Six monthly Compliance Report

For

Proposed development project at S.No. 32/5C, Pisoli, Tehsil-Haveli, Pune

by

M/s. Advika Construction Pvt Ltd

(June to December 2024)

Point wise compliance status to various stipulations laid down by the Government of Maharashtra as per the Environmental Clearance issued vide letter no. **SEIAA-EC-0000000450 dated 18th September 2018**

On site Construction status:

1. Building A, B, D, D1, E are completed & occupancy given.
2. Building C, F are under construction.

Sr. no.	Specific Conditions (Compliance points as mentioned in EC letter)	Reply
1.	PP to submit IOD/IOA/Concession Document/Plan Approval or any other form of documents as applicable clarifying its conformity with local planning rules and provisions there under as per the Circular dated 30.01.2014 issued by the Environment Department, Govt. of Maharashtra	IOD has been received and accordingly EC has been granted.
2.	PP to submit a copy of purchase agreement	Submitted & Presented at the time of meeting.
3.	PP to provide STP on ground and open to sky; PP to submit cross section drawing of STP and provide engineered green belt treatment for removal of phosphates and nitrates.	Complied.
4.	SEIAA decided to grant EC for: FSI area : 21650.31 m2, Non FSI area : 12690.19 m2 and Total BUA : 34340.50 m2.	Noted

Sr. No.	EC Condition for Pre-Construction Phase	Reply
1.	E-waste shall be disposed through Authorized vendor as per E- waste (Management & Handling) Rules 2011	E-waste will be collected regularly and sequentially given to the MPCB authorized E-waste management agencies.
2.	Occupation certificate shall be issued to the project by local planning authority only after	Water supply & drainage connection NOC has been

	ensuring availability of drinking water and connectivity of the sewer line to the project site	obtained The occupancy has been given to few buildings further to remaining buildings it shall be issued by local planning authority only after ensuring availability of drinking water and connectivity of the sewer line to the project site.
3.	This environment clearance is issued subject to obtaining NOC from Forestry and Wild Life angle including clearance from the standing committee of the National Board for Wild life as if applicable & this environment clearance does not necessarily implies that Forestry & Wild Life clearance granted to the project which will be considered separately on merit.	Not applicable.
4.	PP has to abide by the conditions stipulated by SEAC & SEIAA.	Noted. We will abide by conditions, if there is any deviation in proposal we will approach to SEAC.
5.	The height, Construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan & before according commencement certificate to proposed work. Plan approving authority should also ensure the zoning impressibility for the proposed project as per the approved development plan of the area.	Noted. The height and construction built up area of the proposed construction is in accordance with the existing FSI/FAR norms of the urban local body commencement and completion certificate to buildings has been obtained.
6.	"Consent to Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment Department before start of any construction work at the site.	Consent to Establish has been obtained from MPCB.
7.	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.	Few labours are present on the site. All sanitary and hygienic measures have been taken on site.
8.	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of waste water and solid wastes generated during the construction	Adequate drinking water and sanitary facilities have been provided to the construction workers present on the site. Please refer site photos.

	phase should be ensured.	
9.	The solid waste generated should be properly collected and segregated, dry/inert solid waste should be disposed off to the approved sites for the land filling after recovering recyclable material.	During construction phase solid waste generated on site is taken away by Gram panchayat.
10.	Disposal of muck during construction phase should 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.	Construction waste (muck) generated will be reused on site for back filing of proposed construction .
11.	Arrangement shall be made that waste water and storm water do not get mixed.	Separate arrangement has been made for the disposal of storm water and drainage management. Disposal of storm water will be in storm drain near site/adjacent river and excess treated water will be disposed in sewer line near site.
12.	All the topsoil excavated during construction activities should be stored in horticulture / landscape development within the project site.	Top soil excavated during construction activities has been stored and shall be used for landscape development.
13.	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved	Will be complied.
14.	Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/Agriculture Dept.	Landscape area to be provided on ground is 10% on virgin land as required. Also maximum native species has been proposed. Consultation with Garden dept of PMC will be done during finalization of project.
15.	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Soil testing has been carried out. Soil monitoring report is enclosed. Ground water sample will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and

		other toxic contaminants.
16.	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	Will be complied during construction stages of proposed buildings.
17.	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board	No hazardous waste will be generated during the construction phase.
18.	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.	The DG sets to be used is of Total no's of DG : 160 KVA & 100 KVA complying to Environments (Protection) Rules prescribed for air and noise emission standards.
19.	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.	The storage of diesel will not be more than 50 lit at a time which will be stored in impervious tank. Since the quantity of diesel is less, no NOC is required for the same.
20.	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 and should be operated only during non peak hours.	Complied.
21.	Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to confirm to the stipulated standards by CPCB/MPCB.	Air and noise has been monitored and all the values are within the limits.
22.	Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is	Fly ash is using for this project

	located within the 100 km of Thermal Power Stations).	
23.	Ready mixed concrete must be used in building construction	Will be complied
24.	Storm water control and its re-use as per CGWB and BIS standards for various applications.	Appropriate Rain water harvesting system has been provided & proposed for storm water management.
25.	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	Complied
26.	The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.	Ground water will not be used for the project.
27.	The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the MPCB and Environment Department before the project is commissioned for operation. Discharged of this unused treated effluent, if any should be discharged in the sewer line. Treated effluent emanating from STP shall be recycled/refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treatment of 100% gray water by decentralized treatment should be done. Necessary measures should be made to mitigate the odor problem from STP.	STP has been executed on site & certified by expert.
28.	Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project	NA
29.	Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.	Dual plumbing system is installed.
30.	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control	Complied.
31.	Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality	Glass is being used in windows only.

	double glass with special reflective coating in windows	
32.	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.	Complied.
33.	Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use 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. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source as source of energy.	Project proposed to use CFLs/TFLs for common lightning. Lighting power density in compliance with ECBC. Overall energy saving is 15 % Solar water heating system is also proposed to suffice the hot water requirement.
34.	Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with MPCB.	DG set installed on site as back up power for elevators and common area illumination
35.	Noise should be controlled to ensure that it does not exceed the prescribed standards. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	Construction activity will not be carried out during night time.
36.	Traffic congestion near the entry and exit points from the roads adjoining the proposed project sire must be avoided. Parking should be fully internalized and no public space should be utilized.	Traffic congestion will be avoided. Internal parking are provided

37.	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces while it is aspirational for non-air- conditioned spaces by use of appropriate thermal insulation material to fulfill requirement	Noted.
38.	The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.	The buildings have been planned with adequate distance for fresh air, light and ventilation.
39.	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	All the environmental practices will be monitored. An organizational set up will be formed to ensure the effective implementation of mitigation measures.
40.	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent of it was found that construction of the project has been started without obtaining environmental clearance.	Environmental clearance has been obtained from the Environment Department. Govt. of Maharashtra as per the Environmental Clearance issued vide letter no. **SEIAA-EC-0000000450 dated 18.09.2018**
41.	Six monthly monitoring reports should be submitted to the Regional office MoEF, Bhopal with copy to this department and MPCB.	Complying. Six monthly compliance report has been submitted to regional office of MoEF, Nagpur
42.	Project proponent shall ensure completion of STP, MSW disposal Will be complied. As committed no facility, green belt development prior to occupation of the buildings. As agreed during the SEIAA meeting, PP to explore possibility of utilizing excess treated water in the adjacent are for gardening before discharging it into sewer line. No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. prior certification from appropriate authority shall be obtained.	No Occupancy will be given unless all environmental infrastructures are installed and made functional.
43.	Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for	Separate OWC has been proposed for management of wet waste.

	gardening. And no wet garbage will be disposed outside the premises. Local authority should be ensure this. In case of any change(s) in the scope of the project, the project would require a fresh appraisal by this department.	
44.	Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.	Noted
45.	A complete set of all the documents submitted to Department should be forwarded to the MPCB	Complied.
46.	In case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department	In case of any change, a fresh appraisal will be made to Environment Department.
47.	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards	Environment Management cell appointed for construction and operation phase.
48.	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department	Complied during operation phase.
49.	The project management shall advertise at least in two local newspapers widely circulated in the region around the project one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at website at http://ec.maharashtra.gov.in.	Complied.
50.	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard and soft copies to the MPCB	six monthly compliance has been submitted. We will be regularly submitting half yearly compliance reports.

	& this department, on 1st June & 1st December of each calendar year.	
51.	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	Noted.
52.	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely SPM, RSPM, SO_2, NO_X (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Complied.
53.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions results of monitored data (both in hard copies as well as by e- mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Noted.
54.	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	Noted.

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Environment department,
Room No. 217, 2nd floor,
Mantralaya, Annexe,
Mumbai- 400 032.
Date:September 18, 2018

To,
Mr. Gautam Budhrani
at S.No. 32/5C, Pisoli, Tehsil- Haveli, Pune

Subject: Environment Clearance for Environment Clearance for project by M/s. Advika Construction Pvt Ltd

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee-III, Maharashtra in its 57th Meetingth meeting and recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 137th meetings.

2. It is noted that the proposal is considered by SEAC-III under screening category B2 as per EIA Notification 2006.

Brief Information of the project submitted by you is as below :-

1.Name of Project	Advika
2.Type of institution	Private
3.Name of Project Proponent	Mr. Gautam Budhrani
4.Name of Consultant	M/s. Saitech Research & Development Organization
5.Type of project	Residential and Commercial
6.New project/expansion in existing project/modernization/diversification in existing project	Not applicable
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Not applicable
8.Location of the project	S.No. 32/5C, Pisoli, Tehsil- Haveli, Pune
9.Taluka	Haveli
10.Village	Pisoli
11.Area of the project	Grampanchayat ADTP Pune
12.IOD/IOA/Concession/Plan Approval Number	Applied
	IOD/IOA/Concession/Plan Approval Number: -
	Approved Built-up Area: 54953.37
13.Note on the initiated work (If applicable)	8525.27 m2
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	NA
15.Total Plot Area (sq. m.)	28000.00 m2
16.Deductions	4995.40 m2
17.Net Plot area	23004.60 m2
18 (a).Proposed Built-up Area (FSI & Non-FSI)	**FSI area (sq. m.):** 27593.49 m2 +3965 m2 =31558.49 m2
	Non FSI area (sq. m.): 23394.88 m2
	Total BUA area (sq. m.): 54953.37 m2

18 (b).Approved Built up area as per DCR	**Approved FSI area (sq. m.):**
	Approved Non FSI area (sq. m.):
	Date of Approval:
19.Total ground coverage (m2)	5945.94 m2
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	21.23 % Total Plot Area (28000.00 m2) 25.84 % Net Plot Area (23004.6 m2)
21.Estimated cost of the project	1400000000

22.Production Details

Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Not applicable	Not applicable	Not applicable	Not applicable

23.Total Water Requirement

Dry season:	**Source of water**	Grampanchayat Pisoli
	Fresh water (CMD):	443.025 m3/day
	Recycled water - Flushing (CMD):	155.37 m3/day
	Recycled water - Gardening (CMD):	20.00 m3/day
	Swimming pool make up (Cum):	-
	Total Water Requirement (CMD) :	287.65 m3/day
	Fire fighting - Underground water tank(CMD):	300.00 m3
	Fire fighting - Overhead water tank(CMD):	-
	Excess treated water	184.13 m3/day
Wet season:	**Source of water**	Grampanchayat Pisoli
	Fresh water (CMD):	443.025 m3/day
	Recycled water - Flushing (CMD):	155.37 m3/day
	Recycled water - Gardening (CMD):	-
	Swimming pool make up (Cum):	-
	Total Water Requirement (CMD) :	287.65 m3/day
	Fire fighting - Underground water tank(CMD):	300.00 m3
	Fire fighting - Overhead water tank(CMD):	-
	Excess treated water	204.13 m3/day
Details of Swimming pool (If any)	NA	

24.Details of Total water consumed

Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
Water Requirement	Existing	Proposed	Total	Existing	Proposed	Total	Existing	Proposed	Total
Domestic	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

25.Rain Water Harvesting (RWH)	**Level of the Ground water table:**	1.5 to 3.5 m
	Size and no of RWH tank(s) and Quantity:	-
	Location of the RWH tank(s):	-
	Quantity of recharge pits:	75 nos
	Size of recharge pits :	0.75m x 0.75m x 3m
	Budgetary allocation (Capital cost) :	Rs.10.00 Lakh
	Budgetary allocation (O & M cost) :	Rs.1.20 Lakh/Year
	Details of UGT tanks if any :	Domestic UG tank Capacity : 460 m3 Flushing UG tank Capacity : 160 m3 Fire UG tank Capacity: 300 m3
26.Storm water drainage	**Natural water drainage pattern:**	-
	Quantity of storm water:	4426.30 m3/ Year
	Size of SWD:	0.75m x 0.75m x 3m
27.Sewage and Waste water	**Sewage generation in KLD:**	387.95 m3/day
	STP technology:	MMBR (Moving Media Bio Reactor)
	Capacity of STP (CMD):	400 m3/day & 35.00 m3/day
	Location & area of the STP:	-
	Budgetary allocation (Capital cost):	Rs.98.00 Lakh
	Budgetary allocation (O & M cost):	Rs.14.65 Lakh/year

28.Solid waste Management

Waste generation in the Pre Construction and Construction phase:	**Waste generation:**	22.5 kg/day
	Disposal of the construction waste debris:	Use for Leveling
Waste generation in the operation Phase:	**Dry waste:**	1058.75 kg/day + 134.75 kg/day
	Wet waste:	453.75 kg/day + 57.75 kg/day
	Hazardous waste:	NA
	Biomedical waste (If applicable):	Not Applicable
	STP Sludge (Dry sludge):	87.00 kg/day
	Others if any:	-
Mode of Disposal of waste:	**Dry waste:**	SWACH
	Wet waste:	Organic Waste Convertor
	Hazardous waste:	Authorized Reprocessor
	Biomedical waste (If applicable):	Not applicable
	STP Sludge (Dry sludge):	Used as Manure after treatment in OWC
	Others if any:	-
Area requirement:	**Location(s):**	-
	Area for the storage of waste & other material:	137 m2
	Area for machinery:	15 m2
Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	Rs.33.00 Lakh
	O & M cost:	Rs.7.60 Lakh/year

29.Effluent Charecterestics

Serial Number	Parameters	Unit	Inlet Effluent Charecterestics	Outlet Effluent Charecterestics	Effluent discharge standards (MPCB)
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Amount of effluent generation (CMD):	Not applicable
Capacity of the ETP:	Not applicable
Amount of treated effluent recycled :	Not applicable
Amount of water send to the CETP:	Not applicable
Membership of CETP (if require):	Not applicable
Note on ETP technology to be used	Not applicable
Disposal of the ETP sludge	Not applicable

30.Hazardous Waste Details

Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

31.Stacks emission Details

Serial Number	Section & units	Fuel Used with Quantity	Stack No.	Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases
1	DG SET	HSD	1	2.5 m	-	DG SET - to be provided

32.Details of Fuel to be used

Serial Number	Type of Fuel	Existing	Proposed	Total
1	HSD	Not applicable	30 Lits / Hrs	30 Lits / Hrs
33.Source of Fuel		Bharat Petroleum Corporation Limited/Hindustan Petroleum		
34.Mode of Transportation of fuel to site		By roadway		

35.Energy

Power requirement:	**Source of power supply :**	MSEDCL
	During Construction Phase: (Demand Load)	116 KW
	DG set as Power back-up during construction phase	2 X 62.5 KVA
	During Operation phase (Connected load):	3766 KVA
	During Operation phase (Demand load):	261 KVA
	Transformer:	6 No. X 630 KVA
	DG set as Power back-up during operation phase:	160 KVA – 1 no & 100 KVA – 1 no
	Fuel used:	Diesel
	Details of high tension line passing through the plot if any:	NO

Energy saving by non-conventional method:

Generally we have proposed high efficiency transformer, motors etc. to reduce losses.
Electronic Ballasts and Energy efficient lamp source either troposphere or CFL are proposed for common area & general lighting with automatic time based control to save power by switching ON & OFF the lights at appropriate time. The estimated saving in common lighting consumption is up to 15 % due to adopting above measures.
Solar photovoltaic system shall be considered for partial external / Landscape ligh

36.Detail calculations & % of saving:

Serial Number	Energy Conservation Measures	Saving %
1	Low power high efficiency CFL lights in common area.	7358KWH
2	Low power high efficiency T5 lights for external & roads.	16060 KWH
3	Energy saving by solar water heater.	1058495 KWH
4	Total Annual Savings in KWH	1081913 KWH
5	Total Annual Savings in KVA	1202126 KWH
6	Total Annual Savings Per Day in KVA	3293 KWH
7	Design Demand Per Day in KVA,if above masure were not proposed	18024 KWH
8	Persantage Saving	18 %

37.Details of pollution control Systems

Source	Existing pollution control system	Proposed to be installed
Air	-	Green belt will be provided.
Water	-	STP will be installed & excess treated water used for flushing & gardening
Noise	-	Noise monitoring will be done in once a fortnight. Traffic management plan to be prepared. Acoustically enclosed DG set will be brought & installed.
Solid Waste	-	Wet Waste will be treated in OWC. STP sludge will be Used as Manure after treatment in OWC Dry Waste will be given to SWACH

Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	Rs.98.35 Lakh
	O & M cost:	Rs. 1.97 Lakh/ Year

38.Environmental Management plan Budgetary Allocation

a) Construction phase (with Break-up):

Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Lacs)
1	Air Environment	Water for Dust Suppression Air & Noise Monitoring	0.50 Lakh/Year
2	Water Environment	Tanker Water for Construction Water Monitoring	0.50 Lakh/Year
3	Land Environment	Site Sanitation –Mobile toilets	0.50 Lakh/Year
4	Socio-economic	Disinfection- Pest Control First Aid Facilities Health Check Up Creches For Children Food for children Personal Protective Equipment	1.0 Lakh/Year

b) Operation Phase (with Break-up):

Serial Number	Component	Description	Capital cost Rs. In Lacs	Operational and Maintenance cost (Rs. in Lacs/yr)
1	STP	sewage treatment plant	98.00 Lakh.	14.65 Lakh / Year

2	RWH	Rain Water Harvesting	10 Lakh	1.2Lakh / Year
3	MSW	Solid Waste Management	33.00Lakh	7.60 Lakh / Year
4	Solar system	Solar system	98.35 Lakh	1.97Lakh / Year
5	Landscape	Landscape	48.47 Lakh	6.97 Lakh / Year
6	Safety Equipments	Safety Equipments	10 Lakh	2.0 Lakh/Year
7	Post EC Monitoring	Post EC Monitoring	--	2.5 Lakh/Year
8	Dry waste management	Dry waste management	--	3.63 Lakh/Year

39.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

Description	Status	Location	Storage Capacity in MT	Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

40.Any Other Information

No Information Available

	CRZ/ RRZ clearance obtain, if any:	NA
	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries	NA
	Category as per schedule of EIA Notification sheet	B2
	Court cases pending if any	NA
	Other Relevant Informations	NA
	Have you previously submitted Application online on MOEF Website.	No
	Date of online submission	-

3. The proposal has been considered by SEIAA in its 137th meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:

Specific Conditions:

I	PP to submit IOD/IOA/Concession Document/Plan Approval or any other form of documents as applicable clarifying its conformity with local planning rules and provisions there under as per the Circular dated 30.01.2014 issued by the Environment Department, Govt. of Maharashtra.
II	PP to submit a copy of purchase agreement.
III	PP to provide STP on ground and open to sky; PP to submit cross section drawing of STP and provide engineered green belt treatment for removal of phosphates and nitrates.
IV	SEIAA decided to grant EC for: FSI area : 21650.31 m2, Non FSI area : 12690.19 m2 and Total BUA : 34340.50 m2.

General Conditions:

I	E-waste shall bedisposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016.
II	The Occupancy Certificate shall be issued by the Local Planning Authority to the project only after ensuring sustained availability of drinking water, connectivity of sewer line to the project site and proper disposal of treated water as per environmental norms.
III	This environmental clearance is issued subject to obtaining NOC from Forestry & Wild life angle including clearance from the standing committee of the National Board for Wild life as if applicable & this environment clearance does not necessarily implies that Forestry & Wild life clearance granted to the project which will be considered separately on merit.
IV	PP has to abide by the conditions stipulated by SEAC& SEIAA.
V	The height, Construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan & before according commencement certificate to proposed work. Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
VI	If applicable Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.
VII	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
VIII	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.

IX	The solid waste generated should be properly collected and segregated. dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
X	Disposal of muck during construction phase should 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.
XI	Arrangement shall be made that waste water and storm water do not get mixed.
XII	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
XIII	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
XIV	Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
XV	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
XVI	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.
XVII	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.
XVIII	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
XIX	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.
XX	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 and should be operated only during non-peak hours.
XXI	Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/MPCB.
XXII	Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within the 100Km of Thermal Power Stations).
XXIII	Ready mixed concrete must be used in building construction.
XXIV	Storm water control and its re-use as per CGWB and BIS standards for various applications.
XXV	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
XXVI	The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.
XXVII	The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the MPCB and Environment department before the project is commissioned for operation. Discharge of this unused treated affluent, if any should be discharge in the sewer line.Treated effluent emanating from STP shall be recycled/refused to the maximum extent possible. Discharge of this unused treated affluent, if any should be discharge in the sewer line.Treatment of 100% gray water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.
XXVIII	Permission to draw ground water and construction of basement if any shall be obtained from the competent Authority prior to construction/operation of the project.
XXIX	Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.
XXX	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
XXXI	Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.
XXXII	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.

XXXIII	Energy conservation measures like installation of CFLs /TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use 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. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source as source of energy.
XXXIV	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Maharashtra Pollution Control Board.
XXXV	Noise should be controlled to ensure that it does not exceed the prescribed standards. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
XXXVI	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
XXXVII	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces while it is aspiration for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
XXXVIII	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
XXXIX	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
XL	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.
XLI	Six monthly monitoring reports should be submitted to the Regional office MoEF, Bhopal with copy to this department and MPCB.
XLII	Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. As agreed during the SEIAA meeting, PP to explore possibility of utilizing excess treated water in the adjacent area for gardening before discharging it into sewer line No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained.
XLIII	Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for gardening. And, no wet garbage will be disposed outside the premises. Local authority should ensure this.
XLIV	Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.
XLV	A complete set of all the documents submitted to Department should be forwarded to the Local authority and MPCB.
XLVI	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.
XLVII	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
XLVIII	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.
XLIX	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in.
L	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.
LI	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.

LII	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM. SO2, NOx (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
LIII	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
LIV	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.

5. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.

6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, and amendments by MoEF&CC Notification dated 29th April, 2015.

8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.

9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.

10. Any appeal against this Environment clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune),New Administrative Building, 1stFloor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Shri. Anil Diggikar (Member Secretary SEIAA)

Copy to:

1. SHRI JOHNY JOSEPH, CHAIRMAN-SEIAA
2. SHRI UMAKANT DANGAT, CHAIRMAN-SEAC-I
3. SHRI M.M.ADTANI, CHAIRMAN-SEAC-II
4. SHRI ANIL .D. KALE. CHAIRMAN SEAC-III
5. SECRETARY MOEF & CC
6. IA- DIVISION MOEF & CC
7. MEMBER SECRETARY MAHARASHTRA POLLUTION CONTROL BOARD MUMBAI
8. REGIONAL OFFICE MOEF & CC NAGPUR
9. MUNICIPAL COMMISSIONER PUNE
10. MUNICIPAL COMMISSIONER SATARA
11. REGIONAL OFFICE MPCB PUNE
12. REGIONAL OFFICE MIDC PUNE
13. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD
14. COLLECTOR OFFICE PUNE
15. COLLECTOR OFFICE SATARA
16. COLLECTOR OFFICE SOLAPUR

MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 24010437/24020781 /24037124/24035273
Fax : 24044532/24024068 /24023516
Email : jdwater @mpcb.gov.in
Visit At : http://mpcb.gov.in

Kalpataru Point, 3rd & 4th floor,
Sion- Matunga Scheme Road No. 8,
Opp. Cine Planet Cinema, Near Sion Circle,
Sion (E), Mumbai - 400022

Infrastructure /Red/LSI
Consent order No: Format1.0/BO/JD (WPC)/UAN-072356/CE/CC-1907000104
Date 03/07 /2019

To,
M/s. Advika Construction Pvt Ltd,
S. No. 32/5C at Pisoli
Tal: Haveli, Dist: Pune.

Sub: Consent to Establish for Residential and commercial Construction Project granted under Red Category.

Ref: 1. Your Application vide UAN No. -0000072356 Dated: 02/05/2019.
2. Minutes of Consent Committee meeting held on 12/06/2019.

For: Consent to Establish for Residential and Commercial Construction project under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 5 of the Hazardous and Other Wastes (M & TM) Rules, 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

1. The consent is granted for a period up to commissioning of the project or of 5 years whichever is earlier.

2. The proposed capital investment of the project is Rs. 140.0 Cr.
(As per C.A certificate submitted by project proponent)

The Consent to Establish is valid for construction of Residential and Commercial Construction Project named as **M/s. Advika Construction Pvt Ltd, S. No. 32/5C at Pisoli Tal: Haveli, Dist: Pune**. For total plot area of 28,000.0 Sqm and total construction built up area 54,953.37 Sqm including utilities and services as per Construction Commencement Certificate issued by local body.

3. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

Sr. No.	Description	Permitted quantity of discharge (CMD)	Standards to be achieved	Disposal
1.	**Trade effluent**	**NIL**	**NA**	**NA**
2.	Domestic effluent	388.0	As per Schedule –I	60% should be reused & recycled and remaining should be discharged in municipal sewer

4. Conditions under Air (P& CP) Act, 1981 for air emissions:

Sr. No.	Description of stack/ source	Capacity	Number Of Stack	Standards to be achieved
1	DG Set	160 KVA	1	As Per Schedule –II
2	DG Set	100 KVA	1	As Per Schedule –II

5. **Conditions under Solid Waste Management Rules, 2016:**

Sr. no.	Type Of Waste	Quantity & UoM	Treatment	Disposal
1	Wet garbage	1194.0 Kg/Day	Organics waste Converter with composting facility / Biogas digester with composting facility	Used as Manure
2	Dry garbage	512.0 Kg/Day	--	Segregate and Hand over to Local Body for recycling
3.	STP sludge	87.0 Kg/day	STP	Used as manure

6. Conditions under Hazardous and Other Wastes (M & TM) Rules, 2016 for treatment and disposal of hazardous waste; NIL.
7. The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same should be binding on the industry.
8. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.
9. Project Proponent shall comply the Construction and Demolition Waste Management Rules, 2016 which is notified by Ministry of Environment, Forest and Climate Change dtd.29/03/2016.
10. Project Proponent shall submit an affidavit in Board's prescribed format within 15 days regarding the compliance of conditions of EC/CRZ clearance and C to E.
11. Project Proponent shall install online monitoring systems for BOD, TSS and flow at the outlet of STP.
12. Project Proponent shall provide Organic waste digester with composting facility or Biogas digester with composting facility.
13. The applicant should comply with the conditions stipulated in environmental Clearance Obtained from SEIAA, Environment Department, Government of Maharashtra, dtd .18.09.2018 for total plot area 28,000.0 Sqm and total construction BUA 54,953.37 Sqm.

For and on behalf of the
Maharashtra Pollution Control Board

(E. Ravendiran, IAS)
Member Secretary

Received Consent fee of –

Sr. No.	Amount (Rs.)	Transaction . No.	Date	Drawn On
1	2,80,000/-	QIDD7500996322	02/05/2019	Online

Copy to:

1. Regional Officer, MPCB, Pune and Sub-Regional Officer, MPCB, Pune-II -- They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB, Mumbai.
3. CC/CAC desk- for record & website updating purposes.

Schedule-I

Terms & conditions for compliance of Water Pollution Control:

1) A] As per your application, you have proposed to install of Sewage Treatment Plants (**STP**) with the design capacity of **400.0 CMD**

B] The Applicant shall operate the effluent treatment plant (STP) to treat the sewage so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

Sr No.	Parameters	Standards prescribed by Board
		Limiting Concentration in mg/l, except for PH
01	**BOD (3 days 27°C)**	**10**
02	Suspended Solids	20
03	COD	50
04	Residual chlorine	1 PPM

C) The treated effluent shall be 60% recycled for secondary purposes such as toilet flushing, air conditioning, firefighting, on land for gardening etc and remaining shall be discharged in to the municipal sewerage system.

D] Project proponent shall operate STP for five years from the date of obtaining occupation certificate.

The Board reserves its rights to review plans, Specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant should obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or and extension or addition thereto

2) The industry should ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

3) The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act.

Sr. no.	**Purpose for water consumed**	**Water consumption quantity (CMD)**
1.	Domestic purpose	**463.0**

4) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time.

Schedule-II

Terms & conditions for compliance of Air Pollution Control:

1. **As per your application, you have proposed to install the Air pollution control (APC)system and also proposed to erect following stack (s) and to observe the following fuel pattern-**

Sr. No.	Stack Attached To	APC System	Height in Mtrs.	Type Of Fuel	Quantity	UOM	S%	SO_2
1.	DG Set (160 KVA)	Acoustic enclosure	3.0	HSD	30.0	Lit/Hr	--	--
2.	DG Set (100 KVA)	Acoustic enclosure	2.0	HSD	17.0	Lit/Hr	--	--

*** Above roof of the building in which it is installed.**

2. **The applicant should operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards.**

Particulate matter	Not to exceed	150 mg/Nm^3.

3. The Applicant should obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement alteration well before its life come to an end or erection of new pollution control equipment. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

Schedule-III
Details of Bank Guarantees

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	Consent to Establish	Rs. 10 lakh	15 Days	Towards Compliance of EC and consent conditions.	COU	COU

Schedule-IV

General Conditions:

The following general conditions shall apply as per the type of the industry.

1) The applicant shall provide facility for collection of samples of sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
2) The firm shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act,1981 and environmental protection Act 1986 and Solid Waste Management Rules, 2016 and E-Waste (Management) Rules, 2016.
3) Drainage system shall be provided for collection of sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No sewage shall be admitted in the pipes/sewers downstream of the terminal manholes. No sewage shall find its way other than in designed and provided collection system.
4) Vehicles hired for bringing construction material to the site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
5) Conditions for D.G. Set
   a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
   b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
   c) The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the night time. Day time is reckoned between 6 a.m. to 10 p.m and night time is reckoned between 10 p.m to 6 a.m.
   d) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
   e) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
   f) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
   g) D.G. Set shall be operated only in case of power failure.
   h) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
   i) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel.
6) Solid Waste – The applicant shall provide onsite municipal solid waste processing system & shall comply with Solid Waste Management Rules, 2016 & E-Waste (M) Rules, 2016.
7) Affidavit undertaking in respect of no change in the status of consent conditions and compliance of the consent conditions the draft can be downloaded from the official web site of the MPCB.
8) The treated sewage shall be disinfected using suitable disinfection method
9) The firm shall submit to this office, the 30th day of September every year, the environment statement report for the financial year ending 31st march in the prescribed Form-V as per the provision of rule 14 of the Environmental (Protection) Second Amended rule 1992

10) The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before commissioning of the project.

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437
Fax: 24023516
Website: http://mpcb.gov.in
Email: cac-cell@mpcb.gov.in

Kalpataru Point, 2nd, 3rd and 4th floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai-400022

Infrastructure/RED/L.S.I
No:- Format1.0/CC/UAN No.0000215093/CE/2411000448

Date: 09/11/2024

To,
M/s.Advika Construction Pvt Ltd
S.No. 32/5C, Pisoli, Tehsil- Haveli, Pune

Your Service is Our Duty

Sub: Revalidation of Consent to Establish for Residential & Commercial Construction Project.

Ref:

1. Application submitted by Sub-Regional Office, Pune-I vide UAN No. MPCB-CONSENT-0000215093
2. Previous Consent to Establish issued by Board vide Consent No. Format 1.0/BO/JD(WPC)/UAN-072356/CE/CC-1907000104 Dt. 03/07/2019
3. Environmental Clearance obtained vide no. SEIAA-EC-000000450 dated 18/09/2018
4. Minutes of the 9th Consent Committee Meeting held on 30/09/2024.

Your application NO. MPCB-CONSENT-0000215093

For: Your application No.MPCB-CONSENT-0000214560 For: grant of Consent to Establish under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization / Renewal ofAuthorization under Rule 6 of the Hazardous & Other Wastes (Management & Transboundry Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I,II,III & IV annexed to this order:

1. **The Revalidation of Consent to Establish in RED category is hereby granted for a period up to commissioning of the Project or of 05 years whichever is earlier.**
2. **The capital investment of the project is Rs.95.67 Cr. (As per undertaking submitted by pp).**
3. **1. The revalidation of Consent to Establish in RED category is hereby granted for a period up to commissioning of the Projector of 05 years whichever is earlier. 2. The capital investment of the project is Rs. 95.67 Cr. (As per undertaking submitted by PP) 3. The revalidation of Consent to Establish is valid for Residential & Commercial construction project is named as M/s.Advika Construction Pvt Ltd.,,Survey No. 32/5C,Pisoli,Haveli,Pune on Total Plot Area of 28000 Sq.Mtrs for construction BUA of 13071.35 Sq.M Revalidation of CTE area out of TBUA 34340.50 SqMtrs as per EC granted dated 18/9/2018 including utilities and services**

Sr.No	Permission Obtained	Plot Area (SqMtr)	BUA (SqMtr)
1	C to E dated 03/07/2019	28000.00	54953.37

2	Renewal of consent to operate (part-I) with amalgamation of consent to operate (Part-II) dated 09/01/2024 valid up to 30/11/2024	28000.00	21269.15
3	EC dated 18/09/2018	28000.00	34340.50

4. **Conditions under Water (P&CP), 1974 Act for discharge of effluent:**

Sr No	Description	Permitted (in CMD)	Standards to	Disposal
1.	Trade effluent	Nil	NA	NA
2.	Domestic effluent	228.95	As per Schedule - I	The treated effluent shall be 60% recycled for secondary purposes such as toilet flushing, air conditioning, cooling tower make up, firefighting etc. and remaining shall be connected to the sewerage system provided by local body

5. **Conditions under Air (P& CP) Act, 1981 for air emissions:**

Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
S-1	DG Set 100 KVA	1	As per Schedule -II

6. **Conditions under Solid Waste Rules, 2016:**

Sr No	Type Of Waste	Quantity & UoM	Treatment	Disposal
1	Wet waste	130.5 Kg/Day	OWC	Use as a manure
2	Dry waste	939.2 Kg/Day	Collect & Disposed through MPCB?CPCB Authorized agency Collect & Disposed through Authorized agency	Collect & Disposed through MPCB/CPCB Authorized agency

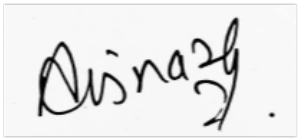
7. **Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for Collection, Segregation, Storage, Transportation, Treatment and Disposal of hazardous waste:**

Sr No	Category No.	Quantity	UoM	Treatment	Disposal
1	5.1 Used or spent oil	50	Ltr/A	Sale to MPCB/CPCB Authorized vendor	Through MPCB/CPCB Authorized Vendor

8. The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.
10. Project Proponent shall provide Organic waste digester with composting facility or biodigestor with composting facility.
11. Project Proponent shall operate the Organic waste digester with composting facility or biodigestor with composting facility effectively
12. Project Proponent shall comply the Construction and Demolition Waste Management Rules, 2016 which is notified by Ministry of Environment, Forest and Climate Change dtd.29/03/2016.
13. The project proponent shall make provision of charging of electric vehicles in atleast 40 % of total available parking area.

14. The project proponent shall take adequate measures to control dust emission and noise level during construction phase.
15. The Project Proponent shall comply with the Environmental Clearance obtained vide No.SEIAA-EC-000000450 dated 18/09/2018 for construction project having total plot area of 28000 Sqm and total construction BUA of 13071.35 Sqm as per specific condition of EC.
16. PP shall submit an affidavit in Boards prescribed format within 15 days regarding compliance of C to E & Environmental Clearance/CRZ Clearance.
17. This consent is issued as per Minutes of the 9th Consent Committee Meeting dated 30/09/2024.

This consent is issued on the basis of information/documents submitted by the Applicant/Project Proponent, if it has been observed that the information submitted by the Applicant/Project Proponent is false, misleading or fraudulent, the Board reserves its right to revoke the consent & further legal action will be initiated against the Applicant/Project Proponent.



Signed by: Dr.Avinash Dhakne
Member Secretary
For and on behalf of,
Maharashtra Pollution Control Board
ms@mpcb.gov.in
2024-11-09 15:05:44 IST

Received Consent fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	125000.00	TXN2407001819	10/07/2024	Online Payment

-

Copy to:

1. Regional Officer, MPCB, Pune and Sub-Regional Officer, MPCB, Pune I
- They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB,Sion, Mumbai

SCHEDULE-I

Terms & conditions for compliance of Water Pollution Control:

1) A] As per your application, you have proposed to provide MBBR Technology based Sewage Treatment Plants (STPs) of combined capacity **400 CMD for treatment of domestic effluent of 228.95 CMD.**

B] The Applicant shall operate the sewage treatment plant (STP) to treat the sewage so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

Sr.No	Parameters	Limiting concentration not to exceed in mg/l, except for pH
1	pH	5.5-9.0
2	BOD	10
3	COD	50
4	TSS	20
5	NH4 N	5
6	N-total	10
7	Fecal Coliform	less than 100

C] The treated domestic effluent shall be 60% recycled for secondary purposes such as toilet flushing, air conditioning, cooling tower make up, firefighting etc. and remaining shall be utilized on land for gardening and connected to the sewerage system provided by local body.

2) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or and extension or addition thereto.

3) The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

4) **The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act,1974 and as amended, and other provisions as contained in the said act.**

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	0.00
2.	Domestic purpose	266.03
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Grandening/Other consumption	0

5) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time.

SCHEDULE-II

Terms & conditions for compliance of Air Pollution Control:

1) **As per your application, you have proposed to provide the Air pollution control (APC)system and also proposed to erect following stack (s) and to observe the following fuel pattern-**

Stack No.	Source	APC System provided/proposed	Stack Height(in mtr)	Type of Fuel	Sulphur Content(in %)	Pollutant	Standard
1	DG Set	Acoustic Enclosure Stack	3.00	Diessel 30 Ltr/Hr	2	SO2	-

2) The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards.

Total Particular matter	Not to exceed	150 mg/Nm3

3) The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacemenalteration well before its life come to an end or erection of new pollution control equipment.

4) The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

5) **Conditions for utilities like Kitchen, Eating Places, Canteens:-**

a) The kitchen shall be provided with exhaust system chimney with oil catcher connected to chimney through ducting.

b) The toilet shall be provided with exhaust system connected to chimney through ducting.

c) The air conditioner shall be vibration proof and the noise shall not exceed 68 dB(A).

d) The exhaust hot air from A.C. shall be attached to Chimney at least 5 mtrs. higher than the nearest tallest building through ducting and shall discharge into open air in such a way that no nuisance is caused to neighbors.

SCHEDULE-III

Details of Bank Guarantees:

Sr. No.	Consent(C2E/C2O/C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	Consent to Establish	Rs.10 Lakhs (Existing BG mentioned in earlier C to E is Extended)	Extended period order with existing BG should be submit within 15 days after grant of this C to E	Towards compliance of EC and consent conditions	10/7/2029	10/7/2030

** The above Bank Guarantee(s) shall be submitted by the applicant in favour of Regional Officer at the respective Regional Office within 15 days of the date of issue of Consent. **# Existing BG obtained for above purpose if any may be extended for period of validity as above.**

BG Forfeiture History

Srno.	Consent (C2E/C2O/C2R)	Amount of BG imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
NA						

BG Return details

Srno.	Consent (C2E/C2O/C2R)	BG imposed	Purpose of BG	Amount of BG Returned
NA				

SCHEDULE-IV

Conditions during construction phase

A	During construction phase, applicant shall provide temporary sewage and MSW treatment and disposal facility for the staff and worker quarters.
B	During construction phase, the ambient air and noise quality shall be maintained and should be closely monitored through MoEF approved laboratory.
C	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.

General Conditions:

1 The applicant shall provide facility for collection of samples of sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.

2 The firm shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act,1981 and Environmental Protection Act 1986 and Solid Waste Management Rule 2016, Noise (Pollution and Control) Rules, 2000 and E-Waste (Management & Handling Rule 2011.

3 Drainage system shall be provided for collection of sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No sewage shall be admitted in the pipes/sewers downstream of the terminal manholes. No sewage shall find its way other than in designed and provided collection system.

4 Vehicles hired for bringing construction material to the site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.

5 Conditions for D.G. Set

a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.

b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.

c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.

d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.

e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.

f) D.G. Set shall be operated only in case of power failure.

g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.

h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.

6 Solid Waste – The applicant shall provide onsite municipal solid waste processing system & shall comply with Solid Waste Management Rule 2016 & E-Waste (M & H) Rule 2011.

7 Affidavit undertaking in respect of no change in the status of consent conditions and compliance of the consent conditions the draft can be downloaded from the official web site of the MPCB.

8 Applicant shall submit official e-mail address and any change will be duly informed to the MPCB.

9 The treated sewage shall be disinfected using suitable disinfection method.

10 The firm shall submit to this office, the 30th day of September every year, the environment statement report for the financial year ending 31st march in the prescribed Form-V as per the provision of rule 14 of the Environmental (Protection) Second Amended rule 1992.

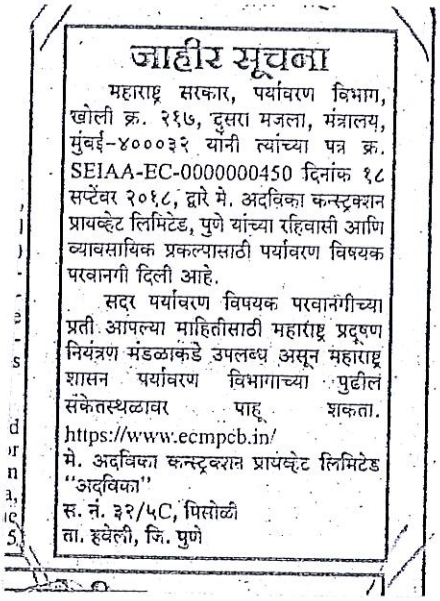
11 The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before commissioning of the project.

This certificate is digitally & electronically signed.

Advika construction - Enviironment Notice

Date - 19/05/2019

Kesari pg. No - 3



जाहीर सूचना

महाराष्ट्र सरकार, पर्यावरण विभाग, खोली क्र. २१७, दुसरा मजला, मंत्रालय, मुंबई-४०००३२ यांनी त्यांच्या पत्र क्र. SEIAA-EC-0000000450 दिनांक १८ सप्टेंबर २०१८, द्वारे मे. अदविका कन्स्ट्रक्शन प्रायव्हेट लिमिटेड, पुणे यांच्या रहिवासी आणि व्यावसायिक प्रकल्पासाठी पर्यावरण विषयक परवानगी दिली आहे.

सदर पर्यावरण विषयक परवानगीच्या प्रती आपल्या माहितीसाठी महाराष्ट्र प्रदूषण नियंत्रण मंडळाकडे उपलब्ध असून महाराष्ट्र शासन पर्यावरण विभागाच्या पुढील संकेतस्थळावर पाहू शकता.

https://www.ecmpcb.in/

मे. अदविका कन्स्ट्रक्शन प्रायव्हेट लिमिटेड
"अदविका"
स. नं. ३२/५C, पिसोळी
ता. हवेली, जि. पुणे

Saikal times pg. No - 2.

PUBLIC NOTICE

Government of Maharashtra, Environment Department, Room No. 217, 2nd Floor, Mantralaya Annexe, Mumbai 400 032 has accorded Environmental Clearance No. SEIAA-EC-0000000450, dated 18th September 2018 for Residential & Commercial Project of M/s. Advika Construction Pvt.Ltd., Pune.

Copies of the Clearance letter are available with Maharashtra Pollution Control Board & may also be seen at website of Government of Maharashtra, Department of Environment **https://www.ecmpcb.in/**

M/s. Advika Construction Pvt. Ltd. "Advika"
at S.No. 32/5C, Pisoli, Tal. Haveli, Dist. Pune.

SBI Possession Notice

भारतीय स्टेट बँक
भारतीय स्टेट बैंक
STATE BANK OF INDIA
Branch : Majalgaon

स्थापना : २/८/१९७९ ॥ अहर्निश ग्रामसेवा ॥ पुनर्स्थापना : ३०/३/२००२

ग्रामपंचायत पिसोळी

ता. हवेली, जि. पुणे. फोन : ०२० - २६९३३८५१

श्री. जे. एम. भोंग
ग्रामसेवक

श्री.गणपत शंकर दगडे
उपसरपंच

सौ. स्नेहल गणपत दगडे
सरपंच

जावक क्र.:

दिनांक : ०७/०९/२०१५

प्रति,

मे.अदविका कन्स्ट्रक्शन्स प्रा.लि.तर्फे भागीदार श्री गौतम पुरुषोत्तम बुधराणी

स.नं.३२ हि.क्र.५क

पिसोळी

विषय : स.नं.३२ हि.क्र.५ क मधील अर्जदार यांच्या गृहप्रकल्पासाठी सांडपाणी (ड्रेनेज लाईन) जोडणीबाबत.

संदर्भ : ग्रा.पं.मासिक सभा दि.११/१२/२०१४ ठराव क्र.७३/३ नुसार

महोदय,

उपरोक्त विषयांस अनुसरुन आपणांस कळविण्यात येते कि आपला नविन गृहप्रकल्प पिसोळी येथिल स.नं.३२ हि.क्र.५ क मध्ये असुन सदर गृहप्रकल्पातील ३४.०२ m3 प्रतिदिन सांडपाणी संपुर्ण गृहप्रकल्पाचे बांधकाम पुर्ण झाल्यानंतर व सदरच्या गृहप्रकल्पाची ग्रामपंचायत दप्तरी कर आकारणी झाल्यानंतरच ग्रामंचायतीची परवानगी घेऊन ग्रामपंचायतीच्या मुख्य ड्रेनेज लाईन ला स्वखर्चाने जोडण्यास ग्रामपंचायतीची काहीही हरकत नाही.

सरपंच
ग्रामपंचायत पिसोळी
ता.हवेली.जि.पुणे

स्थापना : २/८/१९७९ ॥ अहर्निश ग्रामसेवा ॥ पुनर्स्थापना : ३०/३/२००२

ग्रामपंचायत पिसोळी

ता. हवेली, जि. पुणे. फोन : ०२० - २६९३३८५१

श्री. जे. एम. भोंग
ग्रामसेवक

श्री.गणपत शंकर दगडे
उपसरपंच

सौ. स्नेहल गणपत दगडे
सरपंच

जावक क्र.:

दिनांक : ०७/०९/२०१५

प्रति,

मे.अदविका कन्स्ट्रक्शन्स प्रा.लि.तर्फे भागीदार श्री गौतम पुरुषोत्तम बुधराणी

स.नं.३२ हि.क्र.५क

पिसोळी

विषय : स.नं.३२ हि.क्र. ५ क मधील अर्जदार यांच्या गृहप्रकल्पासाठी पाणीपुरवठा जोडणीबाबत.

संदर्भ : ग्रा.पं.मासिक सभा दि. ११/१२/२०१४ ठराव क्र.७३/३ नुसार

महोदय,

उपरोक्त विषयांस अनुसरुन आपणांस कळविण्यात येते कि आपला नविन गृहप्रकल्प पिसोळी येथिल स.नं.३२ हि.क्र.५क मध्ये असुन सदर गृहप्रकल्पासाठी प्रतिदिन लागणारे ३७.८ m3 पाणी संपुर्ण गृहप्रकल्पाचे बांधकाम पुर्ण झाल्यानंतर व सदरच्या गृहप्रकल्पाची ग्रामपंचायत दप्तरी कर आकारणी झाल्यानंतर ग्रामपंचायतीची परवानगी घेऊन पिसोळी ग्रामपंचायतीकडुन पाणी पुरविले जाईल.

सरपंच
ग्रामपंचायत पिसोळी
ता.हवेली.जि.पुणे

PROCESS DESCRIPTION

TREATMENT PLANT DESCRIPTION

Sewage Treatment Plant is proposed to treat 350,000 liters per day waste water. Sewage Treatment Plant is designed to meet the regulatory norms of Maharashtra government consistently and efficiently.

The process design involves Physico-chemical, Biological and Tertiary treatment processes.

PHYSICAL PROCESS

Bar screen chamber, Oil & Grease removal tank, Equalization tank, Anoxic Tank

BIOLOGICAL PROCESS

Aeration Tank, Secondary Clarifier

TERTIARY PROCESS

Pressure Sand Filter & Carbon Filter

PRIMARY/PRELIMINARY TREATMENT

PHYSIOCHEMICAL PROCESS

BAR SCREEN CHAMBER

First unit of proposed STP is Inlet chamber. In this tank, Bar Screen is provided, where floatable solid materials shall be separated and removed manually with the help of screen. Screen is provided in this tank. Overflow from screen chamber is collected in Oil & Grease Removal tank.

OIL & GREASE REMOVAL TANK

Gravity from Bar Screen chamber to Oil & Grease removal tank where oil & grease shall be removed manually. Over flow from this unit is collected in Equalization tank.

EQUALIZATION TANK

At Equalization tank, Jet Aerator is provided to mix and maintain homogenous effluent. With the help of raw Sewage pump, Sewage transferred to biological treatment system i.e., Aeration Tank.

SECONDARY TREATMENT

3.2.0 BIOLOGICAL PROCESS

Secondary treatment is the biological degradation of organic material. This process converts the organic pollutant in to harmless by-product with the help of aerobic microorganisms.

SECONDARY TREATMENT INVOLVES FOLLOWING PROCESSES

SECONDARY TREATMENT INVOLVES FOLLOWING PROCESSES

It consists of following units

- **I.** Anoxic Tank
- **II.** Aeration Tank
- **III.** Secondary clarifier

ANOXIC TANK

Anoxic processes are typically used for the removal of nitrogen from wastewater. The process of biological nitrogen removal is known as denitrification. Denitrification requires that nitrogen be first converted to nitrate, which typically occurs in an aerobic treatment process such as a trickling filter or aerated suspended growth system. The nitrified water is then exposed to an environment without free oxygen. Organisms in this anoxic system use the nitrate as an electron acceptor and release nitrogen in the form of nitrogen gas or nitrogen oxides. A readily biodegradable carbon source is also needed for efficient denitrification processes to occur. It should be noted that sulfate can also be used as an electron acceptor, resulting in the formation of hydrogen sulfide.

ACTIVATED SLUDGE PROCESS

The activated-sludge process is a biological method of waste water treatment that is performed by a variable and mixed community of microorganisms in an aerobic aquatic environment. These microorganisms derive energy from carbonaceous organic matter in aerated waste water for the production of new cells in a process known as synthesis, while simultaneously releasing energy through the conversion of this organic matter into compounds that contain lower energy, such as carbon dioxide and water, in a process called respiration. As well, a variable number of microorganisms in the system obtain energy by converting ammonia nitrogen to nitrate nitrogen in a process termed nitrification. This consortium by microorganisms, the biological component of the process, is known collectively as activated sludge.

The overall goal of the activated-sludge process is to remove substances that have a demand for oxygen from the system. This is accomplished by the metabolic reactions (synthesis-respiration and nitrification) of the microorganisms, the separation and settling of activated-sludge solids to create an acceptable quality of secondary waste water effluent, and the collection and recycling of microorganisms back into the system or removal of excess microorganisms from the system.

The activated-sludge process is depending up on establishing a mixed community of microorganisms that will remove and consume organic waste material, that will aggregate and a concentrated sludge (return activated sludge, or RAS) for recycling.

Activated Sludge process (ASP) system comprises of aeration tank followed by secondary clarifier. These process descriptions are as follows-

AERATION TANK

In Aeration tank organic load as BOD shall be degraded by the help of cultivated microbial culture. Constant Mixed Liquor Suspended Solids (MLSS) will be maintained in aeration tank in definite proportions by recycling the bio sludge trapped by the secondary clarifier. At aeration tank jet aerators is provided to supply oxygen to micro organisms. Jet Aerators are provided to supply the required air to nutrients as Nitrogen and phosphorous shall be added manually to effluent at aeration tank at the ratio of BOD: N: P as 100:5:1.

Over flow from aeration tank collected to second

ary clarifier.

SECONDARY CLARIFIER

Secondary clarifier separates solids from liquids through the process of gravity sedimentation. The mixed liquor from the solids contact basins flow in to the secondary clarifier tanks through a vertical inlet pipe. It serves as a stilling basin that promotes flocculation and settling of solids. As flow enters the relatively large volume in the clarifier is designed to promote the settling of solids to the bottom of the tank while allowing the clarified liquid to flow over a weir at the perimeter of the tank. Recycling of bio-sludge from secondary clarifier will be done by sludge recirculation pumps .

SLUDGE TREATMENT

Sludge from Secondary Settling tank shall be send to Sludge drying beds . Dewatered and dried sludge cakes shall be used as good manure or for secured land filling.

TERTIARY TREATMENT

TERTIARY TREATMENT SYSTEM

The tertiary treatment system consists of Pressure Sand Filter followed by Activated Carbon filter

PRESSURE SAND FILTER

The treated Sewage is pumped to Multi grade Filter to remove suspended particles, turbidity. Multi grade filter is in MS-EP construction with top and bottom dished ends. Operation of the Multi grade filter is Manual.

ACTIVATED CARBON FILTER

The filtered Sewage from sand filter is then taken into Activated Carbon Filter to remove the organics, odor present in the water. Activated Carbon filter is in MS-EP construction with top and bottom dished ends. Operation of the Activated Carbon filter is manual.

STARTUP & SHUT DOWN PROCEDURE

1.0 PLANT START-UP

The various units of Sewage Treatment Plant have been designed for maximum efficiency with certain flow ranges and Sewage characteristics. Close co-ordination and control in operation of different units are required within the limits of design. Efficient plant operation can be done only when the operator is fully conversant with the equipment and function of each unit.

1.1 PLANT START UP WITH RESPECT OF EACH UNIT

Before starting the plant check each unit as per following instruction:

1.1.1 BAR SCREEN CHAMBER

Inspect the screen chamber for cleanliness before the Sewage is let in. In case of any particulate matter found cleaning should be carried out. The bar screen should be fixed in the correct slot and should be rust free.

1.1.2 OIL & GREASE TANK

Inspect the tank for cleanliness and make sure the connections to the oil scrapper mechanism are correct. When the tank is empty operate the scrapper and check for direction of movement and scrapping. It should be made sure that the scrapper stops at the designated level which means the level switches are functioning properly.

1.1.3 EQUALIZATION TANK

Inspect the tank for cleanliness. Keep the discharge valve and bypass valve of blower open. Start, run and check the blower in no load condition. If any, abnormal sound is heard stop the blower and rectify the problem. When this process is completed Sewage can be taken till the equalization tank. Once the Sewage starts filling inside keep running the blowers continuously.

1.1.4 AERATION TANK

The process of activated sludge is done here. Keep the discharge valve and bypass valve of blower open. Start, run and check the blowers in no load condition. If any, abnormal sound is heard stop the blowers and rectify the problem. Check the nutrient dosing system for proper functioning. After all inspection aeration tank can be checked for on loading testing

1.1.5 SECONDARY CLARIFIER

Inspect the tank for cleanliness and make sure the connections to the secondary Clarifier Tank are correct. Make sure the clarifier mechanism is fixed properly. When the tank is empty operate the secondary clarifier check for direction. Check the sludge recycling pumps for proper functioning. Keep the discharge valve and bypass valve of sludge recycling pumps open. Make sure the pressure gauge is fixed properly and condition is good. Check the sludge pipelines and the sludge recycling pipelines are cleaned and fixed properly.

1.1.6 CLEAR WATER TANK

This tank is used to store the clear treated water from SST. Check the chlorine dosing pump for proper functioning. It should be made sure that the sludge recycling pumps are functioning properly.

1.1.7 SLUDGE DRYING BEDS

The process of sludge dewatering is done here. Visually inspect the sludge drying beds are cleaned. Make sure the filtrate transferring pipelines are connected properly and free of debris.

6.2 START UP PROCEDURE AFTER SHORT SHUT DOWN

1. Start to take the Sewage into bar screen chamber.
2. Start all equipments, pumps and blowers.

6.3 START UP PROCEDURE AFTER LONG SHUT DOWN

1. Start to take the Sewage into bar screen chamber.
2. Start all equipments, pumps and instruments as per their operating procedure.
3. Start the oil Scraper mechanism.
4. Start the Air of equalization tank, aeration tank clear water as per standard operating procedure.
5. Slowly start Feeding in Aeration tank according to the procedure.
6. Start the secondary settling tank
7. Start chemical analysis of STP process.

6.4 PRE - COMMISSIONING TESTS

Before a new plant is under operation it is necessary that all operation and maintenance personnel understand the function and location of each process unit mechanical equipment and piping. Following checkups should be made before the commissioning of the Sewage treatment plant

- All the mechanical equipments are tested and are in good working condition, properly lubricated.
- All the tanks and piping are clean and free of debris.
- All the process units and mechanical Equipments should be tested with water for the normal operation of each unit and hydraulic system. Only after this, waste water should be introduced to the system.
- All the lights, meters, indicators, etc. are operational.
- Check all lines for leaks, any repairs needed are easier to make before waste water is added.

6.4.1 PLANT START UP (MECHANICAL)

Before starting the plant on full load, it is essential that mechanical performance of the equipment has to be established to ensure their proper functioning, and to achieve these following steps should be observed.

6.4.2 NO LOAD RUN OF MOTORS (TESTING)

This is required to be carried out to ensure that the motors are running smoothly without any problems. To carry this out, disconnect the coupling pins/valves from the driven equipment. Then the motors are kick started and stopped to observe their direction of rotation. If this is not as required then the terminal box is opened to reverse the phase connections. The motors should then be run on load for 2 to 4 hours depending on their ratings. Normally it is sufficient for motors to run no - load for 4 hours to show up problems if any. During this run, one should observe no load current of motors, vibrations, noise and bearing temperature for signs of any defects. In case one feels that all these are within limits, then motors are coupled with driven equipments for further step. Otherwise possible causes for defects should be found out and rectified as given in Motor Manuals.

6.4.3 ON LOAD TRAIL (WITH CLEAR WATER)

Normally an Sewage density is equal as water density, so it is required to run all equipments on clear water for sufficient time to prove the adequacy of mechanical equipments. All tanks in which equipments are supposed to run on load are filled up with clear water and properly tested.

6.5 STARTUP PROCEDURE FOR BIOLOGICAL SYSTEM

As the Sewage does not contain organisms to stabilize the Organics present in the Sewage it is necessary to develop sufficient microbial mass or activated sludge in the aeration tank.

Before starting the plant check that all the mechanical equipment are in good condition lubricated and all piping free of debris.

It is preferable to start the process with waste sludge from any nearby treatment plant. In the absence of such sludge the process can be start with properly prepared cow dung solution. Addition of sewage directly also help the process.

6.5.1 CHEMICAL REQUIRED FOR COMMISSIONING PROCESS

S. No.	Chemical Name	Quantity
1.	Urea	200 Kg.
2.	DAP	50 Kg.

6.5.2 AERATION SYSTEM

- Aeration Tank Fill with fresh water up to One Meter and check the air destitution.
- Start aeration with blowers to maintain dissolved oxygen in the mixed liquor between 1.5 – 2.5 mg / lit.
- Add sufficient culture (Sewage water)
- Keep running the blowers for 6 to 7 days. Do not add anything check the condition of culture growth.
- Slowly feed the Sewage from 5 % to increase gradually to 100 %.
- Check and maintain MLSS regularly.
- Continuous returning the entire sludge until the MLSS concentration reached desired level.
- Jet Aerators should run continuously and after maintaining required MLSS in the tank the excess Sludge should be pumped out to sludge drying beds.

6.6 PLANT SHUT DOWN

In case plant need to be shut down for a considerable period of time, close inlet valve to plant and open by pass valve thus Sewage will not be received in the plant. Pump out Sewage s from bar screen chamber and equalization tank. Open drain valves of tanks and drain out the Sewage from tanks. Clean the equipments with clear water.

6.6.1 IF PLANT NEED TO BE SHUT DOWN FOR A SHORT PERIOD OF TIME

- Stop the feeding of influent to the plant.
- Stop all agitators, motors and other equipments connected to the plant.

6.6.2 IF PLANT NEED TO BE SHUT DOWN FOR A LONG PERIOD OF TIME

- Stop the feeding of influent to the plant.
- Stop all agitators, motors and other equipments connected to the plant.
- Slowly starts drain the liquid from tanks.
- After dewatering the tanks clean all the tanks.
- After cleaning fill the aeration tank with water.
- Store the active sludge in sludge pit for reuse at the time of stabilization.
- Arrange all safety precautions, fire fighting facilities, gas mask, medical facilities, first aid boxes, doctor on call, during maintenance period for biogas plant.
- Remove / disconnect electrical connections / cables from all agitators, pumps, blowers etc on STP plant and ensure that no electrical connection / continuity are available to the reactor body.
- Reactor body should be properly earthed before starting any welding work on reactor.
- Mark the area to be repaired. Carry out visual inspection for defects. Take notes and keep written record of type, size, for length, area, location of defect and make detailed plan for replacement/ repair to the defected area / part.
- Consult original drawings / design before starting any repair. Do not carry out any structural changes without consulting concern persons.
- Prepare detailed scheme for cutting, welding, v – preparation, replacement plate preparation etc. before doing any repairs. Use material, electrodes, plates, and structures identical to original material only, for repairs / replacement.
- Carry out necessary inspections like x-ray, magnetic particle test, dye- penetration test, etc to ensure good quality of welding work.
- Entire maintenance work should be carried out under supervision of competent maintenance engineer.
- Hydraulic testing should be carried out as per usual practice after completion of work.
- Restarting of the plant should be done as per usual / standard procedure after successful hydraulic test.
- If defect is still noticed during hydraulic test, it must be rectified before restarting the plant. Above-mentioned total procedure should be followed for repairing of defects.

- General standard and safe engineering practices should be used during total maintenance/ repair work. Above-mentioned details/ procedures are for general guidelines.
- Contact equipment manufacturers for any further details about operation / maintenance on STP plant and in case of doubts.

6.6.3 EMERGENCY SHUT DOWN DUE TO POWER FAILURE

- Restart the plant as per procedure when power available.

6.6.4 EMERGENCY SHUT DOWN DUE TO EQUIPMENT/INSTRUMENT FAILURE

- Check and analyze the problem related to equipment/instrument.
- Check for expected shut down period & follow the instruction according to short or long shut down procedure mentioned in this manual.

FILTERS-OPERATING INSTRUCTIONS

PRESSURE SAND FILTER (PSF):

1. **START UP**: OPEN V1 AND V5 TILL WATER STARTS COMING OUT THROUGH V5. THIS IS TO REMOVE ANY AIR TRAPPED IN THE SYSTEM.

2. **RINSE**: CLOSE V5 AND OPEN V6. NOW THE VESSEL IS GETTING RINSED. CHECK FOR THE PARAMETERS AND ONCE ATTAINED THE UNIT CAN BE PUT INTO SERVICE.

3. **SERVICE**: CLOSE V6. OPEN V1 AND V2 WITH ALL OTHER VALVES CLOSED. NOW THE UNIT IS IN SERVICE.

4. **BACKWASH**: OPEN V3 AND V4. KEEP THIS OPERATION TILL CLEAR WATER COMES OUT.

ACTIVATED CARBON FILTER (ACF):

1. ENSURE PSF IS IN SERVICE.

2. **START UP**: OPEN V1 AND V5 TILL WATER STARTS COMING OUT THROUGH V5. THIS IS TO REMOVE ANY AIR TRAPPED IN THE SYSTEM.

3. **RINSE**: CLOSE V5 AND OPEN V6. NOW THE VESSEL IS GETTING RINSED. CHECK FOR THE PARAMETERS AND ONCE ATTAINED THE UNIT CAN BE PUT INTO SERVICE.

4. **SERVICE**: CLOSE V6. OPEN V1 AND V2 WITH ALL OTHER VALVES CLOSED. NOW THE UNIT IS IN SERVICE.

5. **BACKWASH**: OPEN V3 AND V4. KEEP THIS OPERATION TILL CLEAR WATER COMES OUT.

PREPARATION OF ALUM & SODIUM HYPOCHLORIDE SOLUTIONS:

1) SODIUM HYPO CHLORIDE:

Generally 10% Solution Is Available In The Market. This Has To Be Made Into 5% Solution For

CHECKLIST FOR STP

CHECK LIST FOR STP

12.1 DAILY CHECK LIST

1. Hand cleaned screens should be cleaned to prevent backing up of sewage.
2. Screen chambers should be hosed at least once a day to keep them clean.
3. Check the motor motors for noise and temperature etc.
4. Check lubricant/cool oil in oil cups of pumps and gear boxes.
5. Remove grit from the grit chamber manually after bypassing one unit at a time.
6. Check whether flow is without any obstruction and Sewage is flowing properly.
7. If agitators are provided, check motor, and gear boxes for lubrication, vibration and noise. The motor should not get heated during continuous operation.
8. Ensure that distribution chamber of secondary settling tank is free of debris.
9. Check and Adjust the return sludge to aeration tank as per the desired concentration.
10. Floating materials collecting on the surface of primary sedimentation tanks and oil and grease removal chambers are removed by skimming devices operated devices operated mechanically. Where such mechanical skimmers are not provided, manual removal at least once a day is recommended. In mechanical skimming devices the skimmer brush tips the scum into a scum trough discharging into a sludge sump, from where it is pumped along with the sludge.
11. Sludge removal should be sufficiently frequent to avoid development of septic conditions. Sludge is removed continuously in some plants and 2 to 4 times a day in others.
12. Check the Inlet and outlet pressure of Sand and Carbon filters every day.
13. Do back wash and Rinse the DMF and Carbon Filter every day.
14. Do all necessary chemical analysis for smooth operation of treatment plant.
15. Record the chemical consumption every day.
16. Daily record of operations should be maintained to show frequency of cleaning, volume of wet screen removed and power consumption for mechanically operated screens. Besides, record should also be made of time settings between strokes for mechanically operated screens.

12.2 WEEKLY CHECK LIST

1. Once a week check the start and stop buttons of Motors.
2. Sedimentation tanks Inlet and Outlet channels should be kept clean and hosed at least once a week.
3. All baffles should be cleaned of any sticky material and stringy growths on the surface and edges.
4. The skimmer device of Oil and grease removal chamber should be inspected periodically and moving parts lubricated.
5. Where cathodic protection devices using impressed current are provided, the strength of protective current should be checked.
6. Check the oil in Temperature measuring devices or gauges.
7. Check pump gland leakages and arrest more leakages.

12.3 MONTHLY CHECK LIST

1. Check the each individual treatment system performance data sheet and efficiency.
2. Calculate the monthly chemical consumption.
3. Clean the electrical panel Board with vacuum cleaner.
4. Calculate the monthly power consumption of Treatment plant.
5. Motors should be checked periodically for overload conditions and electric wirings for proper insulation.

8.0 STAFF REQUIREMENT

S. No.	Required Staff	Required Number
1.	Plant Supervisor	1 No. (in general shift)
2.	Chemist	1 No. (in general shift)
3.	Operators	4 Nos. (3 Nos. in shift + 1No. Reliever)

13.1 DUTIES OF CHEMIST

1. Collect daily samples of inlet and outlet Sewage water. Collect these two important samples at the interval of two hours for 24 hours and make composite sample for analysis.
2. Collect samples of Treated Sewage , Return sludge, mixed liquor from Bio-Reactor & Membrane Tank.
3. Carry out daily analysis as indicated below-

Parameters	Oil & Fat Removal Tank	Equalization Tank		Aeration Tank	Secondary Settling Tank	
	Within	Inlet	outlet	within	Inlet	outlet
pH	√			√		√
TSS						√
COD	√		√	√		√
BOD	√		√	√		√
MLSS				√		
MLVSS				√		
Oil & Grease	√					√
Turbidity	√					√

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TEST REPORT

Report No:	**EHSM/2024/Nov/R-467**	**Issue Date**	**20/11/2024**
Name and Address of Customer	**Proposed development project at S.No. 32/5C, Pisoli, Tehsil- Haveli, Pune by M/s. Advika Construction Pvt Ltd**		
Sample Name	Air	**Sample Description**	Ambient Air
Date of Sampling	12/11/2024	**Sampling duration**	1440 Min
Sampling Location	**Near Main Gate**	**Sampling Procedure**	CPCB Guideline for measurement of Ambient Air pollutants Volume I
Dry bulb temperature	30^0C	**Wet bulb temperature**	27^0C
Relative Humidity	70%	**Sampling done by**	EHS Matrix Pvt Ltd, Pune
Start Date of Analysis	14/11/2024	**End Date of Analysis**	20/11/2024

Results

Sr. No.	Parameters	Results	Unit(s)	Specifications (NAAQ Standards)	Methods
1	Sulphur Dioxide (SO_2)	24.2	µg/m^3	≤ 80	IS 5182 (Part 2)
2	Oxides of Nitrogen (NO_2)	32.7	µg/m^3	≤ 80	IS 5182 (Part 6)
3	Particulate Matter PM_{10}	69.9	µg/m^3	≤ 100	CPCB Guideline for measurement of Ambient Air pollutants Volume I
4	Particulate Matter $PM_{2.5}$	34.5	µg/m^3	≤ 60	
5	Carbon Monoxide (CO)	1.4	mg/m^3	≤ 04	

Remark- All above results is within National Ambient Air Quality Standards.

EHS Matrix Pvt. Ltd. PUNE

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TEST REPORT

Report No:	**EHSM/2024/Nov/R-468**	**Issue Date**	**20/11/2024**
Name and Address of Customer	**Proposed development project at S.No. 32/5C, Pisoli, Tehsil- Haveli, Pune by M/s. Advika Construction Pvt Ltd**		
Sample Name	Air	**Sample Description**	Ambient Air
Date of Sampling	12/11/2024	**Sampling duration**	1440 Min
Sampling Location	**Near DG Set**	**Sampling Procedure**	CPCB Guideline for measurement of Ambient Air pollutants Volume I
Dry bulb temperature	30^0C	**Wet bulb temperature**	27^0C
Relative Humidity	70%	**Sampling done by**	EHS Matrix Pvt Ltd, Pune
Start Date of Analysis	14/11/2024	**End Date of Analysis**	20/11/2024

Results

Sr. No.	Parameters	Results	Unit(s)	Specifications (NAAQ Standards)	Methods
1	Sulphur Dioxide (SO_2)	26.6	µg/m^3	≤ 80	IS 5182 (Part 2)
2	Oxides of Nitrogen (NO_2)	36.4	µg/m^3	≤ 80	IS 5182 (Part 6)
3	Particulate Matter PM_{10}	69.2	µg/m^3	≤ 100	CPCB Guideline for measurement of Ambient Air pollutants Volume I
4	Particulate Matter $PM_{2.5}$	30.5	µg/m^3	≤ 60	
5	Carbon Monoxide (CO)	1.3	mg/m^3	≤ 04	

Remark- All above results is within National Ambient Air Quality Standards.

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TEST REPORT

Report No:	**EHSM/2024/Nov/R-469**	**Issue Date**	**20/11/2024**
Name and Address of Customer	**Proposed development project at S.No. 32/5C, Pisoli, Tehsil- Haveli, Pune by M/s. Advika Construction Pvt Ltd**		
Sample Name	Air	**Sample Description**	Ambient Air
Date of Sampling	12/11/2024	**Sampling duration**	1440 Min
Sampling Location	**Near Construction Site**	**Sampling Procedure**	CPCB Guideline for measurement of Ambient Air pollutants Volume I
Dry bulb temperature	30^0C	**Wet bulb temperature**	26^0C
Relative Humidity	70%	**Sampling done by**	EHS Matrix Pvt Ltd, Pune
Start Date of Analysis	14/11/2024	**End Date of Analysis**	20/11/2024

Results

Sr. No.	Parameters	Results	Unit(s)	Specifications (NAAQ Standards)	Methods
1	Sulphur Dioxide (SO_2)	28.5	µg/m^3	≤ 80	IS 5182 (Part 2)
2	Oxides of Nitrogen (NO_2)	34.1	µg/m^3	≤ 80	IS 5182 (Part 6)
3	Particulate Matter PM_{10}	71.2	µg/m^3	≤ 100	CPCB Guideline for measurement of Ambient Air pollutants Volume I
4	Particulate Matter $PM_{2.5}$	31.4	µg/m^3	≤ 60	
5	Carbon Monoxide (CO)	1.4	mg/m^3	≤ 04	

Remark- All above results is within National Ambient Air Quality Standards.

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TEST REPORT

Report No:	**EHSM/2024/Nov/R-470**	**Issue Date**	**20/11/2024**
Name and Address of Customer	**Proposed development project at S.No. 32/5C, Pisoli, Tehsil- Haveli, Pune by M/s. Advika Construction Pvt Ltd**		
Sample Name	Noise	**Sample Description**	Ambient Noise
Date of Sampling	12/11/2024	**Sampling duration**	Spot Time
Sampling done by	EHS Matrix Pvt Ltd, Pune		

Results

Sr. No.	Locations	Results dB(A) Day	Results dB(A) Night	Specifications (CPCB Standards dB(A)	Method
1	Near Main Gate	50.6	38.0	55/45	CPCB Guideline
2	Near DG Set	52.8	42.2		
3	Near Construction Site	51.0	41.8		

Remark-

- All above Noise level results are within Central Pollution Control Board Standards limit.
- Day/Night -55/45 dB.

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TEST REPORT

Report No:	**EHSM/2024/Nov/R-471**	**Issue Date**	**20/11/2024**
Name and Address of Customer	**Proposed development project at S.No. 32/5C, Pisoli, Tehsil- Haveli, Pune by M/s. Advika Construction Pvt Ltd**		
Sample Name	Soil	**Sample Description**	Soil
Date of Sampling	12/11/2024	**Sampling Time**	12:20 PM
Sampling Location	**At Construction site**	**Sampling Procedure**	--
Sampling done by	EHS Matrix Pvt Ltd, Pune	**Sample Quantity**	01 Kg
Start Date of Analysis	14/11/2024	**End Date of Analysis**	20/11/2024

Results

Sr. No.	Parameters	Results	Unit(s)	Methods
1	Soil Texture			Manual Of Soil Testing
	a) Sand	30	%	
	b) Silt	22	%	
	c) Clay	48	%	
2	pH at 25^{0}C	7.32	--	IS 2720(Part 26) 1987
3	EC at 25^{0}C	268.0	µS/cm	IS 14767 : 2000
4	Moisture Content	1.6	%	Manual Of Soil Testing
5	Organic Matter	2.5	%	IS 2720(Part 22) 1972
6	Cation Exchange Capacity	0.65	meq/100g	IS 2720(Part 22) 1972
7	Potassium (as K)	165.0	mg/Kg	Manual Of Soil Testing
8	Available Phosphorus	55.0	mg/Kg	Manual Of Soil Testing
9	Available Nitrogen	71.2	mg/Kg	Manual Of Soil Testing
10	Water Holding	48.0	%	Manual Of Soil Testing
11	Calcium (as Ca)	41.0	mg/Kg	Manual Of Soil Testing
12	Magnesium (as Mg)	20.0	mg/Kg	Manual Of Soil Testing
13	Lead (as Pb)	<1.0	mg/Kg	Manual Of Soil Testing
14	Copper (as Cu)	<1.0	mg/Kg	Manual Of Soil Testing
15	Zinc (as Zn)	<1.0	mg/Kg	Manual Of Soil Testing
16	Cadmium (as Cd)	<1.0	mg/kg	Manual Of Soil Testing
17	Iron (as Fe)	2.5	mg/Kg	Manual Of Soil Testing
18	Manganese (as Mn)	4.3	mg/Kg	Manual Of Soil Testing

Remark-

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TEST REPORT

Report No:	**EHSM/2024/Nov/R-472**	**Issue Date**	**20/11/2024**
Name and Address of Customer	**Proposed development project at S.No. 32/5C, Pisoli, Tehsil- Haveli, Pune by M/s. Advika Construction Pvt Ltd**		
Sample Name	Water	**Sample Description**	**Labour Drinking Water**
Date of Sampling	12/11/2024	**Sampling Time**	11.30 AM
Sampling Location	-	**Sampling Procedure**	APHA 1060
Sampling done by	EHS Matrix Pvt Ltd, Pune	**Sample Quantity**	02 L
Start Date of Analysis	14/11/2024	**End Date of Analysis**	20/11/2024

Results

Sr. No.	Parameters	Results	Unit(s)	Specifications (IS 10500:2012)	Methods
1	pH at 25^0C	7.33	--	6.5 to 8.5	APHA 4500 H+ A, 23rd Ed.2017
2	EC at 25^0C	141	µS/cm	--	APHA 2510 B, 23rd Ed.2017
3	Total Dissolved Solids TDS	93.0	mg/L	<500	APHA 2540 C, 23rd Ed.2017
4	Total Hardness (as $CaCO_3$)	35.0	mg/L	<200	IS 3025 (Part 21):2009
5	Total Alkalinity (as $CaCO_3$)	24.0	mg/L	<200	IS 3025 (Part 23):1986
6	Sulphate (as SO_4)	<5.0	mg/L	<200	IS 3025 (Part 24):1986
7	Chloride (as Cl)	20.0	mg/L	<250	APHA 4500 Cl 23rd Ed.2017
8	Calcium (as Ca)	15.0	mg/L	<75	IS 3025 (Part 40) 1991
9	Magnesium (as Mg)	6.6	mg/L	<30	IS 3025 (Part 46) 1994
10	Total Coliform	Absent	MPN/100ml	<2	IS 1622:1981
11	E.coli	Absent	MPN/100ml	<2	IS 1622:1981

- **Remark- The above water sample is Comply with required limit as per 10500:2012.**
  For Total Coliform & *E.coli*. <2 can be consider as Zero [Refer IS: 1622 (R.A.1996), Table No.-4].

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