani, District Barabanki. ILP: by M/s Shahmar Corp Ltd.

Dear Sir,

In response to your letter number Mannat/HT/2024/76, dated 27.03,2024 vetting of Structure Design and Drawings of Existing Block K and L of Group Housing 'Shere's Shalimar Mannat at Khasra Nn.52, 53, 54A, 54B, 55, 59, 105, 110-119, 121, 123-128, 131 & 139-144, Village-Mohmmadgur Chauki, Tebshil Nawabgani, District Barabanki, U.P. by M/s Shalimar Corp Ltd has been carried out as per following area details:

	Block No.	No of Floors	F.A.R. (Sqm.)	Sub Structure Area (Basement) - A	Super Structure Area - B	Total (A+B) in Sqm.
ī	860ck – K & L	B + Stilt + 10	30,119	9,887	33,553	43,440

The design and drawing of these building towers are found to comply with the relevant IS codal norms of IS:45-2000, IS:806-2007, IS:875 (Part 3)-2015, IS:13920-2016 etc. and found to besatisfactory. The vetted drawing are being sent to you for future necessary action at your end.

With Thanks and Regards

min R. K. PATHAK Discontinuity of GOOD Enquisioning Include Leadington of Technology Include Michigan Life Commissioning Commission Life Commission Li



## इंस्टीट्यूट ऑफ इंजीनियरिंग एण्ड टेक्नोलाजी INSTITUTE OF ENGINEERING AND TECHNOLOGY

सीतापुर रोड, लखनक - 226 021 (७.४.) भारत Sitapur Road, Lucknow- 226 021 (U.P.) India

Phone: 491 94150 59074 / Email: drkhan1961@gmail.com

IET/CE/MZK-C&T/Q023-5399

Dated: 04-21-2025

Mis Stallmar Corp Ltd. 11th Floor, Shalimar Corporate Park Vibbati Khand, Genti Nagar, Ludorew - 226 910.

Ref. Your letter No. Missaud IET 7/2023/64 dated 01.11.2023

Door Sir.

This has reference to your above letter whereby consultancy for Vesting of structural design for submission for construction of 2/8+G+23+Sarvice floor i.e. total of 27 storey Group Bearing at Rhines No. 52, 53, 54A, 54B, 55, 59, 105, 110-118, 121, 123-128, 131, 130-144, Stationar Mannat (Slock M & NE Village, Mohanimaliyat Cheviki, District Bambooki by Shalimar Cusy Ltd. for which drawings were presented. The submission drawings are checked and some being verting subject to soliowing:

A total of Tweety Three (23) drawings for construction of above referred building are presented for verting. There
are two Towers each in M. & N Tower Block. B+S=10 Storey i.e. total of 12 storey.

 The structural design has been carried out by Mrs TPC Technical Projects Consultant Pvt. Ltd. NOIDA.
 As per Soil Test report presented along with drawings, value of 15.08 T/m² is recommended below NGL has been. adopted in the foundation design.

4. The design loads have been adopted in accordance to referent part 1, II, III and V of IS-875. Hence satisfactory

The site is fulling under Science Zone-III, for which seismic factor 0.16 is adopted in the design, hence satisfactory.

6. The sectional details of space dimensions are assumed to be as per architectural requirements and client needs and on such are considered in the structural design.

Design has been carried out as per provisions of 15:456-2000, 15:13920-2016 and 15:1893-2016, hence satisfactory.

8. For Columns the concrete grade as per details mentioned under schedule has been adopted while Concrete grade of Miss is adopted for all other structural members. Hence satisfactory.

9. It is advised to use design concede mix to determine ingredients of grades of concrete to be used as mentioned above and get the majorial test report of all the constructional material prior to their use.

10. Before capting of each structural member, verification to office of proper laying and placing of reinforcement must be varified cartifled by the competent authority and kept as record.

11. All essential and necessary clearances from appropriate authorities must be obtained before construction.
12. All requisite NOC's including Pre-construction NOC from 1.P Fire Services should be obtained before starting construction.

13. The submission drawings are being vetted as per design data in accordance to 35 code, any deviation, variation, amoutmont, shift from IS code provisions during actual construction, knowingly or unknowingly shall render this vetting report redundant and non-responsive on our part. However, if any amendment/variation/ deviation, etc. is needed, the same shall be brought to notice of Structural designer to that appropriate suggestions could be made: based on revised design.

With above community, suggestion and recommendations for amendments design in found Safe and as such vetted.

Enclosure: Twenty Three (23) Nov. Derwings as muriloned above.

(Prof. M. Z. Khan) Professor & Principal Investigator, Civil Engg Department



# DEPARTMENT OF CIVIL ENGINEERING INSTITUTE OF ENGINEERING & TECHNOLOGY

An Autonomous Constituent Institute of Dr. API Abdul Kalam Technical University, Utter Pradesh SUTAPUR ROAD, LUCKNOW (U.P.), INDIA PIN-226021 Phone: +91 522 2361692 Fax: +91 522 2361631

Ref.: IET/CE/NBS/SPS/2016-202

Dated: 07.09.2016

To:

Shalimar Corp Limited, 11th Floor, Shalimar Titanium, Shalimar Corporate Park, Vibhuti Khand, Gomti Nagar, Lucknow-226010

Subject: Vetting of structural drawings of Group Flousing Project of Shalimar Mannat Khasta No. 52 to 55, 59, 105, 110 to 119, 121, 123 to 128, 131, 139 to 144 vill- Mohammadpur Chouki Barabanki.

Dear Sir.

Kindly refer your letter no. Nil dated 31-08-2016 on the consultancy of subject cited above. In this context, it is to inform you that the submitted structural drawings of Group Housing Project of Shalimar Mannat Khasra No. 52 to 55, 59, 105, 110 to 119, 121, 123-to 128, 131, 139 to 144 vill- Mohammadpur Chouki Barabanki have been checked in accordance to 15 codes. Structural drawings are herewith enclosed for further necessary action at your end.

Thanking.you,

(Dr. S. P. Shu

Professor

Yours Sincerely

(Dr. N. B. Singh)

Professor

#### **Annexure-7**

#### Fire NOC

8/5/202

FIRE BERVIOR LUTIVIR PRACESM

## प्रारूप-छ (संलग्नक-6) अग्नि सुरक्षा प्रमाणपत्र (पूर्णता (कम्प्लीशन) अनापत्ति प्रमाणपत्र)

युआईडी संख्या: UPFS/2020/21015/BRB/BARABANKI/214/CFO वित्राव्य: 30-07-2020

मेर्नेत लिये जाने का दिनांक : 05-08-2020 जाने : BARABANKI

क्डॉक/शवर	प्रत्येक ब्लाक में लतों की संख्या	वेसमेन्द्र की संख्या	- के साई
	- 2	1	22,26 mt.
0	7	PART OF THE PART O	22.76 mt.
C	7	1	22.76 avt.
ATOMIC PROPERTY.	9	1	29.10 mt.

है। स्थान का अरंतमात देवार SHERE SHALIMAR MANNAT प्रता किया का एत है। इनके हार स्थान में अपि निवास देव अपि दुस्स स्थान स्थान करायी वर्षा स्थानमा करायी के अरंति है। इनके हार स्थान करायी वर्षा स्थानमा करायी के अरंति है। इनके स्थानमा अरंगिया करायी के अरंगिया करायी के अरंति है। इनके स्थानमा अरंगिया करायी के अरंगिया करायी के अरंगिया करायी करायी करायी के अरंगिया करायी के अरंगिया करायी के अरंगिया करायी करायी करायी करायी के अरंगिया करायी करायी

The property and the supplication of the state of the first action in a contract of the supplication of the property (Perfect affairs).

(मुख्य अग्निशमन अधिकारी)



(RA) PRAKASH RAI)

[3/9100009Ck7469905400278068849496969080875]

12/01/2019

# प्रारूप-छ (संलग्नक-6)

## अप्नि एवं जीवन सुरक्षा प्रमाण पत्र (Fire & Life Safety Certificate)

युआईडी संख्या: UPFS/2019/14348/BRB/BARABANKI/147/CFO

दिनक: 07-12-2019

पुरमाणित किया जाता है कि मैसर्स SHALIMAR CORP LTD (भवन/प्रतिद्वान का नाग)पत 52, 53, 54, 55, 59, 105 ETC,VILL-MOHAMMADPUR CHAUKI, FAIZABAD ROAD,BARABANKI तसरील - NAWABGANI जिसमें

व्लॉक/टावर	ततों की संख्या	बेसमेन्ट की संख्या	ऊँचाई
D	7	1	22.76 mt.
E	7	1	22.76 mt,
F	7	1	22.76 mt.
G	7	1	22.76 mt.
Ĥ	7	1	22.76 mt.

त्या पतट एरिया 74945.00 sq.mt है। भाग का अधिभीग SHALIMAR CORP LTD (भाग स्वामी/ अधिभीगी अपवा वामनी का नम्म) द्वारा किया था रहा है। इनके द्वारा अवश में अब्रि निवास एवं अब्रि सुरहा व्यवस्थी राज्यिति एवं ग्रांसकी भारतीय मानक व्यूती के अईवएसव के अनुसार मानक में स्थापित व्यवस्थाओं का अनुसाय किया तथा है। जिसका निरीक्षण मुख्य अब्रियामन अधिकारी द्वारा विनीक 10-12-2019 को भाग स्वामी के प्रतिनिधि अ R. N. SHUKLA AND SHABBAAZ SIDDIQUE के साथ किया गया तथा भाग में अधिकारीय अब्रि एवं जीवन सुरक्षा अवस्थाओं को मानकों के अनुसार व्यवस्थिति में पाया गया। जल प्रशास कान को अब्रि एवं जीवन सुरक्षा प्रमाण पत्र (Fire & Life Safety Centificate) (एनवबीवसीव की अधिभीग अधी) Residential के अनुमार के साथ दिया पर रहा है कि भाग में सभी मानकों का अनुमारन किया आधीग तथा भाग के इस प्रमाण पत्र का नवीनीकरण निर्धारित समध्यवि के अनुमारन कार्यस्थाओं को कियारील रखने की जिम्मेवारी अध्यापित अब्रियमन व्यवस्थाओं को कियारील रखने की जिम्मेवारी आधी।

"यह प्रमाण-पत्र आपके द्वारा प्रस्तुत अभिलेखों , सूचनाओं के आधार पर निर्यंत किया जा रहा है | इनके असत्य पाए जाने पर निर्यंत प्रमाण-पत्र माना नहीं होगा |"

निर्गत किये अमें का दिनका 11-12-2019

स्पान: BARABANKI

हसाक्षर-निर्गमन अधिकारी-(मुख्य अग्रिजमन अधिकारी)



Digitally Signed By

(RAJ PRAKASH RAI)

[7F51008C89CA74689E64057785676A9496866EF5]

11-12-2019

#### Annexure-8

#### **CTE Certificate**



#### UTTAR PRADESH POLLUTION CONTROL BOARD

Building, No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0822-2720828,2720831, Fax:0822-2720764, Email: info@uppcb.com, Website: www.uppcb.com

Dated:- 21/01/2024

#### Validity Period:12/01/2024 To 11/01/2027

Ref No. -197042/UPPCB/Lucknow(UPPCBRO)/CTE/BARABANKI/2023

To .

Shri SHEO JANAM CHAUDHARI

M/s Shahmar Corp Limited Mannat

Khasta No. 52, 53, 54A, 54B, 55, 59, 105, 110-119, 121, 123-128, 131, 139-144 Village

Mohimmidpur Chowki, Ayodhya Road, Barabanki, U.P., BARABANKI 225003

BARABANKI

Sub: Consent to Establish for New Unit/Expansion/Diversification under the provisions of Water (Prevention and control of pollution) Act, 1974 as amended and Air (Prevention and control of Polution) Act, 1981 as amended.

Please refer to your Application Form No. - 23605184 dated - 24/11/2023. After examining the application with respect to pollution angle, Consent to Establish (CTE) is granted subject to the compliance of following conditions:

- Consent to Establish is being issued for following specific details:
  - A- Site along with geo-coordinates:
  - B- Main Raw Material :

Main Raw Material Details		
Name of Raw Material	Raw Material Unit Name	Raw Material Quantity
Cement, Sand, Aggregate, Concerete	Metric Tonnes/Day	0

#### C- Product with capacity:

Product Detai	1	
Name of Product	Product Quantity	
Shalimar Mannat (167227.62 Sqm. Builtup)	0	

#### D- By-Product if any with capacity :

	By Produ	ct Detail	
Name of By Product	Unit Name	Licence Product Capacity	Install Product Capacity
Cement, Sand, Aggregate, Concerete	Metric Tonnes/Day	0	0

### Water Requirement (in KLD) and its Source :

	Source of Water Details	477
Source Type	Name of Source	Quantity (KL/D)
Ground Water (within premises)	Borewell	492.0

3. Quantity of effluent (ln KLD) :

Effluent	Details
Source Consumption	Quantity (KL/D)
Domestic	492.0

Fuel used in the equipment/machinery Name and Quantity (per day):

	Fuel Consumption Details	
Fuel	Consumption(tpd/kld)	Use
Diesel	0	Diesel Generator

- 5 IIIIFor any change in above mentioned parameters, it will be mandatory to obtain Consent to Establish again. No further expansion or modification in the plant shall be carried out without prior approval of U.P. Pollution Control Board.
  - IllFor any change in above mentioned parameters, it will be mandatory to obtain Consent to Establish again. No further expansion or modification in the plant shall be carried out without prior approval of U.P. Pollution Control Board.
- You are directed to furnish the progress of Establishment of plant and machinery, green belt, Effluent Treatment Plant and Air pollution control devices, by 10th day of completion of subsequent quarter in the Board.
- Copy of the work order/purchase order, regarding instruction and supply of proposed Effluent Treatment Plant/Sewerage Treatment Plant/Air Pollution control System shall be submitted by the industry till 11/01/2027 to the Board.
- Industry will not start its operation, unless CTO is obtained under water (Prevention and control of Pollution) Act, 1974 and Air (Prevention and control of Pollution) Act, 1981 from the Board.
- It is mandatory to submit Air and Water consent Application, complete in all respect, four months before start of operation, to the U.P. Pollution Control Board.
- Legal action under water (Prevention and control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 may be initiated against the industry With out any prior information, in case of non-compliance of above conditions.

#### Specific Conditions:

- This Consent to Establish (CTE) is being granted to M/s Shahmar Corp Limited Mannat for expansion the project of Buildup area 1,04,526.72 sqm to 1,67,227.62 sqm at Khsra no. 52, 53, 54A, 54B, 55, 59, 105, 110-119, 121, 123-128, 131, 139-144, Village Molumnadpur Chowki, Ayodhya Road, Barabanki.
- The Project Proponent shall ensure to provide the proper exhaust from roof level along with acoustic enclosures on DG as per prescribed standards.
- The PP shall ensure to compliance of all conditions mentioned in the Environmental Clearance (EC) vide letter no. letter no. EC23B638UP169879 File no.-7547-7345 dated 19.12.2023
- 4. The PP shall operate and maintained the STP of capacity 800 KLD (02 nos. 2X400 KLD) for treatment of domestic sewage and treated effluent shall be used for irrigation in green belt, cooling of DG sets of the premises as per the norms specified in Environment (Protection) Act, 1986.
- The PTZ web cameras shall be installed on STP outlet. Online continuous monitoring system shall be installed for monitoring of treated water and provide the URL ID and password to the Board.
- 6. The PP shall ensure to establish Miyawaki forest, as per the GO no. 1011/81-7-2021-09(rit)/2016 dated 13.10.2021 of Deptt. of Environment, forest and Climate Change.
- The Order issued by Hon'ble Courts/Hon'ble NGT, MoEF & CC, Central Pollution Control Board, U.P. Pollution Control Board shall be complied with.
- 8. Project shall obtain CTO (Air and Water) from the Board, before operation of the project.
- The PP shall obtain NOC from UP Ground Water Department for abstraction of ground water within 03 months and submit in the Board.
- 10. The dust emission from the construction sites shall be completely controlled and all precautions will be taken in that behalf.
- 11. [All approach roads & in campus roads should be sprinkled with water to suppress the dust emission.
- 12. The PP shall ensure to install Organic Waste Convertor for bio degradable waste in its premises before completion of project.
- 13. The project shall ensure to put tarpaulin scaffolding around the area of construction and the building for effective and efficient control of dust emission generated during construction of the project.
- 14. Estorage of any construction material particularly sand shall not be done on any space outside the project area.
- 15. The project shall comply with the provisions of Construction and Demolition Waste Management Rules, 2016.
- 16. The construction material of any kind stored on site shall be fully covered in all respect so that it does not disperse in the air in any form. The dust emission from the construction sites shall be completely controlled and all precautions will be taken in that behalf.
- 17. EAll the construction material & debris shall be carried in trucks or vehicles which are fully covered and protected so as to ensure that the construction debris or construction material does not get dispersed into the air or atmosphere in any form whatsoever.
- 18 The project shall ensure to provide the proper Wind breaking wall constructed around the construction site.
- 19. In case of installation of hotmix/ready mix plant, the prior permission shall be obtained from the Board.
- 20. Trixing of sprinklers and creation of green air barriers shall be done to control fugitive dust

emission and improve environment. Compulsory use of wet jet in grinding and stone cutting shall be practiced.

- 21. The project shall comply with the provisions of Environment (Protection) Act 1986, Water (Prevention and Control of Pollution) Act, 1974 as amended, Air (Prevention and Control of Pollution) Act, 1981 as amended, Plastic Waste Management Rules 2016, E- Waste (Management) Rules 2016, Solid Waste Management Rules 2016 & Hazardous and other Waste (Management and Transboundary Movement) Rules 2016 (Whichever is applicable).
- 22. The Project proponent shall ensure to submit a bank guarantee of Rs. 5.0 lakhs in the board within 15 days issuance of this certificate for compliance of the above conditions no 1 to 21.

Establish will be revoked, in case of, non compliance of any of the above mentioned conditions. Board reserves its right for amendment or cancellation of any of the conditions specified above. Industry is directed to submit its first compliance report regarding above mentioned specific and general conditions till 21/02/2024 in this office. Ensure to submit the regular compliance report otherwise this Consent to Establish will be revoked.

RAM bigitally signed by RAM KARAN Date: 2024.01.21 18:05-46-05-30 Chief Environmental Officer, Circle-5, UPPCB.

Dated: - 21/01/2024

Copy To -

Regional Officer, UPPCB, Lucknow.

RAM Digitally signed by RAM KARAN Date: 2024.01.21 18:06:06 +05'30'

Chief Environmental Officer, Circle-5, UPPCB.



## मिशन LiFE - पर्यावरण के लिए जीवन शैली





- स्वच्छता देशसेवा में अपने परिवेश की स्वच्छता हेतु अपना सक्रिय योगदान सुनिश्चित करें
- संकल्प लें -एकल उपयोग प्लास्टिक उत्पाद जैसे कप, तश्तरी, चम्मच, स्ट्रॉ, ईयरबड्स आदि का उपयोग न हो एवं पर्यावरण अनुकुल विकल्पों जैसे कागज/पत्तों से बने दोने या कटलरी को प्राथमिकता दी जाय |
- एकल उपयोग प्लास्टिक उत्पाद के प्रयोग को रोकने एवं प्लास्टिक बैग के बजाय कपड़े के थैले का उपयोग करने मात्र से 375 मिलियन टन ठोस (प्लास्टिक) कचरे का उत्सर्जन बचाया जा सकता है
- चक्रीय अर्थव्यवस्था (सर्कुलर इकोनॉमी) का समुचित कार्यान्वयन वर्ष 2030 तक लगभग 14 लाख करोड़ रुपये की अतिरिक्त बचत उत्पन्न कर सकता है | वेस्ट /अपशिष्ट फेकने के पूर्व सोचें, ये किसी का संसाधन तो नहीं ...?
- अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को कचरे में फेकने से रुकें | इसके उपयुक्त निस्तारण हेतु इसे प्राधिकृत ई वेस्ट रीसाइकलर को दें | प्राधिकृत ई-रीसाइक्लिंग इकाई में अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को देने मात्र से 0.75 मिलियन टन तक ई-कचरे का पुनर्चक्रण किया जा सकता है एवं ई-कचरे के विषम पर्यावरणीय दुष्प्रभाव से बचा जा सकता है
- बाहर जाते समय सोचें कि क्या आपको वास्तव में परिवहन की आवश्यकता है वह भी क्या व्यक्तिगत रूप से ? छोटी दूरी के लिए पैदल चलना पसंद करें, अथवा सम्भव हो तो कार पूल के रूप में संसाधन को साझा करें अथवा सार्वजनिक परिवहन पर विचार करें
- घरेलू स्तर पर कम से कम ठोस अपशिष्ट का उत्सर्जन करें और इनका प्र्थाक्कीकरण करें
- उपयोगी शेष खाद्य सामग्री आपके स्वयं प्रयास अथवा निकटस्थ सक्रिय स्वयं सेवी संस्थाओं की सहायता से समाज के वंचित वर्ग तक पहुंचाई जा सकती है | वहीं अनुपयोगी भोजन /खाद्य सामग्री को कंपोस्ट (वर्मी कम्पोस्ट) करने से 15 अरब टन भोजन को नष्ट होने से बचाया जा सकता है
- ध्यान रखें उपयुक्त नल और शावर के उपयोग से पानी की खपत को 30 40% तक कम किया जा सकता है। एवं उपयोग में न होने पर नलों को बंद रखने मात्र से 9 ट्रिलियन लीटर पानी बचाया जा सकता है
- ट्रैफिक लाइट/रेलवे क्रॉसिंग पर कार/स्कूटर के इंजन बंद करने मात्र से 22.5 बिलियन kWh तक ऊर्जा की बचत हो सकती है
- परम्परागत बल्ब के स्थान पर CFL का उपयोग बिजली की खपत में प्रभावी कमी लाते हैं | उपयोग में न होने पर बिजली उपकरणों को बंद करें | स्टार रेटेड विद्युत उपकरणों के उपयोग को प्राथमिकता दें

हमारे द्वारा अपनी जीवन शैली की प्राथमिकताओं का उचित और पर्यावरण अनुकूल पुनर्निर्धारण समाज और पर्यावरण के प्रति हमारा दायित्व है |

#### Electric load certificate



## विद्युत सुरक्षा निदेशालय कार्यालय, उपनिदेशक , वियुत्त सुरक्षा, उत्तर प्रदेश शासन

लग्रनङ रीजन, लग्रनङ

संबदा: 20VSNOC03018290 शिवस्त/मध्यम विमय/एवएछैठ/विसेश्ना. 2019-20

TOTAL 30/05/2015

र्सपानी:

सर्वर्धे Shakmar Mannat Township

Shalmar Wannet Township , Shalmar grop Limited Mahmudour Churki, Safedabaad

विषय - विपृत्तिय अधिकायमाँ का निरीक्ता/परीकाना/

प्रसंग :- आप का आवेदन पन संख्या VS1951171 दिलीक 30/09/2019

पिय महोदय,

कुम्म निक्रतांकित विद्युतीय अधिक्रमत का निरीक्षण/वरीत्या अधीतस्ताक्षरी हाता दिलांक १७७०४७४०१० को करते वर उत्त विद्वीय अधिक्रपत चितुत सुरक्षा की दृष्टि से शब्दाने दुर्सायदृष्टिये अधीरते (१०००) रिसरेत दू नेपनी एक दुर्धायदक स्वाहं) रेगुनेशन 2010 के सुरक्षत विभिन्नमा का पाठन क्ष्माद्र प्रभावन लेका लियाच्या में किया भी परिवर्तन की दशा में 5स कार्यालय कर अवगत क्याते हुन्दे पुनः निर्माण्य करावा लोगे।

कार पांच	उपलब्ध	45	60555	विनदस	संदिशन सम्बद
1	Transfermer	KRYPS POWER COMPONENT LTD	5000 KWA	35000 V	01/1553
2	Transference	DANISH PVT LTD	200 1044	11000 V	[16044007

दिव्हीय मोड के अधिक्षपन का विवरण क्रिकिशोपाट।

रियाणी :

इन 05 MVA ट्रांसणानंत है संबंधित vob एवम पैन्येतिए का उनमें होते हुए पाया गया तथा की दिए वर बच्चे अपूर्ण है आग उप्जीकरण से पहले उस कार्य को पूर्ण करा शिया आए माधीय

संख्याः 20VSNOC03018230वि0स्0/अध्यक्त विकार/एच०री०/निरीक्षणः 2019-20,वर्गटनांकः।

उपनित की प्रति तिथि जिल्लानियित को शुक्रमार्थ एवं अग्रवका सर्ववाही हेनु ग्रीयतः-

अधिगासी अभियन्ता, विद्युतियतरण खण्डा, बायचंकी।

मग्रयक निर्देशक, विद्वासुरक्षा, उ०४० शक्त नद्धतप्र जीत |

संयुक्त निदेशक, वियुत्तसुरक्षा, उ००० श्रासत, संख्यतक । <sup>\*</sup>

SHATRUGHNA, SINGH

उपनिदेशक . नियम भूरका, उठवव शासन,

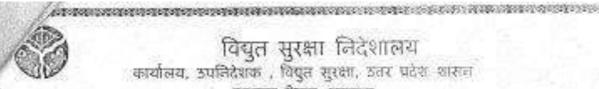
सकतङ

SHATRUCHNA SINGH

उपादिशक . विक्षा सुरक्षा. उठपण शासन्

यह दमान वह e- प्रमाने हार जारि किया नमा है। प्राण सत्यापन हेनु http://widyukurakeba.org/Frm\_NDC\_Verification.osgx? Process-CH पर शत्यापित करें।

Note: This NCC is valid upto 3 years only.



# विद्युत सुरक्षा निदेशालय

### कार्यालय, उपनिदेशक , वियुत सुरक्षा, उत्तर प्रदेश शासन लखनक रीजन, लखनक

aism zovanocomisse Norgo/सम्बद्ध विसद/एकटो०/निर्माण, २०१९-२०

संवाह

सर्वेश Shalimar Mancat Township

Shalmar Mannet Township , Shalmar crip Limites Mahmudoor Chowid Saladabaad

भिषय - रियुमीय अधिहाकते का प्रितेशसम्परीकरते।

प्रशंग :- आप वर आवेदल पत्र संख्या VS1951170 दिलीक 29/09/2019

शिय महोदय,

क्षाण जिम्मांकित विद्युतीय अधिक्षपन का निर्मिष्ण/प्रेरीशम अपनिर्माधनी दान दिनांच ३०/०५/३०१५ की वन्हें पर उक्त प्रयुक्तिय आविष्ठायन विवृत्त सुरक्षा की दृष्टि से सन्देति इत्ते प्रतिदेश अधीरते (गांवर्त विसरेड दू सनते एक इसिव्यूक एपसप्र) देनुनेदन 2010 के सुननत विजित्यनी कर पास्त्र, करवी हुन, पांत्र तैया। अस्टिब्यून में विना में परिवर्तन की वसा ने इस कार्यालय को अधनत कराते हुई पुनः विरोधानी कराये करा।

MO 40	इसलाग	संदर्भ	63157	पोरटवा	effean max
1000	Geneat	Supernova	150 KVA	450 V	\$04(2000019818) (0.4)

विश्तीय जोड के अधिक्षपट का निवरची है जिल्हेबाट।

परिसर में समें genset का रोक supernova है एसी. सन्टरनेटर वर रोक Jeroy somer है (संकार/GS)Co1503672).

संक्याः २०४५NOCurpres आविष्रस्क/ मध्यमः विभव/पेष्यदिशक्षामः, २०१९-२० तरिनांकः

प्रजात का पति निर्देश दिम्लामधित को सुचलर्च एवं आयायक वर्षनीय हैत प्रवेत

अधिशासी अमिबन्ता, विश्वतिपतरण खण्डा, यतावंकी[

agus fatas, Rapagea, sono area anas ata (

संदक्त निर्देशक, विद्युतसुरक्षा, ५००० श्रासन, जन्मनङ ।

SHATRUGHNA SINGH

उपनिदेशक .

चित्रत सुरक्षा, उठवा महरात,

सम्बद्धाः

मक्रीम.

SHATRUGHNA SINGH

उद्यानिदेशचा ,

विप्रा सुस्त्र, ५००० शक्ता.

TE THIP OF A PAINT ON A SET OF THE PAIN AND BY AND A PAINT BY THE PAINT BY THE PAINT OF THE PAINT AND A PAINT OF THE PAINT Process=CH पर राज्यापित करे।

Note: This NOC is valid upto 3 years only.

#### Ambient air test report



# SAWEN PROJECTS & LABORATORIES PVT. LTD.

Regd. Off: 409-A, Sahara Shopping Centre, Ayodhya Road, Lucknow - 226016 (U.P.) Contact: 0522 - 4574575, 2341312, 4235437 Mobile: 7379444471 - 72 - 73, 7007012249 Website: www.sawenconsultancyservices.com E-mail: spipi tko@gmail.com, E-mail: dr.rajesh\_singh@yahoo co in, consultancy\_sawens@yahoo co in, consultancy.sawens@gmail.com CIN No.: U24233UP2009PTC037307 ISO 9001 : 2008 OHSAS 18001:2007 Certified

#### TEST REPORT Ambient Air Quality Analysis

Sample Code: AQ-SPLPL-2400A

Sample Description: Ambient Air

Monitoring Location: 3m from Project Site Date of Monitoring: 03.12.2024-04.12.2024 Date of Analysis: 04.12.2024-17.12.2024

Average Flow Rate of Manometer (m3/min): 1.1 Average Flow Rate of Rotameter (Ipm): 0.5

Land Use at Location: Residential

Report No.: SPLPL/AQ/TR/2400A/24

Issue Date: 18.12.2024

Monitoring done by: Mr. Abhishek

Sampling Plan & Procedure: SPLPL-SOP-AQ-34

Sampling Time: 24 hrs.

Ambient Temperature (°C): 21

Weather Conditions: clear sky

Remarks (if any): none

ne and Address: M/s Shalimar Mannat, Nawabgani, Barabanki, U.P.

S.NO.	PARAMETER TESTED	TEST PROTOCOL	UNIT	RESULT	NATIONAL AMBIENT AIR QUALITY STANDARDS (VIDE CPCB NOTIFICATION FOR G.S.R. 826 (E) DATED 16.11.2009)
	DM (40)	IS: 5182 Part 23	μg/m <sup>3</sup>	97.7	100
2.	PM (10) PM (2.5)	SOP-AAQ-21B	μg/m³	42.4	60
Z.	PM (2.5)		13,770	6.12	80
3.	SO <sub>2</sub>	IS: 5182 Part II	μg/m³	- AND STREET	80
4.	NOx	IS: 5182 Part VI	μg/m³	24.8	*End of Report*

Note:

- This report relates to the tested sample only for various parameters, as observed at the time of sampling. It should not be reproduced wholly or in part without the prior written permission of the Laboratory.
- The test samples shall be destroyed after two weeks from the date of issue of test report, unless otherwise specified.
- Responsibility of laboratory is limited to the invoiced amount only.

For Sawen Projects & Laboratories Pvt. Ltd.

tyendra Singh) **Authorized Signatory** 

Total Environment Services

. MONITORING & TESTING . WATER . EFFLUENT . AIR . STACK/FUGITIVE EMISSION . SOIL . NOISE. FOOD & NUTRITION GEO TECHNICAL INVESTIGATION . R&D . PHARMACEUTICALS. COSMETIC. MOBILE SOIL/WATER/FERTILIZER TESTING KIT Securing Environmental Clearances From MOEF/SEIAA • Securing NOC from SPCB • EIA • ESIA/SIA • ESG • EMP • DMP • Env/Energy Audi DPR • Feasibility Reports • Water & Effluent Management Studies • E Waste Management • Municipal Solid Waste Management • Hazardous Waste nagement • Bio Medical Waste Management • RR Survey/Poverty & Social Impact Assessment Report • Rock Engineering Report • Risk Assessment Disaster Management Plan • Pollution Control Systems (Turnkey Basis) • ETP's • WTP's • STP's • FSTP's • APCS • R.O. Systems • Rain Water Harvestin

#### DG set emission test report



# SAWEN PROJECTS & LABORATORIES PVT. LTD.

Regd. Off: 409-A, Sahara Shopping Centre, Ayodhya Road, Lucknow - 226016 (U.P.) Contact: 0522 - 4574575, 2341312, 4235437 Mobile: 7379444471 - 72 - 73, 7007012249 Website: www.sawenconsultancyservices.com E-mail: splpl.lko@gmail.com, E-mail: dr.rajesh\_singh@yahoo.co.su-dr.faidianty\_anyens@yahoo.co.in, consultancy.sawens@gmail.com Report No.: SPLPL/EQ/TR/205A/24

CIN No.: U24233UP2009PTC037307 ISO 9001 : 2008 OHSAS 18001:2007 Certified the Code: EQ-SPLPL-205A

Sample Description: Stack Emission

Stack Attached To: DG Set-1, at K Block Ambient Air Temperature (°C): 21°C Monitoring Location: 4m from K Block

Date of Monitoring: 04.12.2024 Date of Analysis: 04.12.2024-17.12.2024

Stack Height (from GL): 4.8 meters

Distance of Platform (from GL): 4.6 meters

MOC of Stack: MS

Land Use at Location: Residential Stack Temperature (°C): 67 °C

Stack Top: Circular

Issue Date: 18.12.2024

Sampling done by: Mr. Abhishek Verma

DG Set Capacity:250 KVA

Type of Fuel: High Speed Diesel Consumption of Fuel: 17 Ltrs/ Hr.

Sampling Plan & Procedure: SOP-SQ-20

Stack Diameter: 4.5 inch

Sampling Period: 31 min

Weather Conditions: Clear sky

Atmospheric Pressure:740 mm of Mercury

Flue Gas Exit Velocity (m/sec): 8/43

Flue Gas Discharge (Nm<sup>1</sup>/hr.): 235.67 Flow Rate (Ipm): 31.17 Total Volume of Air Sample (cum): 666.25

APCS (If any): Yes

Name & Address of Client: M/s Shallmar Mannat, Nawabganj, Barabanki, U.P.

S.NO.	PARAMETER TESTED	TEST PROTOCOL	UNIT	VIDE CPCB NOTIFICATION FOR DG SETS GSR 771(E) dt 11.12.2013	RESULT AFTER CONVERSION TO CPCE STANDARD UNITS
1.	Particulate Matter (PM)	IS: 11255 (Part 1)- 1985; Reaff 2019	mg/N cu.m	\$0,2 g/ Kw-hr	0.06 g/ Kw-hr
2.	SO <sub>2</sub>	IS: 11255 (Part 2)- 1985; Reaff 2019	g/cum	144,5 g/hr (0.5% by mass)	80.64 g/hr.
3.	NO <sub>4</sub>	IS: 11255 (Part 7)- 2005; Reaff 2017	mg/N cu.m	s4.0 g/ Kw-hr (NOx+ *HC)	0.22 g/ Kw-hr
4	co	IS: 13270 :1992(Realf 2009)	56	s3.5 g/ Kw-hr	E2
5	CO <sub>2</sub>	IS: 13270:1992[Reaff 2009]	56		22
6	O <sub>2</sub>	IS: 13270:1992(Reaff 2009)	96		

- This report relates to the tested sample only for various parameters, as observed at the time of sampling. It should not be reproduced wholly or in part without the prior written permission of the Laboratory.

  The test samples shall be destroyed after two weeks from the date of issue of test report, unless otherwise
- specified. Responsibility of laboratory is limited to the invoiced amount only.

For Sawen Projects & Lab

## Total Environment Services

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#### **Ground water test**



# SAWEN PROJECTS & LABORATORIES PVT. LTD.

Regd. Off: 409-A, Sahara Shopping Centre, Ayodhya Road, Lucknow - 220010 (U.P.) Contact: 0522 - 4574575, 2341312, 4235437 Mobile: 7379444471 - 72 - 73, 7007012249 Website: www.sawenconsultancyservices.com E-mail: splpt lke@gmail.com.
E-mail: dr.rajesh\_singh@yahoo.co.iv. gpsawkacey\_sawene@gmail.com
iso 9001: 2008 OHSAS 18001:2007 Certifled.com Date: IR12.2024 CIN No.: U24233UP2009PTC037307

Sample collected on: 84 12 2024 Sample received on: 04.12.2024 Date of Test: 04.12.2024 17.12.2024

Source: Ground Water Quantity: 2 liters

Sampling Done By Mr Dhirendra

Sampling Procedure No.: SPLPL SOF-18 Type of text carried: Physico-Chemical Test Nature of Sampler Gear Water

Packing seal & signature: Received to Plantic Bottle Condition of the sample: Clear Water

Client's Name and Address: M/a Shalkmar Mannat, Nawaheant, Barahankt, U.P.

S. No.	PARAMETER TESTED	UNITS	RESULT	Requirement (Acceptable Limit)	Permissible Limit in the Absence Alternate Source	PROTOCOL.
					500:2012) of Revision	
01	Color, Max	Hazen	45.0	, t	15	2120 B APITA 24=Ed. 2020
02	pH Value		7.72	6.5-8.50	No Belaxation	4500-H-R APRA 249-Ed 2023
13	Electrical Conductivity	ps/cm	553.6			2510 B APHA: 24×Ed: 2021
34	Turbidity, Max	NTU	<0.2	1	5.0	2130 B APHA' 24=Ed. 2023
05	Total Dissolved Solids, Max	mg/I	220	500	2000	2540 D APHA: 24°E4 2023
36	Total Hardness (as CaCO <sub>2</sub> ), Max	mg/l	150	200	600	2140 C. APHA: 24×Ed. 2023
07	Calcium (as Ca). Max	mg/l	19.04	75	200	3500 B, APNA 24°Ed 2023
98	Magnesium (as Mg), Max	mg/I	16.30	30	No Relaxation	3500-P, APRA: 240-Ed. 2023
9	Total Alkalinity (as CaCO <sub>1</sub> ). Max	mg/l	166	200	600	15-3025(Part 23)1986
10	Chloride (as Cl-), Max	mg/l	10.4	256	1000	4500 -CLR, APHA: 249 Ed. 2023
[]	Sulphate (as SO <sub>4</sub> ), Max	mg/l	70.03	200	400	4500-504- £ 240 Ed. 2021
12	Nitrate (as NO s), Max	mg/l	8.7	45	No Relaxation	4500 NO. D APHA 240Ed 2023
13	Iron (as Fe), Max	mg/l	<0.1	1.0	No Relaxation	3500 Fe-B APHA' 24+Ed, 2023
14	Fluoride (as F-), Max	mg/l	<0.1	1.0	1.5	4500 F. APHA 24° Ed. 2023
15	Copper (as Cu), Max	mg/l	<0.1	0.05	1.5	3500-Cu-B APHA 24=Ed 2023
16	Total Chromium (as Cr+6), Max	mg/l	< 0.85	0.05	No Relaxation	3500-Cr-B APHA 24%Ed. 2023
17	Zinc (as Zn), Max	mg/l	0.20	5	15	3500 Zn-C APRA 249 Ed. 2023
18	Manganese (as Mn), Max	mg/l	<0.1	0.1	0.3	3500 Mn APHA 24" Est. 2023
22	Total Phosphate (as PO+P)	mg/l	<0.01	1 8		4500 PD APHA 24=Ed. 2023
26	Boron (as B), Max	mg/l	<1.0	0.5	1.0	IS 3025 (Part 57)
27	Ammonia (as total ammonia- N), Max	mg/l	<5.0	0.5	No Relaxation	IS 3025 (Part 34)
28	Cadmium (as Cd), Max	mg/l	<0.001	0.003	No Relaxation	3500-Cd-APHA 749-Ed 2023

This report refers only to the particular Job/ submitted for testing, it should not be reproduced except to full.

Unused balance of samples shall be destroyed after one month from the date of issue of test report, unless otherwise specified.

Interpretation: The tested water sample does confirm to IS: 10500-2012 Drinking Water Specification (Second Revision) and all amendments thereof, w.r.t. tested parameters no.

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Sample Location: Pump House-Project Site

Sample collected on: 04.12.2024

Sample received on: 04.12.2024 Date of Test: 04.12.2024-17.12.2024

Source: Ground Water Quantity 2 liters

Sampling Done By. Mr. Dhirendra

Sampling Procedure No.: SPLPL SOP-16

Type of test carried: Physico-Chemical Test

Nature of Sample: Clear Water

Packing seal & signature: Received in Plantic Bottle

Condition of the sample: Clear Water

Client's Name and Address M/s Shakimar Mannet Namelsoni Barahania (UB)

S. No.	PARAMETER TESTED	UNITS	RESULT	Requirement (Acceptable Limit)	Permissible Limit in the Absence Alternate Source	PROTOCOL
					500:2012) d Revision	
01	Color, Max	Hazen units	<5.0	5	15	2120 B APHA 24° Ed. 2023
02	pH Value		7.51	6.5-8.50	No Relaxation	4500-H+B, APHA 24+Ed, 2023
03	Electrical Conductivity	ps/cm	707.5		Commence of the commence of th	2510 B. APHA' 24° Ed. 2023
04	Turbidity Max	NTU	<0.2	1	5.0	2130 8 APHA: 24º Ed. 2023
0S	Total Dissolved Solida, Max	mg/l	367	500	2000	2540 D. APHA' 249 Ed. 2023
06	Total Hardness (as CaCO <sub>2</sub> ), Max	mg/l	189	200	600	2340 C APHA: 24° Ed. 2023
07	Calcium (as Ca). Max	mg/l	35.79	75	200	3500 B. APHA' 24º Ed. 2023
08	Magnessum (as Mg), Max	mg/l	24.85	30	No Relaxation	3500-B. APHA: 240 Ed. 2023
09	Total Alkalimity (as CaCO <sub>3</sub> ), Max	mg/l	190	200	600	15:3025(Part 23)1986
10	Chloride (as Cl.), Max	mg/l	19.1	250	1000	4500 -Cl B. APHA' 24" Ed. 7023
11	Sulphate (ax SO <sub>1</sub> ): Max	mg/l	61.2	200	400	4500-SO <sub>4</sub> 4 E 24º Ed. 2023
12	Nitrate (as NO 1), Max	mg/l	9.92	45	No Relaxation	4500-NO+- B APHA 240 Ed. 2023
13	Iron (as Fe), Max	mg/l	0.12	1.0	No Relaxation	3500 Fe-B APHA' 24+Ed. 2023
14	Flooride (as F-), Max	mg/l	<0.1	1.0	1.5	4500-F- APHA 249 Ed. 2023
15	Copper (as Cu), Max	mg/l	₹0.1	0.05	1.5	3500 Cu B APHA 24º Ed. 2023
16	Total Chromium (as Cr+6), Max	mg/I	< 0.05	0.05	No Relaxation	3500-Cr-B APHA 24° Ed. 2023
17	Zine (as Zn). Max	mg/l	0.52	5	15	3500 Zn-C APHA 24º Ed 2023
18	Manganese (as Mn), Max	mg/1	<0.1	0.1	0.3	3500 Mn APHA 24° Ed. 2023
22	Total Phosphate (as PO-P)	mg/l	<0.01		3	4500 PD APHA 249 Ed 2023
26	Boron (as B), Max	mg/l	<1.0	0.5	1.0	IS 3025 (Part 57)
27	Ammonia (as total ammonia- N), Max	mg/l	<5.0	0.5	No Relaxation	IS 3025 (Part 34)
28	Cadmium (as Cd), Max	mg/ī	<0.001	0.003	No Relaxation	3500-Cd- APHA '24=Ed. 2023

#### Notes:

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Unused halance of samples shall be destroyed after one month from the date of issue of test report, unless otherwise specified

Interpretation: The tested water sample does confirm to IS: 10500-2012 Drinking Water Specification (Second Revision) and all amendments thereof, w.r.t. testedparameters no

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Disaster Management Plan • Pollution Control Systems (Turnkey Basis) • ETP's • WTP's • STP's • FSTP's • APCS • R.O. Systems • Rain Water Harvesting

#### Surface water test report



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E-mail: dr.rajesh\_singh@yahoo.co.in, consultancy sawens@yahoo.co.in, consultancy sawens@ CINI No.: U28233322599210331397

Sample Location: Sharda Canal Sample collected on: 04.12.2024

Sampling Done By Mr. Administra Sampling Procedure No.: 571.71, 509 (h.

Sample received on: 04.12.2024 Date of Test: 01-12-2021 17-12-2021 Source: Surface Water

Type of test carried: Physica Conscioul Test Nature of Sample: Clear water in plantic juiction Packing seal & algorithms: Jurican with mid and sign

Quantity: 7 liters Citent's Name & Address: M/s Shalimar Mannat, Nawabgani, Barahanki, U.P.

SI.	PARAMETERS TESTED	TEST PROTOCOL	CARGERYET) VALUE (mg/l)	branders for borders Water equations by CRCB \$773 and the bornes of Indian Standards, 1762 (A)
1.	Color (Hazen)	2120 B APHA 24º Edition 2028	-5	
2.	pH Value	4500-16- ft. APHA: 24" Edition 2023	7.31	60.65
3.	Electrical Conductivity, (u5/cm)	2510 B APHA 24* Edition 2023	656H	
4	Turbidity. (N.T.U.)	2130 B APRIA: 24° Edition 2023	64	
5.	Total Dissolved Solids, (mg/l)	ZS40 C. APHA: 24= Edition 2023	382	590
6.	Total Hardness as CaCO <sub>1</sub> (mg/i)	2340 C. APHA: 24" Edition 2023	159	
7	Calicium as Ca. (mg/li)	3500 B. APHA' 24° Edition 2023	22.15	
8	Magnesium as Mg. (mg/l)	3500-B, APRA: 24% Edition 2023	1853	
0	Alkalimity as CaCO <sub>3</sub> (mg/l)	23200, APHA 24° Edition 2023	101.3	1
10	Chloride as Cl. (mg/l)	4500 -CI B, APHA: 24° Edition: 2023	33.8	250
11	Sulphate as SDv. (mg/l)	4500-504- E APHA 24° Edition 2023	52.9	695
12	Nitrate as NO s. [mg/l]	4500-N03-B APRA 24° Edition 2023	10.3	20
13.	Iron as Fe. (mg/l)	3500 Fe-B APRA: 24º Editino 2023	+0.1	0.3
14	Fluoride as F-, (mg/l)	4500-P- APRIA 264 Edition 2023	613	1.5
15	Bio-chemical Oxygen Demand, BOD, (mg/i)	IS 3025(Part-44) 1993, (Realf 2009)	1.1	2
16.	Chemical Oxygen Demand, COD, mg/l	5220 B APHA 24% Editing 2023	18:7	
17.	Total Suspended Solids (TSS), (mg/l)	2540 D APHA 24° Edition 2023	32	
18.	Oil & Grease (mg/l)	5520 B APHA 24th Edition 2023	1.6	
19.	Zinc (mg/l)	3500 Ze-C APHA 24° Ed. 2023	0.24	
20.	Copper (mg/i)	3500 Co B APHA 24-Ed. 2023	×0.4	

This report refers only to the job/ submitted for testing. It should not be reproduced except in full. Unused balance of samples shall be destroyed after one month from the date of issue of test report, a

Interpretation: The above tested sample does conform to Standard of surface water quality w.r.t above tested parameters

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## Total Environment Services

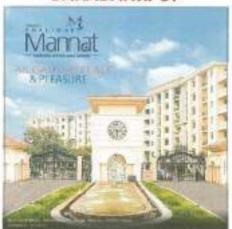
. MONITORING & TESTING . WATER . EFFLUENT . AIR . STACK/FUGITIVE EMISSION . SOIL . NOISE. FOOD & NUTRITION GEO TECHNICAL INVESTIGATION • R&D • PHARMACEUTICALS• COSMETIC• MOBILE SOIL/WATER/FERTILIZER TESTING KIT
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DPR • Feasibility Reports • Water & Effluent Management Studies • E Waste Management • Municipal Solid Waste Management • Hazardous Waste Management • Bio Medical Waste Management • RR Survey/Poverty & Social Impact Assessment Report • Rock Engineering Report • Rick Assessment
• Disaster Management Plan • Pollution Control Systems (Turnkey Basis) • ETP's • WTP's • STP's • FSTP's • APCS • R.O. Systems • Rain Water Harvesting

STP detail

Annexure-9

# 800 KLD SEWAGE TREATMENT PLANT AT MANNAT HOUSING COMPLEX FAIZABAD ROAD BARABANKI UP



# SHERE'S SHALIMAR MANNAT

A project by:

## SHALIMAR CORP LIMITED

SHALIMAR TITANIUM VIBHUTI KHAND GOMTI NAGAR LUCKNOW -226010

CHECKED & VETTED BY MANUAL CHECKED BY MANUAL CHECKED & VETTED BY MANUAL CHECKED BY M



# **Table of Content**

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	2.3	Design Approach	3
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	2.5	Process Flow Scheme	7

CHECKED & VETTED B

Dr. Nadeem Khatil Professor Department of Civil Engineering Aligath Muslim University Aligath-202002 (U.P.)

#### List of Abbreviations

ABR Anaerobic Baffled Reactor BOD Biochemical Oxygen Demand

CPHEEO Central Public Health & Environmental Engg.

Organization

COD Chemical Oxygen Demand CWs. Constructed Wetlands

FC Fecal Coliform

GoUP Government of Uttar Pradesh HDPE High-Density Polyethylene HF-CW Horintal Flow Wetlands KLD Kilo Litres Per Day

KV Kilo Volts KW: Kilo-Watts

LPCD Litres Per Capita per Day

MS Mild Steel

Most Probable Number MPN 0 & M Operation and Maintenance RCC Reinforced Cement Concrete SPS Sewage Pumping Station STP Sewerage Treatment Plant TSS Total Suspended Solids TKN Total Kjeldahl Nitrogen TP Total Phosphorus VF-CW Vertical Flow Wetlands

Dr. Nadeem Khalil Professor

Department of Civil Engineering Aligarh Muslim University Aligarh-202002 (U.P.)

#### **About the Project**

SHERE'S SHALIMAR MANNAT, a 33 acre township, located at

Faizabad Road, Barabanki, having 720 Flats in Phase 1 in which 528 flats are 3 bhk & 192 flats are 2 bhk as well as in phase 2 having 160 flats are 2 bhk,160 flats are 2.5bhk & 160 flats are 3bhk.



Artisitc View



Actual View after Completion

Taking into consideration of company's fundamental ethics, compliance of regulatory norms, and more importantly, the need of today's growing environmental challenges, following are some of the measures that have been taken to address the environment and conservation of natural resources in their project on a sustainable approach basis. The foremost aspect of any housing project is to deal with efficiently the wastewater, its reuse after proper treatment, and rain water harvesting system. CHECKED, & VETTED BY

#### 2. **Sewage Treatment Plant**

#### 2.1 **Wastewater Flow**

Dr. Nadeem Khalil The capacity of the SEWAGE TREATMENT PLANTER TO THE MAINTAIN THE MAINT wastewater flow that shall be generated cumulatively from

the flats. The details of the houses/families in different. phases of the project are given in Table 1.

As per the standard norms and guidelines of the CPHEEO, the average water supply rate is taken as 130lpcd.

1 Flats (Phase - II)

2400 Persons

Total water supply rate per capita = 130 LPCD

Interception factor - 0.75

Total KLD for Phase II:

Total Person x LPCD x Interception factor

2400 x 130 x 0. 75 = 234.000 ltrs

= 234 KLD

2 Flats

100

500 Persons

Total water supply rate per capita = 130 sped

Interception factor - 0.75

Total KLD for Phase II:

500 x 130 x 0. 75 = 48.750 ltrs

Total KLD = 48 KLD

FINAL STP CAPACITY

Phase I + Phase II + PWS/LIG

400 + 234 + 48 = 682 KLD

Dr. Nadeem Khalil Professor

The STP has been designed to cater population with Muslim University 8000.

#### 2.2 Philosophy of the Technology Choice

The corner-stone of our philosophy towards the technology choice is its SUSTAINABILITY. We believe that any

developmental project should address the green concept and must be sustainable concerning its longevity, hassle-free operation & maintenance and make a more societal impact.

The domestic wastewater (sewage) within the Mannat housing complex from its different households shall flow into the underground sewerage network. It will collect and convey the entire sewage at one point/place where the facility for its treatment is provided. The underground sewerage network has been designed and laid in such a way that the pumping is minimally required.

The technology for sewage treatment plant at Mannat has been decided after careful considerations and due diligence. It is the state-of-the-art "Wetlands" technology that has been adopted for this STP. This concept of Wetlands Technology is eco-friendly, sustainable, and already provenin many countries, including India. The Wetlands Technology is highly-efficient, produces high effluent quality effluent, requires no energy and offers hassle-free operation and maintenance. It doesn't produces any kind of odor or vectors. Instead, it gives a very nice aesthetic view and landscape.

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In India, AMU, NEERI, and other technical institutions have done remarkable achievements in this field. In one of the major R&D projects "SWINGS" under Indo-Euro Water Technology Programme (FP7 Framework) supported by the Government of India and European Commission, wherein Dr. Nadeem Khalil ppl. was also involved as SME partners developed /

n-partment of Clvin Engineetingleyed Wetlands Technology for municipal wastewater Aligarh 202002 (U.P.) reuse and recycle. This project has successfully demonstrated the results.

at AMU Aligarh.

#### Design Approach

The design of the Sewage Treatment Plant at Mannat has been carried out while keeping the aim to fully use the treated water for gardening, toilet flushing, and horticulture. The landscape/ green area of the Mannat is approx 24 acres, which according to the estimate may consume 50-60% of the recycled water from the sawage treatment plant. About 20-30 % shall be used in group housing for the toilet flushing system. The remaining 10-20 %, shall be used in water bodies, cleaning of roads/pedestrians, automobile washing and other site related activities during the construction of the second phase.

#### Details of the STP

The flow rate and wastewater quality are the prime design considerations for any STP. Based on the similar townships completed by Shalimar Group and information gathered from various sources, Table 2 gives the wastewater quality that has been used for the design purpose.

Table 2: Wastewater Flow and Characteristics for design purpose

Parameter	Value
Flow, KLD	800
BOD, mg/l	225
CDD, mg/l	350
TSS, mg/l	400
Feacal Coliform, MPN/100ml	2.3 x 10°

Treated Effluent:

BOD TSS

< 10 mg/l < 20 mg/l

Feacal Coliform

< 1000 MPN/100ml

CHECKED & VETTED BY:

Dr. Nadeem Khalil Professor Department of Civil Engineering

Augarh Muslim University Aligarh-202002 (U.P.)

#### The treatment units at Mannat are:

- 1. Sump Curn Pump House
- 2. Inlet Chamber, Screens and Grit Chambers
- 3. UASB Reactors
- 4. Vertical Flow Constructed Wetlands
- Horizontal Flow Constructed Wetlands
- 8. Chlorination Tank
- 7. Treated Effluent Sump Cum Pump House

The flow diagram of the STP at Mannat is given in Figure 1.

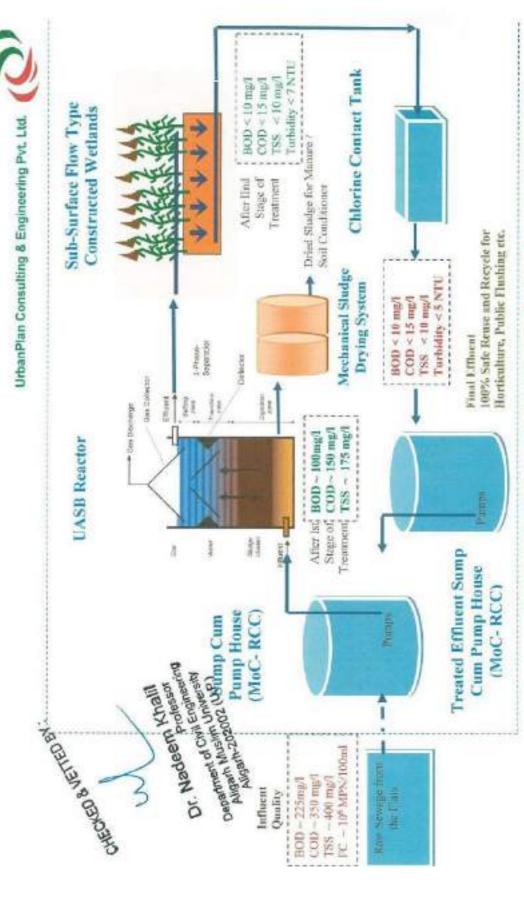
#### 2.5 Process Flow Scheme

The wastewater from the flats shall be collected in the underground sewerage network and conveyed to the sump cum pump house from where it shall be lifted to the inlet chamber of the STP. Firstly, it will be screened (manually) for the removal of small objects, floatable items like wrappers, plastic, etc. After screening, the wastewater is allowed to enter into a grit chamber for the removal of inorganic solids, silt etc. After grit chamber, the wastewater shall enter into the UASB reactors under gravity. The wastewater shall be subjected to the settlement of the solids and degradation of the organic metter anaerobically. The sludge produced in the reactor shall be withdrawn.

Dr. Nadeem Khalii The sludge produced in the reactor shall be withdrawn professor separately with the help of sludge valves from the bottom person of Civil Engineering the UASB reactors. There are 02 UASB reactors each Department of Civil Plants happile flow of the UASB reactors.

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Aligarh-202002 (U.P.) to handle flow of 400 KLD. From UASB Reactors, the effluent shall enter into Vertical Flow Constructed Wetlands. The flow shall be uniformly districted through



Proposed Process Flow Scheme for the Sewage Treatment Plant at MANNAT Housing Project, Faizabad Road, Barabanki

out the top of the bed. The VF-CW is 1m deep tank that shall have filtering media and emergent vegetation to further treat the effluent. It works on the principle of natural process of treatment. After VF-CW, the effluent shall enter into horizontal flow Wetlands (HF-CW). The depth of the HF-CW is kept as 0.7m, filled with media and emergent. plants (vegetation). The treated effluent after this step of the process shall be clean and crystal clear. However, it may require further treatment to kill the pathogens. For this reason, chlorine contact tank has been provided with 30 minutes contact time. After chlorination, the treated effluent shall be conveyed to the storage tank from where it shall be pumped for use within the Mannat area for gardening etc.

#### Conclusions:

The aforesaid STP at Mannat Housing Complex Barabanki is ready for commissioning now. It is expected that if the STP is properly maintained and operated as per its requirements, it may produce effluent quality that shall comply to the present discharge norms. The technology is self-sustainable, robust and very easy to operate.

CHECKED & VETTED BY:

Dr. Nadeem Khalil

Department of Civil Engineering Aligath Muslim University Aliqath-202002 (U.P.)

Professor

#### Pictures of the 800 KLD STP at Mannat





Inlet Chamber





**UASB Reactors** 





Constructed Wetlands

CHECKED & VETTED BY:

Dr. Nadeem Khalil
Professor
Professor
Professor
Professor
Aligarh Muslim University
Aligarh-202002 (U.P.)

10/to

#### Ambient noise test report



# SAWEN PROJECTS & LABORATORIES PVT. LTD.

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#### TEST REPORT Noise Level Monitoring

Location Code: SPLPL/NQ-1467A

Monitoring of: Ambient Noise

Monitoring Location: As detailed in tabulated form Duration of Monitoring: 03.12.2024-04.12.2024

Sampling Time: 24 hrs.

Monitoring Equipment:

(i) SPL-E-24

Report No.: SPLPL/NQ/ TR/1467A/24

Issue Date: 18.12.2024

Monitoring done by: Mr. Abhishek Sampling Plan & Procedure: SOP-NQ-18 **Environmental Conditions**; Normal Land Use at Location: Residential Area

Client's Name and Address: M/s Shalimar Mannat, Nawabganj, Barabanki, U.P.

Stations	Location	Leq	
		Day dB(A)	Night dB(A)
SPLPL/NQ-1467A	2m from Ghaila Street	51.3	41.5

End of Report

#### Note:

- This report relates to the monitored location only for mentioned parameter, as observed at the time of monitoring. It should not be reproduced wholly or in part without the prior written permission of the
- Responsibility of laboratory is limited to the involced amount only.

Indian Standards for Ambient Noise Levels\*

Area Category Code	Limits in dB(A) Lo	eq .
	Day time	Nighttime
Industrial Area	75	70
Commercial Area	65	50
Residential Area	55	45
Silence Zone	50	40

- \*Ref.: Ministry of Environment & Forest (MOEF) Guidelines vide Environment (Protection) Act, 1986 third 1.
- amendment rules dated 26/12/89 (Ref.6)
- Day time from (600 hrs to 2100 hrs, IST) Nighttime from (2100 hrs to 600 hrs IST) 3.

Interpretation: The monitored noise levels were found to be under permissible standards for Residential land use.

For Sawen Projects & Laboratories Pvt. Ltd.

tyentira Singh) Authorized Signatory Eveknow.

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#### TEST REPORT Noise Level Monitoring

Location Code: SPLPL/NQ-1468A
Monitoring of: Ambient Noise
Monitoring Location: As detailed in tabulated form
Duration of Monitoring: 03.12.2024-04.12.2024
Sampling Time: 24 hrs.
Monitoring Equipment:
[8] SPL-E-25

Report No.: SPLPL/NQ/ TR/1468A/24 Issue Date: 18.12.2024 Monitoring done by: Mr. Shoeb Sampling Plan & Procedure: SOP-NQ-18 Environmental Conditions: Normal Land Use at Location: Residential Area

Client's Name and Address: M/s Shalimar Mannat, Nawabganj, Barabanki, U.P.

Stations	Location	Lec	
		Day dB(A)	Night dB(A)
SPLPL/NQ-1468A	1m from Project Site	52.4	40.8

\*End of Report\*

#### Note

- This report relates to the monitored location only for mentioned parameter, as observed at the time of monitoring. It should not be reproduced wholly or in part without the prior written permission of the Laboratory.
- Responsibility of laboratory is limited to the involced amount only.

Indian Standards for Ambient Noise Levels\*

Area Category Code	Limits in dB(A) Leq	
WILL SATISFIE	Day time	Nighttime
Industrial Area	75	70
Commercial Area	65	50
Residential Area	55	45
Silanca Zona	50	40

- \*Ref.: Ministry of Environment & Forest (MOEF) Guidelines vide Environment (Protection) Act, 1986 third amendment rules dated 26/12/89 (Ref.6)
- Day time from (600 hrs to 2100 hrs, IST)
- Nighttime from (2100 hrs to 600 hrs IST)

Interpretation: The monitored noise levels were found to be under permissible standards for Residential land use.

For Sawen Projects & Laboratories Pvt. Ltd.

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#### TEST REPORT Noise Level Monitoring

Location Code: SPLPL/NQ-1469A Monitoring of: Ambient Noise Monitoring Location: As detailed in tabulated form Duration of Monitoring: 03.12.2024-04.12.2024 Sampling Time: 24 hrs.

Monitoring Equipment:

(I) SPL-E-46

Report No.: SPLPL/NQ/ TR/1469A/24

Issue Date: 18.12.2024

Monitoring done by: Mr. Dhirendra Sampling Plan & Procedure: 50P-NQ-18 Environmental Conditions: Normal Land Use at Location: Residential Area

Client's Name and Address: M/s Shalimar Mannat, Nawabganj, Barabanki, U.P.

Stations	Location	Leq	
		Day dB(A)	Night dB(A)
SPLPL/NQ-1469A	4m from Semra Street	51.8	41.9

\*End of Report\*

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Indian Standards for Ambient Noise Levels\*

Area Category Code	Limits in dB(A) Leg		
	Day time	Nighttime	
Industrial Area	75	70	
Commercial Area	65	50	
Residential Area	55	45	
Silence Zone	50	40	

- \*Ref.: Ministry of Environment & Forest (MOEF) Guidelines vide Environment (Protection) Act. 1986 third 1. amendment rules dated 26/12/89 (Ref.6) Day time from (600 hrs to 2100 hrs, IST)
- Nighttime from (2100 hrs to 600 hrs IST)

Interpretation: The monitored noise levels were found to be under permissible standards for Residential lead use. For Sawen Projects & Laboratories Pvt. Ltd.

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#### TEST REPORT Noise Level Monitoring

Location Code: SPLPL/NQ-1470A Monitoring of: Ambient Noise Monitoring Location: As detailed in tabulated form Duration of Monitoring: 03.12.2024-04.12.2024 Sampling Time: 24 hrs. Monitoring Equipment: (i) SPL-E-56

Report No.: SPLPL/NQ/ TR/1470A/24 Issue Date: 18.12.2024 Monitoring done by: Mr. Lavkush Sampling Plan & Procedure: SOP-NQ-18 Environmental Conditions: Normal Land Use at Location: Residential Area

Client's Name and Address: M/s Shalimar Mannat, Nawabganj, Barabanki, U.P.

Stations	Location	Leq	
		Day dB(A)	Night dB(A)
SPLPL/NQ-1470	4m from Rendua Palhari	52.1	42.5

\*End of Report\*

#### Note:

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Indian Standards for Ambient Noise Levels\*

Area Category Code	Limits in dB(A) Leq	
	Day time	Nighttime
Industrial Area	75	70
Commercial Area	65	50
Residential Area	55	45
Silence Zone	50	40

- \*Ref.: Ministry of Environment & Forest (MOEF) Guidelines vide Environment (Protection) Act, 1986 third amendment rules dated 26/12/89 (Ref.6) 1.
- Day time from (600 hrs to 2100 hrs, IST) Nighttime from (2100 hrs to 600 hrs IST)

Interpretation: The monitored noise levels were found to be under permissible standards for Residential land use. For Sawen Projects & Laboratories Pvt. Ltd.

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