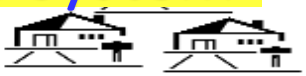
PILOT PROJECT
FAECAL SLUDGE TREATMENT PLANT (FSTP) – 75 KLD

NALGONDA MUNICIPALITY

Nalgonda District

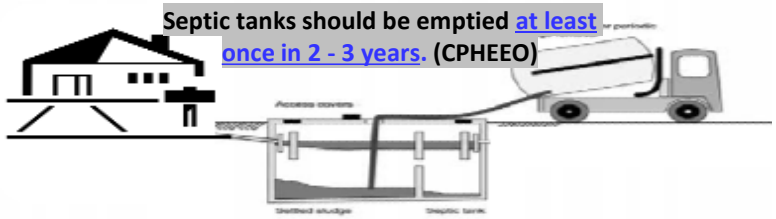
B. Sharath Chandra
Municipal Commissioner

Sewage System

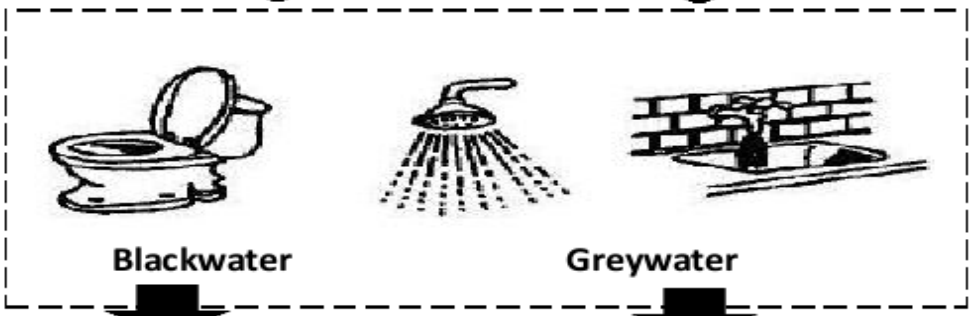


Residential

Commercial/ Institutional



Septic tanks should be emptied at least once in 2 - 3 years. (CPHEEO)



Disposal from on-site containments

Sewerage network/ Strom water drain

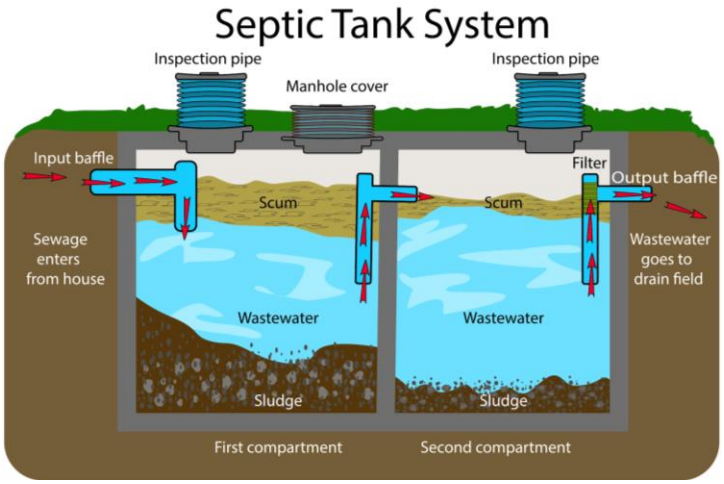
Sanitation is not just about toilets but about the Whole Value chain.

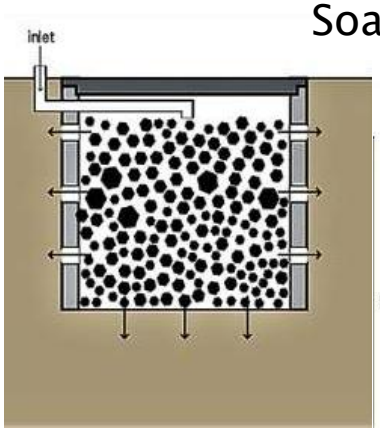
User Interface	Containment	Collection & Conveyance	Treatment	Reuse
• Individual Toilets • Public Toilets • Community Toilets	• Septic Tanks • Single Pits • Twin Pits • Masons	• Manual Scavengers • Desludging Operators • Vehicle Manufacturers	• Centralised/ Decentralised STPs • Operators	• Farmers • Agri-input Retailers

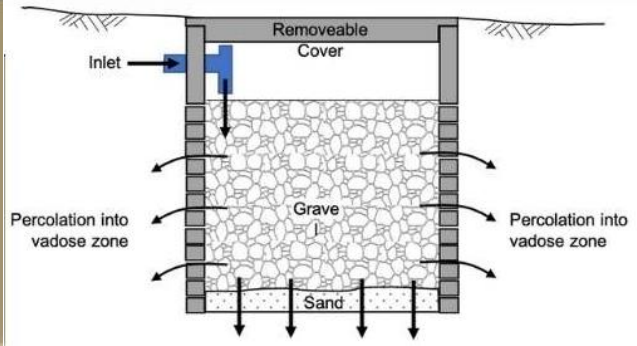
Actions:

- SBM, CSR
- Regular Maintenance
- Better Trucks system
- FSTP @ Nalgonda In Strong Demand
- Treated Waste water is reused for Domestic Purpose (ie; Plantation)

On-site Sanitation Systems







- ✓ Septic tanks should be emptied at least once in 2 - 3 years. (CPHEEO Manual on Sewerage and Sewage Treatment Systems Part A Engineering in Chapter 9)
- ✓ Emptying is best done by using a Motorized Emptying (Septic Tanker), but Manual Emptying is haphazard because sludge from a septic tank includes fresh sludge and presents a risk of transmission of diseases of faecal origin.
- ✓ The faecal sludge needs to be dehydrated and further treated in septic tanks.
- ✓ Regular de-sludging activities require well-organized community or public/private service provider (Desludging Operators).

What is the current practice of Feacal Sludge Disposal?

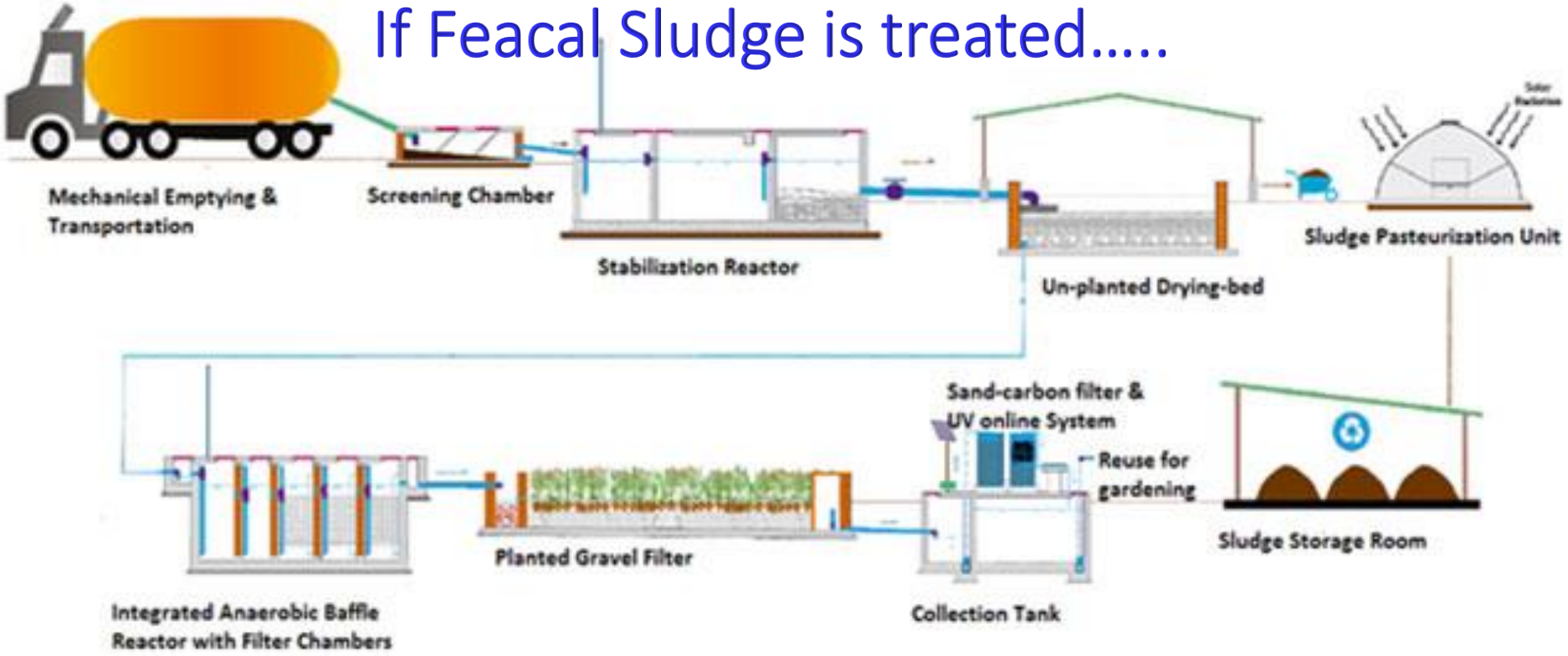
Farm lands

- ✓ Heavy concentration of nutrients – **Affects plant growth**
- ✓ High risk of Faecal oral contamination - **Households living near farmlands**
- ✓ Transmission through **surface runoff**
- ✓ No single point source for disposal – **Regulatory difficulties**

Water bodies

- ✓ High Risk hazard – **Faecal oral contamination**
- ✓ Out break of **diseases across population**
- ✓ Eutrophication of water bodies – **Impact of flora and fauna and usage of water**
- ✓ Frothing of water bodies – **unpleasant smell and visual**

If Feacal Sludge is treated…..



FSTP–75 KLD @ NALGONDA

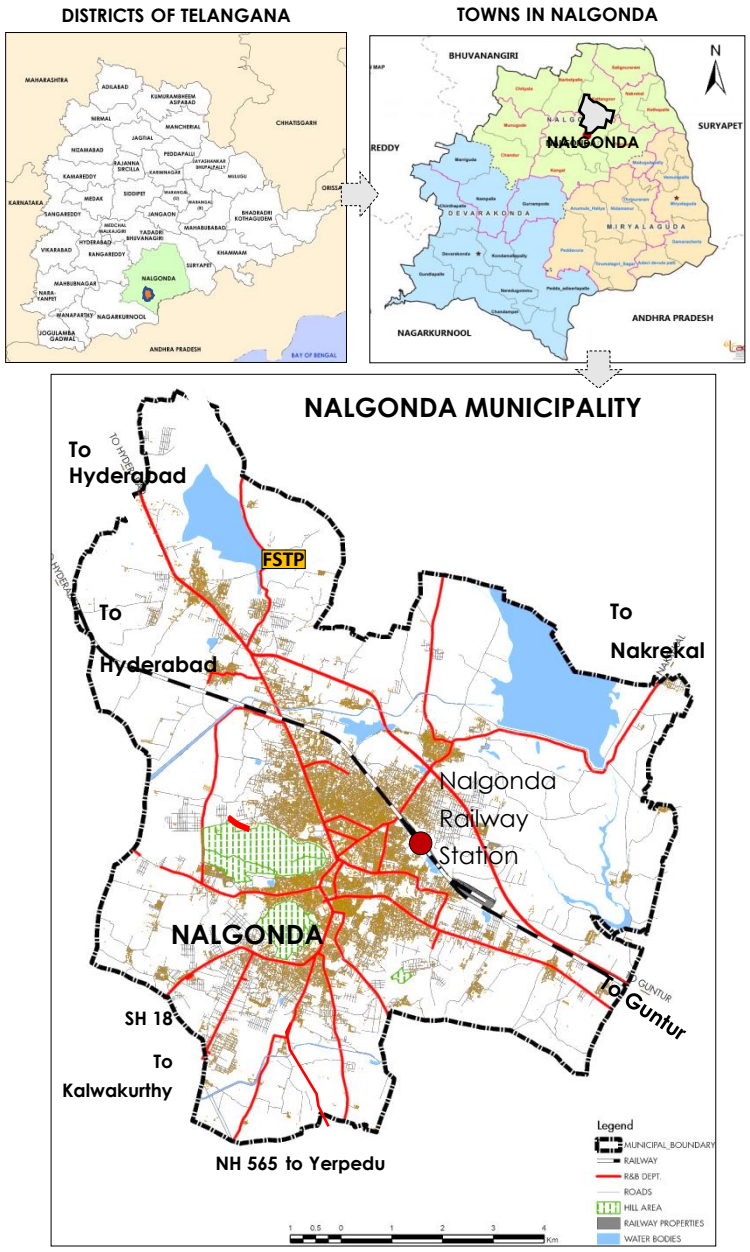
- ✓ People's needs and preference (socio-cultural),
- ✓ Reduce Smell and Visually displeasing outputs,
- ✓ Zero sludge to reduce health and environmental risks,
- ✓ Dedicated place for disposal – easy to regulate,
- ✓ Economic viability -Revenue generating end products.

PROJECT OBJECTIVES

1. To establish an independent Feacal Sludge Treatment Plant as Pilot project
2. To ensure good O&M of sanitation infrastructure which leads to reduction of risks to public health and environment
3. To treat the septage to prescribed reuse standards
4. To produce a hygienic and safe by-products for reuse
5. To achieve the vision of making urban areas ODF+, ODF++ & GFC 3 Star Rating
6. To achieve the strategy of Telangana State G.O. MS. 176: FSSM Policy – CDMA, TS

NALGONDA, TELANGANA

Location	Nalgonda, 90 Km SE to Hyderabad
Civic Status	Special Grade Municipality (2018), AMRUT City
Population	1,65,328 (2011), 198453 (Present)
Area	105 Sq Kms
Wards	48
Toilets	41,482 (100% with Tanks/Pits), ODF free
Water & Sanitation status	Water Supply Coverage = 100% & UGD Scheme under UIDSSMT: 1. STP (WSP) = 17.16 MLD = Core Area Completed 2. STP (MBBR) = 2.55 MLD = Not Grounded
Solid Waste	100% Collection & Transportation, 65% Processing

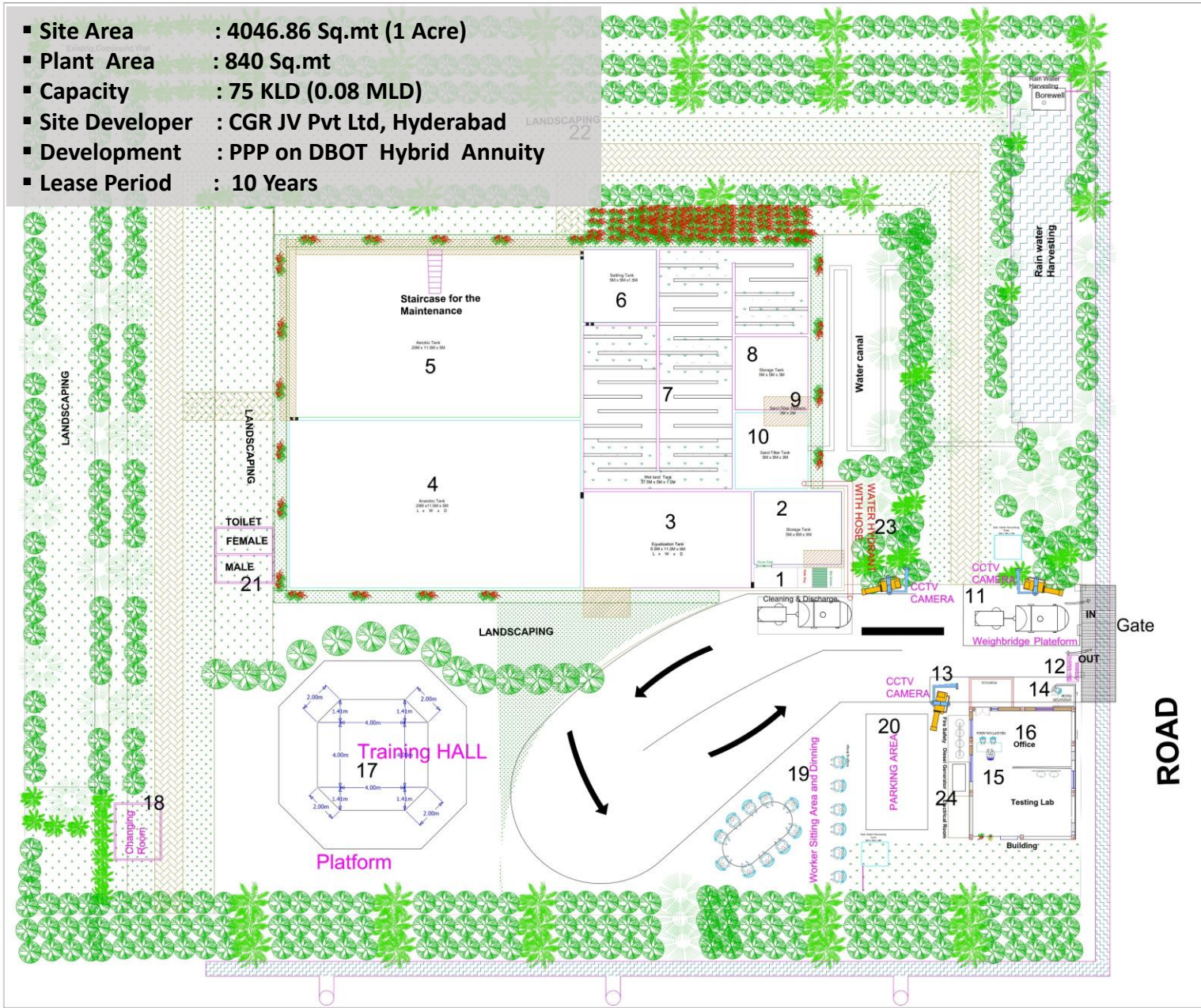


SELECTION CRITERIA

- **Quality and Quantity of Feacal Sludge**
- **Land Availability / Location**
- **Affordable O&M cost**
- **Reasonable Capital Cost & Construction Area Requirements**
- **Reuse Standards of its By-products**
- **Discharge Standards for safe disposal**
- **Climatic conditions**

FSTP 75 KLD LAYOUT PLAN

- Site Area : 4046.86 Sq.mt (1 Acre)
- Plant Area : 840 Sq.mt
- Capacity : 75 KLD (0.08 MLD)
- Site Developer : CGR JV Pvt Ltd, Hyderabad
- Development : PPP on DBOT Hybrid Annuity
- Lease Period : 10 Years



Name of the Work:
FAECAL SLUDGE TREATMENT PLANT (PACKAGE -7) 75 KLD-NALGONDA

1	BAR SCREEN
2	STORAGE TANK
3	EQUALIZATION TANK
4	ANAEROBIC TANK
5	AEROBIC TANK
6	SETTLING TANK
7	WET LAND TANK
8	SAND FILTER STORAGE TANK
9	SAND FILTER PLATFORM
10	DISINFECTION TANK
11	WEIGHBRIDGE PLATEFORM
12	BIOMETRIC ACCESS
13	CCTV CAMERAS
14	OPERATOR ROOM
15	ENV. LABORATORY
16	OFFICE
17	TRAINING HALL
18	CHANGING ROOM
19	SITTING AREA AND DINNING
20	PARKING AREA
21	TOILETS (MALE & FEMALE)
22	LANDSCAPING
23	WATER HYDRANT WITH HOSE FOR CLEANING THE TRUCKS
24	FIRE SAFETY / GENERATOR / ELECTRICAL ROOM

Plant	840 Sq mt
Green Belt	2161.7 Sq mt
Road	978 Sq mt
Building	67.16 Sq mt

N E W S

Total Area - 55 X 74 = 4046.86 Sq mt

Drawn:	Chand	Kishor
Check by:	Mr.Anand Kumar	Kishor
Finalise by:	Mr.Anand Kumar	

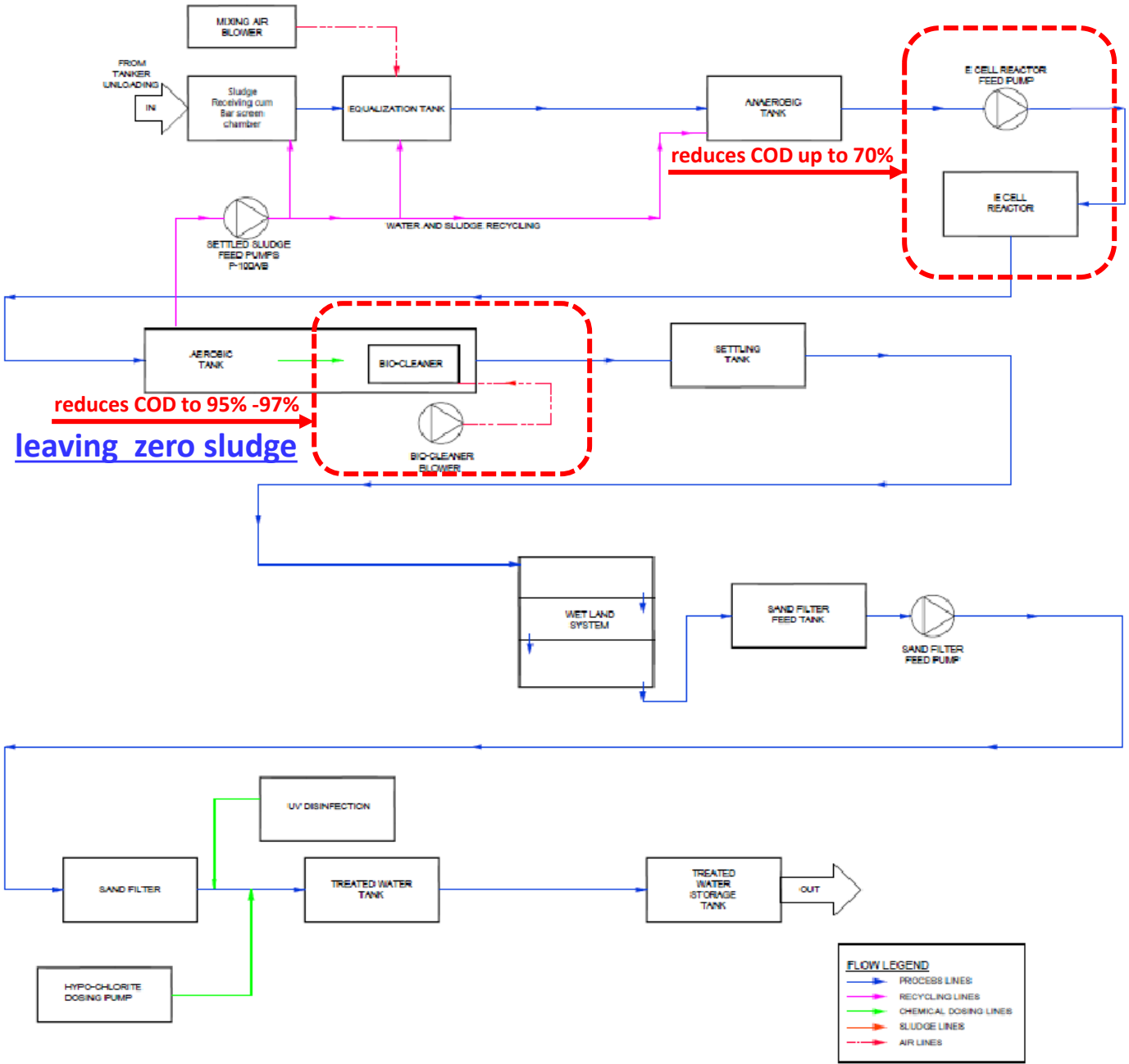
Project - Developers:

CGR JV Pvt Ltd
6-3-855/10/5A, Sampathi Apartments,
Saadat Manzil Colony, Ameerpet,
Hyderabad-500016, Telangana.
Phone: 9701111901

Site Address:
SITE COORDINATES :
Longitude 17°04'52.8"N
Latitude 79°19'28.5"E

MUNCIPAL COUNCIL NALGONDA
VILLAGE:-RESOURCE PARK, CHANDANAPALLI-508205
MANDAL- NALGONDA, DISTRICT- NALGONDA.

Treatment Technology - PROCESS FLOW CHART



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TREATMENT – APPROACH

1. Bar screens - Separation of solids
2. Equalization tank - homogenization of contaminated flows
3. Anaerobic digestion - destroys pathogens & reduced COD upto 70%
4. E Cell Reactors - Electrolytic Degradation Process
5. Aerobic system - Bio-Cleaner Machine
6. Tube Settler Systems for Clarification
7. Horizontal Constructed Wet Land System
8. Pressure Sand Filter (FSP)
9. Disinfection & Discharge

Bio Cleaning Machine:
Installation of advanced BIO REMEDIAL SYSTEM employing IMMOBILZED MICROBES MEDIA, 95% -97% of COD is removed, leaving Zero Sludge

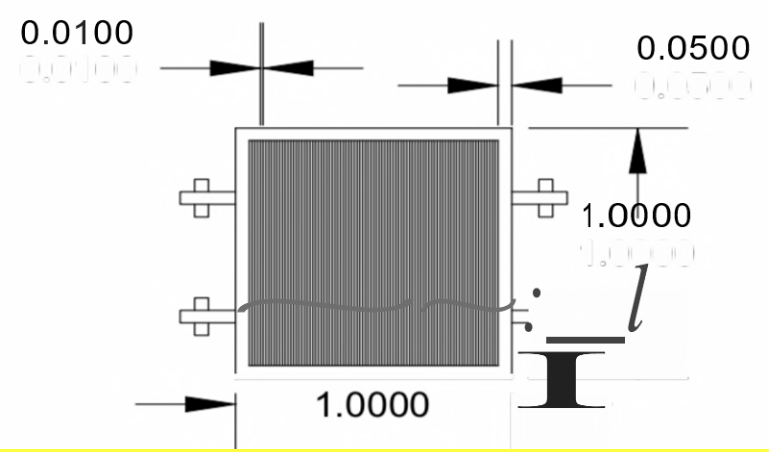
TIMING AND OPERATIONAL HOURS OF EACH TREATMENT MODULES

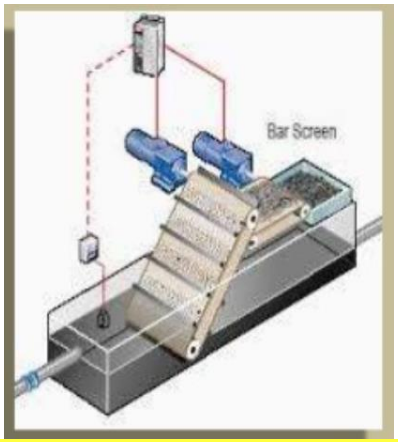
S. No	Treatment Module	Operational Hour	Unit	HRT
1	Screen Chamber	1	hour	1 hours
2	Equalization tank	24	hours	3.5 days
3	Anaerobic tank	24	hours	12 days
4	E Cell Reactor	10	hours	20 min.
5	Aerobic tank	24	hours	12 days
6	Tube settling	24	hours	12 Hrs
7	Horizontal Wet land system	24	hours	2.5 days
8	Sand filter	20	hours	-
9	Disinfection	20	hours	-
10	Discharge	20	hours	-

FSTP 75 KLD – PHOTOGRAPHS

SCREENS

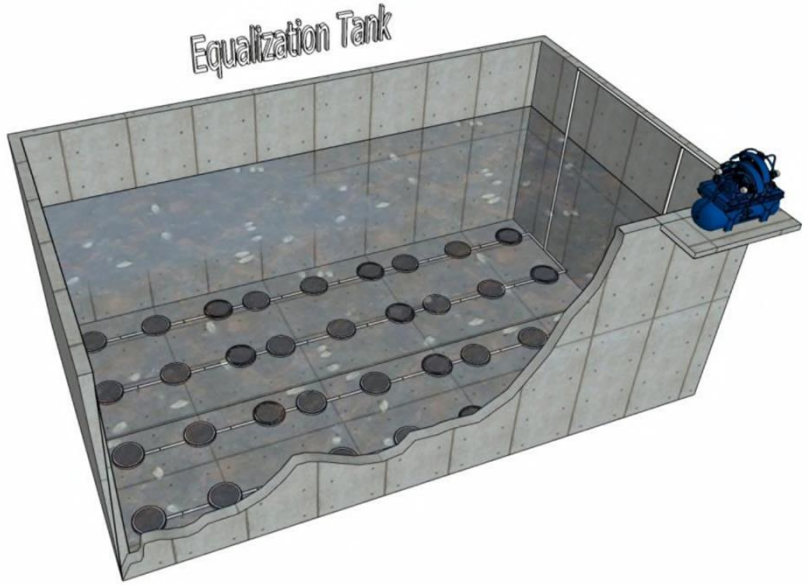
A bar screen is a mechanical filter used to remove large objects, such as rags and plastics, from wastewater. It is part of the primary filtration flow and typically is the first, or preliminary, level of filtration, being installed at the influent to a wastewater treatment plant





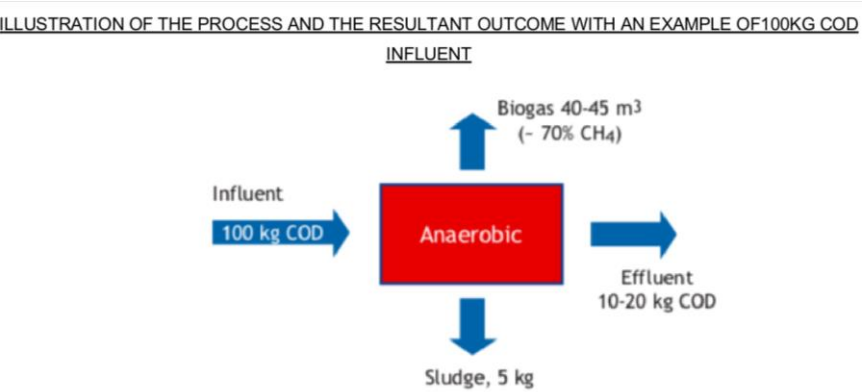
EQUALIZATION TANK

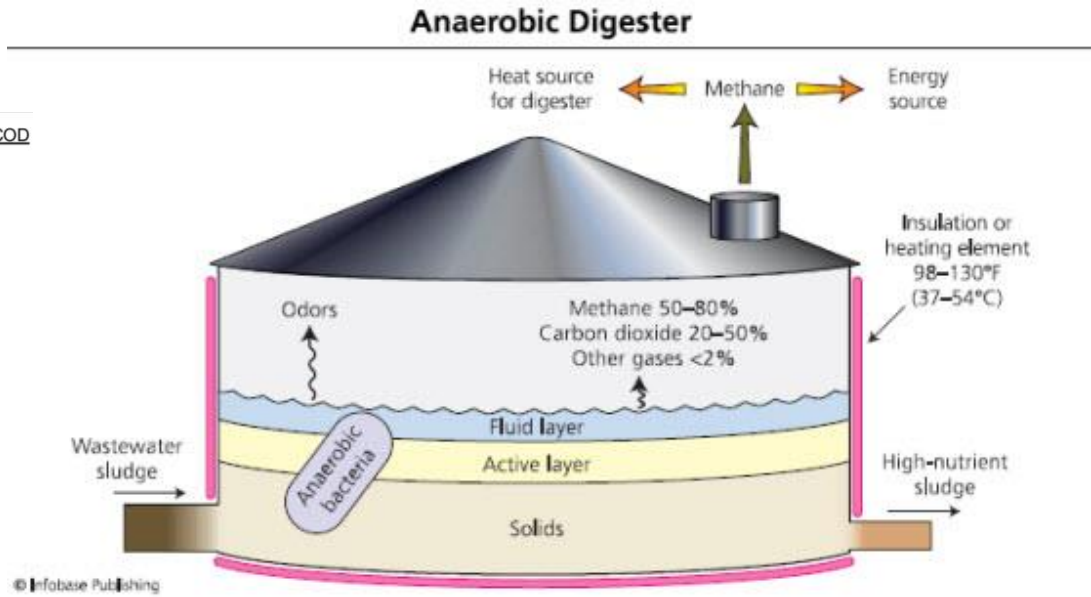
- The equalization tank has two main objectives: flow control (equalization) and/or homogenization of contaminated flows.
- Coarse diffusers will be installed at the bottom of the tank, blower will be installed on the surface to provide air at the bottom of the tank, this agitation homogenizes the contaminants
- During the peak hours, Septage comes at a high rate. The equalization tank stores this Septage, and lets it out during the non-peak time when there is no/little incoming sewage



ANAEROBIC CHAMBER

Anaerobic digestion is a collection of processes by which microorganisms break down biodegradable material in the absence of oxygen. process in which organic solids are decomposed into stable substances. Digestion reduces the total mass of solids, destroys pathogens, reduced COD up to 70%





E CELL REACTOR

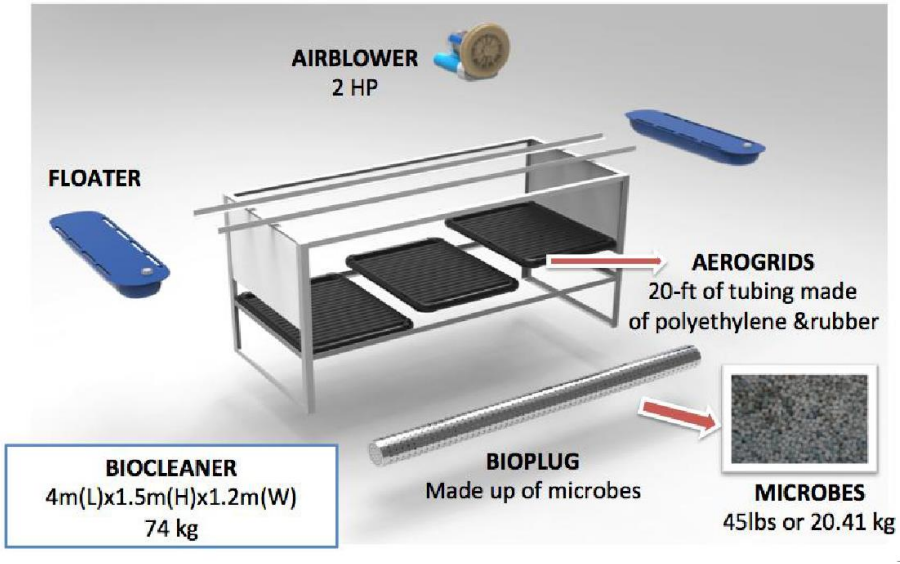
Electrolytic degradation process for destruction of organics in the waste water and removal of the same as suspended impurity through the combined process of electrolysis and electro coagulation

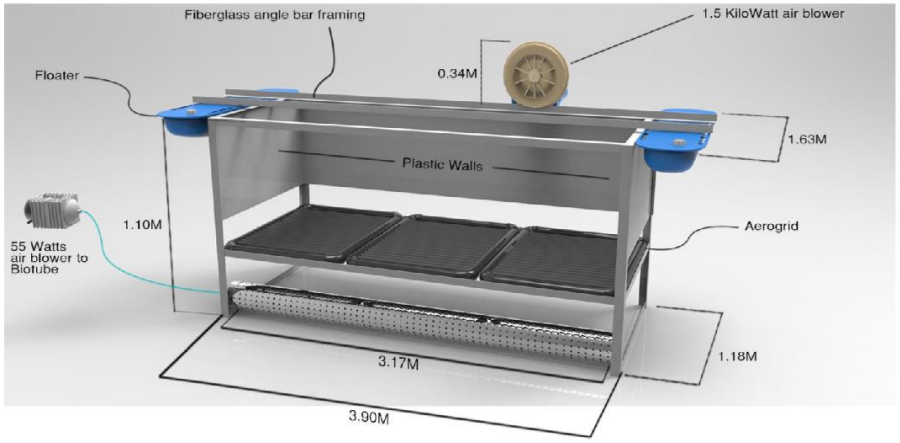
AEROBIC TANK

The Aeration tank is at the heart of the treatment system the bulk of the treatment is provided here, employing microbes/bacteria for the process.

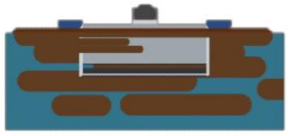
This process is advanced Bioremediation/Biological system, with immobilized microbes media. Media gets activated in the presence of oxygen and wastewater. 95% -97% of COD is removed during this process, **leaving zero sludge.**

Effluent of aerobic tank channelized to tube settling tank. Returns are provided to Equalization Tank and Anaerobic Tank to provide partial treatment during the process. These microorganisms are facultative and they can survive in both presence and absence of oxygen

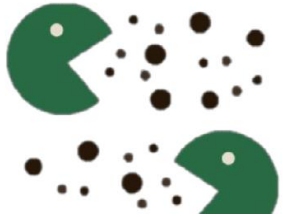




Facultative – can be anaerobic or aerobic. The microbes will remain dormant until they are activated with the presence of oxygen and nutrients – in the form of the waste



Saprobic – they acquire nourishment from non-living or decaying organic matters such as the shells of bacteria that becomes sludge as it accumulates through time

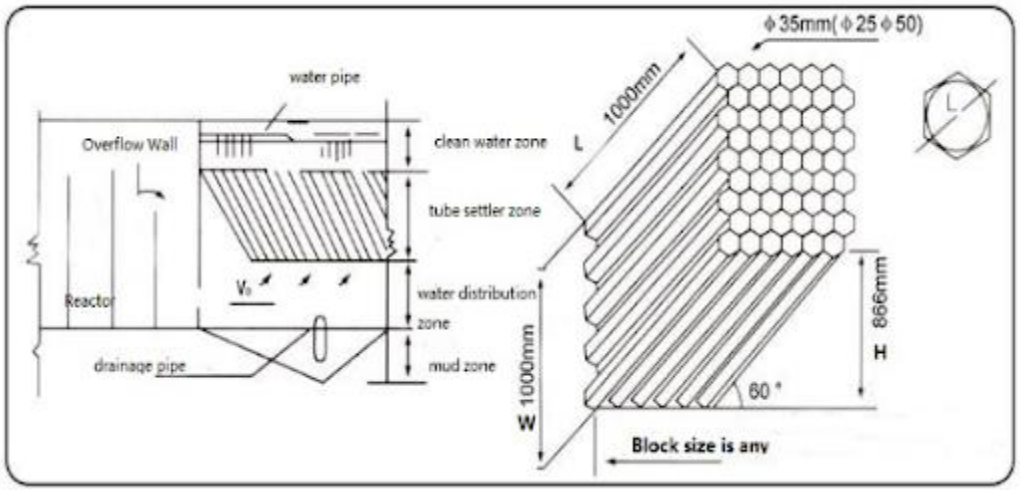


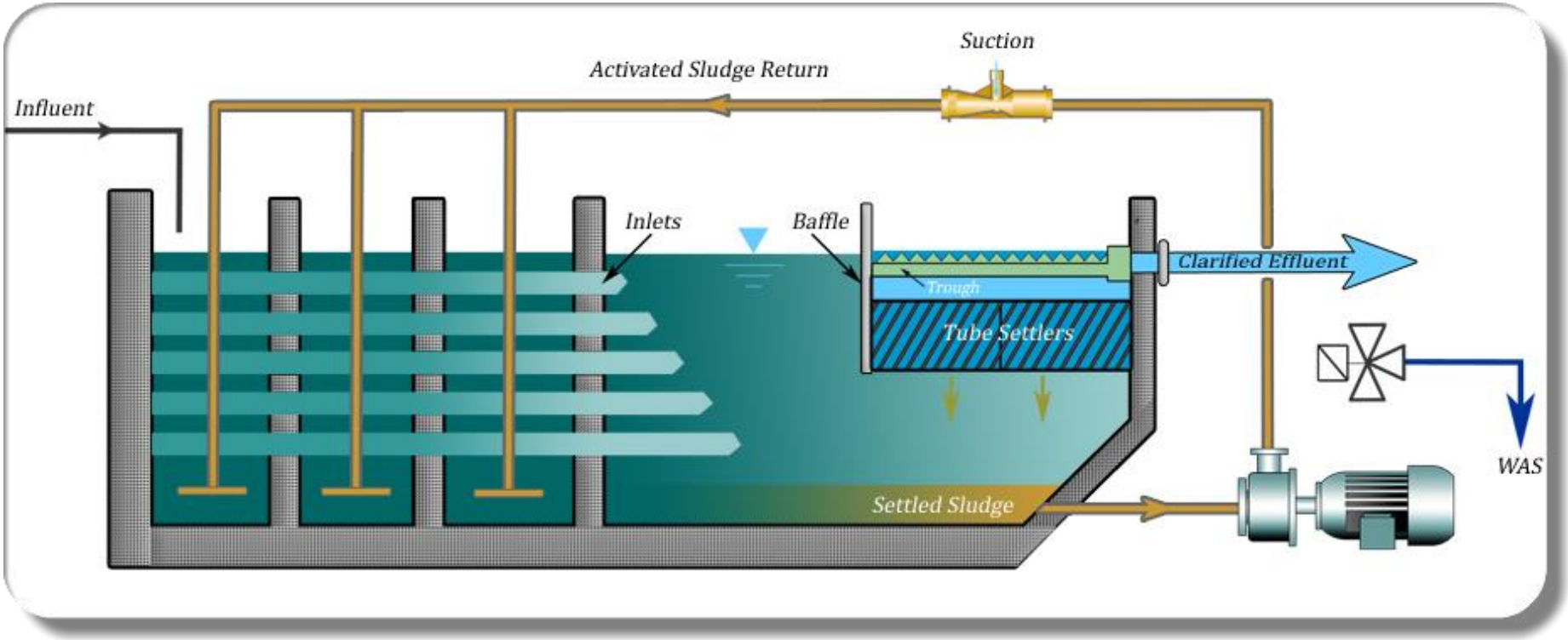
Rock microbes – Biosafety level 1 meaning if a healthy human ingests it will not do any harm. The microbes are all - natural and are not genetically modified.

SETTLING TANK

- The settling tank has a tube settler, which helps in reducing the suspended solids available in the treated water Separates automatically solid from liquids,
- There is one-inlet channel to the unit, Lamella packs are installed at the both sides of the inlet channel.
- Automatic air pipes are provided at the bottom of the tube settler tank.
- At the bottom, there will be a sludge/grit sedimentation chamber is provided.
- Outlet is provided on the other side of the inlet

TUBE SETTLER DIAGRAM



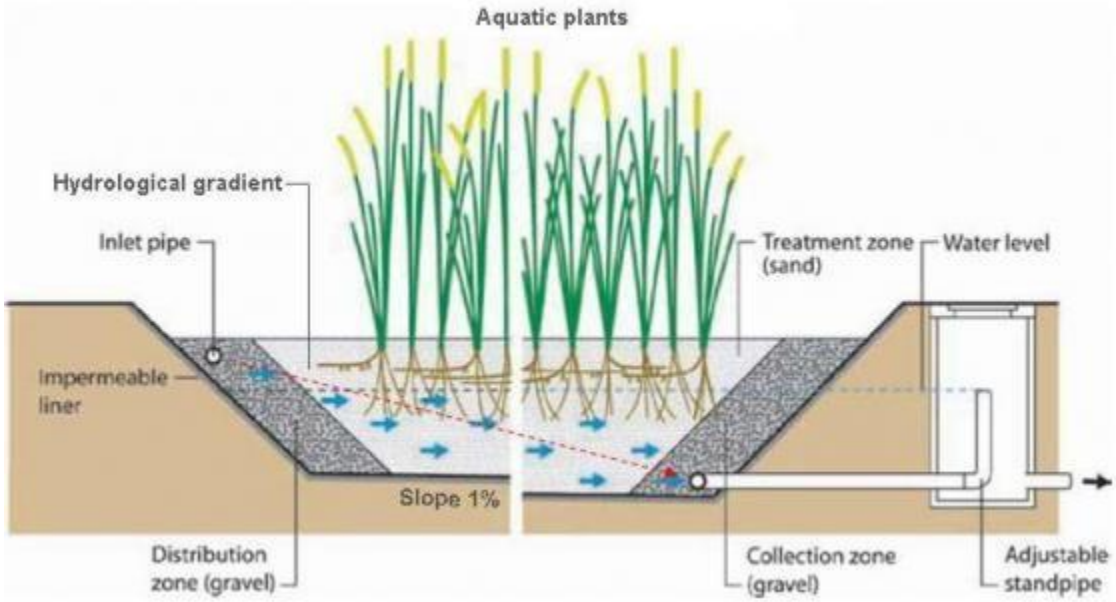


HORIZONTAL CONSTRUCTED WET LAND SYSTEM

Horizontal subsurface flow (HSSF) constructed wetland (below fig) is a large gravel and sand-filled basin that is planted with wetland vegetation; fishes and snails are also introduced into the wetland system for final polishing by filter feeding action.

Specifications:

1. 5-10 days HRT is provided in order to do the further treatment, fishes and snails are introduced into the wetland for final polishing by filter feeding mechanism and to remove pathogens from the waste water.
2. Various sizes of rubbles, pebbles and mud is used for the filtration and also acts as a bio-bed
3. Under the HSSB, sub systems are constructed with stone pitching.
4. Each sub system is of 1m(L) x3m(W) x 2m(Depth)
5. Multiple sub system are constructed
6. Wetland systems are Autotrophic System.
7. Low maintenance.
8. No chemicals are require.
9. Eco friendly system
10. AII plants and fish, which will be used for the treatment, are from local to the site.



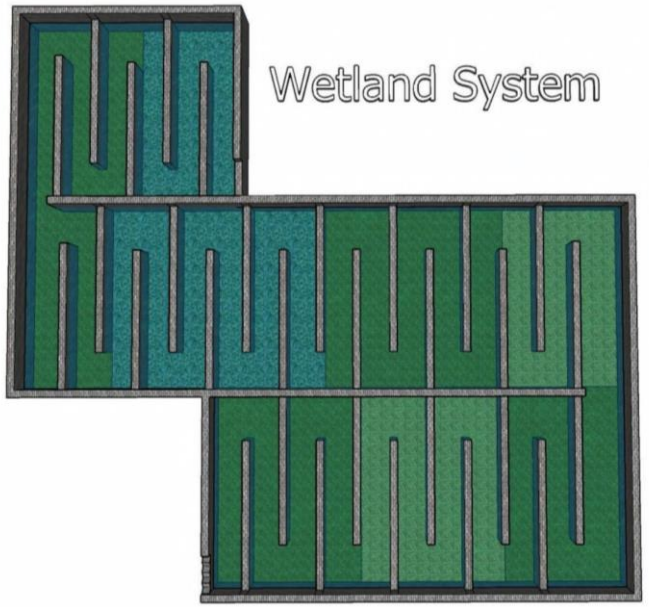


Figure: Schematic diagram of Horizontal Flow Subsurface constructed wetland

PRESSURE SAND FILTER (FSP)

- ✓ The Pressure Sand Filter consists of a multiple layer of sand with a variety in size and specific gravity. These Filters are designed to remove turbidity and suspended particles present in the feed water with minimum pressure drop

Vertical Pressure Sand Filter

- ► FRP Vessel Size: 24 x 72
- ► Make: Aventura/Pentariilter
- ► Feed Pump Make: Kirloskar
- ► Model: KOS 335
- ► Flow: 12000 LPH
- ► Head: 30 Meters
- ► Sand Media
- ► Multipart Valve
- ► Air Breaker
- ► Pressure Gauges
- ► Pipes & Fittings

Pressure Sand Filter

DISINFECTION & DISCHARGE

- ✓ Disinfection is the process designed to kill or inactivate most microorganisms in water, including essentially all pathogenic organisms
- ✓ Mild dosing of chlorination is used in order to kill all the bacteria.
- ✓ After the disinfection, discharge treated water, which can be reused for the irrigation and plantation purpose.

OPERATIONS AND MAINTANACE

Consumables:

1. Energy
2. Chlorine

Manpower:

- 1 Supervisor.
- 3 Security guards for three shifts
- 2 Electrician
- 2 housekeeping for the maintenance of green belt and cleaning the site

Power consumption:

- Installed 15KW solar power plant under net metering scheme, which will be generating 67.5KWh per day.
- Solar street lights yet be installed in order to save in power consumption

S. NO	Power Load	HP	Watts	Operational Hours	WH/Day
1	Bio-cleaner	2	1488	24	**35712**
2	Returns pumps	0.1	74.4	24	**1785.6**
3	Sand Filter	1	744	20	**14880**
4	Disinfection dosing pump	0.1	74.4	20	**1488**
5	Sludge pump	0.1	74.4	0.5	**37.2**
6	Equalization Pump	0.1	74.4	20	**1488**
7	LED Lighting and phone charger loads		200	8	**1600**
8	Fans in the control room		180	16	**2880**
9	Diffusers load in Equalization tank	0.5	372	20	**7440**
			3281.6		**67310.8**

List of Maintenance works @ FSTP

1. Periodically cleaning the diffusers of bio-cleaner unit (Once in a month)
2. Periodically cleaning the diffusers installed in equalization tank (Once in a month)
3. Filling chlorine power in the dosing drum periodically (Once in 15 days)
4. Regular maintenance of motors, screens, lamella etc. (Once in 15 days)
5. Taking care of fish and plantation in the horizontal wetland system (Every day)
6. Monitoring the parameters of both input sludge / waste water and treated water.
7. Maintaining record of the received load on a daily and vehicle basis
8. Sampling collection and sending it to the centrally located lab.
9. Circulation of the test reports and load details on the daily basis.
10. Maintaining green belt within the premises.

PARAMETERS OF SEPTAGE TO BE TREATED

THE PHYSICAL AND CHEMICAL CHARACTERITICS OF SEPTAGE TO BE TREATED				
S.No	**CONSTITUENTS (all units but for pH are in mg/ ltr)**	**UOM**	**AVERAGE**	**RANGE**
1	BOD	mg/ ltr	6480	**440-25000**
2	COD	mg/ ltr	31900	**1500-40000**
3	Total Solid	mg/ ltr	34106	**1132-85000**
4	Total Volatile		23100	**353-68000**
5	Total Suspended Solids	mg/ ltr	12862	**310-80000**
6	Total Nitrogen	mg/ ltr	588	**66-800**
7	Ammonia	mg/ ltr	97	**3-116**
8	Total Phosphorus	mg/ ltr	210	**20-710**
9	FOG	mg/ ltr	5600	**208-15000**
10	**pH**		**1.5-12.6**	**1.5-12.6**

TESTING SAMPLES OF TREATED WATER

IAF elac CB-035-MS
Regn. No.20DQGN85

Vista Labs
Analytical • Biological • Environmental
An ISO/IEC 17025:2005 NABL Accredited & ISO 9001:2015 Certified Lab.

TEST REPORT

Page 1 of 1

Name & Address Of Customer: M/s. CGR JV Pvt.Ltd. H.No.42-293/A, Maruthi Nagar Extn, Dr.A.S.Rao Nagar, Hyderabad, Telangana.	**Lab Ref No:**	VIS/3825/1/2021
	Reporting Date:	02/04/2021
	Sample Received On:	30/03/2021
	Your Ref No:	Verbal
	Sample Condition:	Found OK
Sample Description: STP Outlet water	**Analysis Started On:**	30/03/2021
	Analysis Completed On:	02/04/2021
Quantity Received : 1Ltr X 2 No's	**Sample Drawn By:**	Customer

TEST RESULTS

Sl.No.	Characteristic	Test method	Results	Limits As per CPCB
1.	P^H Value at 25°C	IS:3025(Part -11)-1983,RA 2017	7.53	6.50 – 9.00
2.	Total solids, mg/l	IS:3025(Part -15)-1984,RA 2017	992	N.A
3.	Total Dissolved solids, mg/l	IS:3025(Part -16)-1984,RA 2017	968	< 2100
4.	Total suspended Solids, mg/l	IS:3025(Part -17)-1984,RA 2017	24	< 100
5.	Sulphate as SO_4, mg/l	IS:3025(Part -24)-1986,RA 2014	110.6	<1000
6.	Chloride as Cl mg/l	IS:3025(Part -32)-1988,RA 2014	90.0	<1000
7.	Chemical Oxygen Demand (COD), mg/l	IS 3025 (Part 58) 2006, RA 2017	26.9	< 250
8.	Bio chemical Oxygen demand(BOD), 3days@27°C mg/l	IS:3025(Part -44)1993,RA 2014	9.5	< 30
9.	Oil & Grease mg/l	IS:3025(Part -39)1991,RA 2014	2.40	< 10

Note:
1. This report is valid for the tested sample(s) only.
2. Test report shall not be reproduced except in full & with written approval of VISTA LABS.
3. This report should not be used for advertisement / judicial purpose.
4. Total Number Of Test(s) NINE Only
5. Lab will maintain unused portions of samples for 15 days after the report has been issued.

********** End of Report**********

CGR JV PRIVATE LIMITED Hyderabad

Checked By	Authorized Signatory

VIS/LAB/F/047

4-9-6, Flat No. 103 & 104, Surya Towers, Adj. ANR Gardens, HMT Nagar, Nacharam, Hyderabad-500 076.
Ph : 040-27173815, 42210081, E-mail : vistalabs@yahoo.co.in, vistalabs2004@gmail.com

VIJAYA ENVIRO LABS
A quality of testing

H.No.13-261, Bharathpuri Colony, Medipally, Peerzadiguda Muncipality, Medchal - Malkajgiri Dist. Hydrabad - 500098, Telangana
☎ 7207041212, 9963981212, 9963441212, 9959623529
Email : info@vijayaenvirolabs.com, services@vijayaenvirolabs.com
www.vijayaenvirolabs.com

Test Certificate

Issued to		
M/S.CGR JV PRIVATE LIMITED., H.No:42-293/A,Maruthi Nagar Ext. Dr.A.S.Rao Nagar,ECIL Post, Medchal-Malkajgiri.Dist (HYDERABAD), ELANGANA-500062.	In House Batch No	VEL/CNRL/W/906/SEP/2020
	Sample Details	Septic tank water
	Sample Received Date	19/09/2020
	Analysis Starting Date	19/09/2020
	Analysis Completion Date	22/09/2020
	Date of Report issued	23/09/2020

TEST RESULTS

S.No	Parameters	Test Method	Units	Result
Physical Parameters				
01	pH	APHA-4500-B	--	6.97
Chemical Parameters				
02	Total Solids	APHA-2540-C	mg/l	1675
03	Total Volatile Solids	APHA-2540-C	mg/l	569
04	Total Suspended Solids	APHA-2540-C	mg/l	412
05	Volatile Suspended Solids	APHA-2540-C	mg/l	185
06	Total Kjeldhal Nitrogen	APHA 4500-N_{org} B	mg/l	87
07	Ammonical Nitrogen	APHA 4500-NH_3-C	mg/l	05
08	Total Phosphorus	APHA 4500-P D	mg/l	27
09	Alkalinity	APHA 2320 B	mg/l	800
10	Oil &Grease	APHA-5520 B	mg/l	210
11	Chemical Oxygen Demand	APHA 5220-B	mg/l	1630
12	Biochemical Oxygen Demand (3days@27°C)	APHA 5210 B	mg/l	540

*APHA: American Public Health Association * IS Indian Standard

VIJAYA ENVIRO LABS HYD.

Authorised Signatory

Compressed air validation, Breathing air validation, Instrument air validation, Nitrogen gas validation
Pure Steam, Clean Room Validation, Indoor air quality monitoring, Environmental & Analytical services

75KLD FSTP AT NALGONDA - LOG OF SEPTAGE RECEIVED AT THE SITE

S. No.	Date	Vehicle Number	Driver Name	Contact Number	TIME		WEIGHT/Ltrs			in KLD
					IN	OUT	Gross	Tare	Net	
118	01.03.2021	AP27T6588	Nagaiah	9849867154	12:40PM	12:55PM	9812	8711	1101	1.10
119	02.03.2021	AP27T6588	Nagaiah	9849867154	03:10PM	03:25PM	6541	5121	1420	1.42
120	03.03.2021	AP27V5482	Subash	9346339450	11:10AM	11:20AM	10187	8874	1313	1.31
121	04.03.2021	AP25V2004	Vinod	9618310064	09:30AM	09:50AM	9751	7841	1910	1.91
122	05.03.2021	AP25V2004	Vinod	9618310064	11:06AM	11:28AM	8892	7811	1081	1.08
123	06.03.2021	AP27V5482	Subash	9346339450	09:20AM	09:37AM	7861	5172	2689	2.69
124	07.03.2021	AP25V2004	Vinod	9618310064	12:20PM	12:47PM	9870	8712	1158	1.16
125	08.03.2021	AP05V0946	Mugaiah	7730019438	09:10AM	9.30AM	7262	4689	2573	2.57
126	08.03.2021	AP05V0946	Mugaiah	7730019438	11.05AM	11.22AM	7761	4872	2889	2.89
127	09.03.2021	AP27V5482	Subash	9346339450	10.10AM	10.23AM	7042	4891	2151	2.15
128	10.03.2021	AP05V0946	Mugaiah	7730019438	3.40AM	3.55PM	7184	4989	2195	2.20
129	11.03.2021	AP25V2004	Vinod	9618310064	11.20AM	11.33AM	6841	4726	2115	2.12
130	11.03.2021	AP25V2004	Vinod	9618310064	2.20PM	2.35PM	7101	4012	3089	3.09
131	12.03.2021	AP27V5482	Subash	9346339450	8.00AM	8.17AM	6294	4189	2105	2.11
132	13.03.2021	AP05V0946	Mugaiah	7730019438	10.07AM	10.20AM	7308	4610	2698	2.70
133	14.03.2021	AP25V2004	Vinod	9618310064	10.50AM	11.12AM	7121	5012	2109	2.11
134	15.03.2021	AP27V5482	Subash	9346339450	9.40AM	9.58AM	6212	5168	1044	1.04
135	15.03.2021	AP27V5482	Subash	9346339450	10.50AM	11.12AM	7121	5012	2109	2.11
136	16.03.2021	AP05V0946	Mugaiah	7730019438	2.40PM	2.58	6425	4111	2314	2.31
137	17.03.2021	AP27V5482	Subash	9346339450	2.15PM	2.35PM	7688	5396	2292	2.29
138	17.03.2021	AP27V5482	Subash	9346339450	3.14 PM	3.30PM	7552	5566	1986	1.99
139	18.03.2021	AP25V2004	Vinod	9618310064	11.03AM	11.21AM	8248	4036	4212	4.21
140	18.03.2021	AP27V5482	Subash	9346339450	12.40Pm	12.59PM	7090	4056	3034	3.03
141	19.03.2021	AP05V0946	Mugaiah	7730019438	9.20 AM	9.36AM	7262	4689	2573	2.57
142	19.03.2021	AP05V0946	Mugaiah	7730019438	10.50AM	11.08AM	7512	4458	3054	3.05
143	20.03.2021	AP05V0946	Mugaiah	7730019438	2.50PM	3.05PM	6376	4788	1588	1.59
144	21.03.2021	AP27v5482	Subash	9346339450	11.17AM	11.35AM	8002	5022	2980	2.98
145	22.03.2021	AP25V2004	Vinod	9618310064	8.50Am	9.05 AM	7884	6785	1099	1.10
146	23.03.2021	Ap27v5482	Subash	9346339450	2.10PM	2.28 PM	7688	5396	2292	2.29
147	23.03.2021	Ap27v5482	Subash	9346339450	4.05PM	4.20 PM	7703	5393	2310	2.31
148	24-03.2021	AP29T6588	Nagaiah	9849867154	11.20AM	11.35AM	6256	5318	938	0.94
149	25.03.2021	AP25V2004	Vinod	9618310064	9.20AM	9.35AM	7903	5400	2503	2.50
150	25.03.2021	AP25V2004	Vinod	9618310064	10.40AM	10.53AM	7788	5080	2708	2.71
151	26.03.2021	Ap27v5482	Subash	9346339450	8.00AM	8.17AM	8021	5120	2901	2.90
152	26.03.2021	AP29T6588	Nagaiah	9849867154	11.40AM	11.58AM	7301	4993	2308	2.31
153	26.03.2021	AP25V2004	Vinod	9618310064	4.20PM	4.38PM	7888	5022	2866	2.87
154	27.03.2021	AP29T6588	Nagaiah	9849867154	10.30AM	1049AM	7689	5345	2344	2.34
155	27.03.2021	Ap27v5482	Subash	9346339450	3.10PM	3.28PM	8004	5138	2866	2.87
156	28.03.2021	AP25V2004	Vinod	9618310064	9.50AM	10.06AM	7856	5506	2350	2.35
157	29.03.2021	AP29T6588	Nagaiah	9849867154	10.50AM	11.20AM	7628	5378	2250	2.25
158	30-03-2021	AP9V7443	Srinu	7330773816	8.10AM	8.22AM	7986	5336	2650	2.65
159	30-03-2021	AP9V7443	Srinu	7330773816	9.40AM	9.58AM	7885	5390	2495	2.50
160	31-03-2021	AP29T6588	Nagaiah	9849867154	8.50AM	9.05AM	7666	5054	2612	2.61

- Treatment Capacity = 75 KLD
- As Pilot Project, Volume of Feacal Sludge Received per day (Avg) = 4.2 KLD
- Volume of water Treated per day (Avg) = 3.8 KLD
- No Sludge Produced
- Treated water is reused for Domestic Purpose (ie; Plantation)

Step by Step Implementation

Nalgonda Town Road Map to Holistic Feacal Sludge Management

Have set-up toll-free number where Citizens can call directly and request for a desludging service.

*activation and overanalyzing helpline no. 14420 and establishing Sanitation Responsible Authority (SRA)

Licensed Private Desludging Operators started dumping faecal sludge at the new FSTP facility

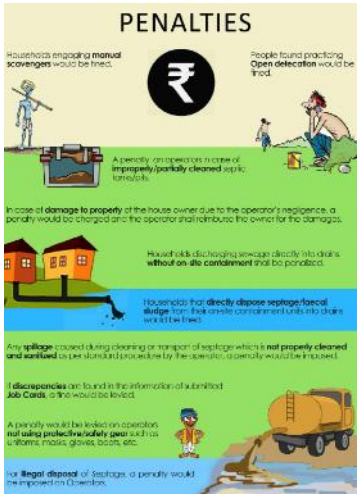
*Both FSTP operator and truck operator are wearing the correct PPE such as gloves, mask, gumboot, apron and uniform etc

Implementing O & M at FS Treatment plant

- Installed 15KW solar power plant under net metering scheme, which will be generating 67.5KWh per day.
- Solar street lights yet be installed in order to save in power consumption

Implementing FSM Policy

- Penalties
- Monitoring



Formalization Of The Private Desludging Service Providers

1.Disposal of faecal sludge in any undesignated location will be considered illegal and calls for legal action and penalty or cancellation of operations license.

2.Prior notification to the municipality has to be done in case of disposal on farm land.

3.All sludge collected is to be dumped at the new FSTP facility.

4.Private desludging service providers to be identified and summoned to register/license with Municipality, by filling in a registration form and paying licensing fee.

5.Private desludging service providers to be provided with license, which would need renewal once in 3 years.

6.Private desludging service providers to be sensitized about the disposal of FS at the FSTP.

7.Any private player not registered with Municipality, or not holding the license to desludge will not be allowed to do any desludging at household/ property level within the premises of the town council wards.

8.Any private player having not registered with Municipality will attract penalty of Amount Rs 5000 which is again subject to discretion of Municipality.

9.Upon signing the registration the private operator will be given a manifesto from which will contain details of pits/ septic tanks and owner details, which they will submit at the Municipal office at a periodic time interval and any noncompliance to this will lead to cancellation of license.

Survey Report for identification of all the de-sludging operators in the ULB

Sl. No.	Desludging Operators Name	Office Address and Contact	Number of Vehicles	Reg. No. of Vehicles
1	Ch.Subhash	9346339450	1	AP27V5482
2	K. Mugaiah	7130019438	1	TS05UC1404
3	J. Srinu	7330773816	1	AP9V7443
4	J. Gopi	9000295888	1	AP29T6588
5	J. Vinod	8688952310	1	AP25V2004
	Total Number of De-sludging Vehicles:			5

Sl. No.	Name of the De-sludging operator	Registration no. of the vehicle.	Name of driver assigned to each vehicle.	Capacity of the vehicle(s)	No. of vehicles with the operator	Number of staff working for the operator	Number of staff trained by the ULB on all aspects of sewer and septic tank maintenance	License/Registration Number of the de-sludging operator
1	Ch.Subhash	AP27V5482	Ch.Subhash	3500	1	1	1	DLFAPO2453490201
2	K. Mugaiah	TS05UC1404	K. Mugaiah	3500	1	1	1	
3	J. Srinu	AP9V7443	J. Srinu	3500	1	1	1	
4	J. Gopi	AP29T6588	J. Gopi	3500	1	1	1	
5	J. Vinod	AP25V2004	J. Vinod	3500	1	1	1	
Total Number of De-sludging operators in the ULB:								5
Total Number of De-sludging vehicles in the ULB:								5
Total Number of de-sludging operators (staff) trained in all aspects of sewer and septic tank maintenance:								5

Paper Notification for Empanelment of de-sludging operators in the ULB

పురపాలక సంఘ కార్యాలయము : నల్లగొండ

పత్రికా ప్రకటన

తేది:07.07.2020

జి.ఓ.యం.యస్ 176, తేది:29.09.2018, మల వ్యర్థాలు మరియు మలినాల నిర్వహణ పాలసీ (తెలంగాణ ప్రభుత్వము) ని అనుసరించి, నల్లగొండ పట్టణంలో సెప్టిక్ ట్యాంక్ యొక్క వ్యర్థాల సేకరణ, దానిని సక్రమ రవాణా పద్ధతుల ద్వారా ట్రీట్‌మెంట్ ప్లాంట్‌కు చేర్చుటలో సృష్టి నల్లగొండ దిశగా పనిచేసే సెప్టిక్ ట్యాంక్ ఆపరేటర్లు నమోదు చేసుకొనుటకు వారి నుండి దరఖాస్తులను పూర్తి వివరాలతో 14.07.2020, సాయంత్రం గం॥5.00ల వరకు నల్లగొండ మున్సిపాల్టీ నందు నమోదు చేసుకొనగలరు. కావున ఈ దరఖాస్తును నల్లగొండ పురపాలక కార్యాలయము పారిశుద్ధ్య విభాగము నందు కార్యాలయ పని వేళల్లో పొందగలరు.

P.U.K

కమీషనర్,
పురపాలక సంఘం, నల్లగొండ.

టు:
ఈనాడు, సాక్షి, ఆంధ్రజ్యోతి, వార్త, నమస్తే తెలంగాణ, ఆంధ్రభూమి, ఆంధ్రప్రభ, సూర్య, నవ తెలంగాణ, మనతెలంగాణ, మనం, సియానత్, టీయస్.5 చానల్ ఐ.ఐ.సి చానల్, యన్.డి.సి చానల్, సిటి టేబుల్ మరియు సత్య చానల్ వారికి పత్రిక యందు ప్రచురించుట గురించి.

ప్రతిలిపి:
శ్రీయుత గౌరవ వైర్‌వర్సన్, పురపాలక సంఘం, నల్లగొండ గారికి తగు సమాచార నిమిత్తము సమర్పించనైనది.

తెలంగాణ ప్రభుత్వము
పురపాలక సంఘ కార్యాలయము: నల్లగొండ

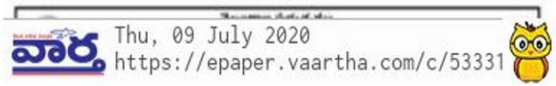
పత్రికా ప్రకటన

తేది:07.07.2020

జి.ఓ.యం.యస్.176, తేది: 29.09.2018, మల వ్యర్థాలు మరియు మలినాల నిర్వహణ పాలసీ తెలంగాణ ప్రభుత్వమును అనుసరించి, నల్లగొండ పట్టణంలో సెప్టిక్ ట్యాంక్ యొక్క వ్యర్థాల సేకరణ, దానిని సక్రమ రవాణా పద్ధతుల ద్వారా ట్రీట్‌మెంట్ ప్లాంట్‌కు చేర్చుటలో సృష్టి నల్లగొండ దిశగా పనిచేసే సెప్టిక్ ట్యాంక్ ఆపరేటర్లు నమోదు చేసుకొనుటకు వారి దరఖాస్తులను పూర్తి వివరాలతో 14.07.2020, సాయంత్రం గం.5.00 ల వరకు నల్లగొండ మున్సిపాలిటీ నందు నమోదు చేసుకొనగలరు. కావున ఈ దరఖాస్తును నల్లగొండ పురపాలక కార్యాలయము పారిశుద్ధ్య విభాగము నందు కార్యాలయ పనివేళల్లో పొందగలరు.

DIPR.No.2968-PP/CL/Advt/1/2020-21 తేది: 08.07.2020

సం/- కమిషనర్, పురపాలక సంఘం, నల్లగొండ.



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8. Format for self-declaration to be submitted by desludging operators

I, Jagadeeshwar Sainu (Name), Director / equivalent of Abbasia Colony (Name and registered address of desludging entity) operating in NALGONDA (Name of ULB) do hereby declare that we:

a) Are registered with and licensed by ULB/ Development Authority / Cantonment Board
b) Are contracted by the ULB / Development Authority / Cantonment Board to provide sludge/septage emptying services to households or community and/or public toilets (copy of contract agreement and details of households and/or community/public toilets allotted by ULB/ Development Authority / Cantonment Board for providing services to, both in annexure)
c) Utilise mechanised equipment to provide emptying services
d) Use personal protective equipment (PPE) to provide mechanical emptying services
e) Transport the emptied faecal sludge and septage to nearby faecal sludge treatment plant (FSTP) / sewage treatment plant (STP) with co-treatment facility / solid waste management (SWM) treatment plant with co-treatment facility (tick whichever applicable) (details of treatment facility in annexure) which is operated as per Central Pollution Control Board (CPCB) norms or as per amended norms by state PCB
f) Do not dump untreated faecal sludge in the open environment—water bodies, drains, open land, etc.

J. Bhaskar Sainu
(Signature and Name of Director or equivalent of desludging operator)

Registered office address: Abbasia Colony H.no. 4-10-308/1
Phone number: 7330773816
Date: 23/9/2020

(Attach copy of contract agreement, details of households and/or community/public toilets allotted by ULB/ Development Authority / Cantonment Board for providing services to, and details of treatment facility where faecal sludge/septages being conveyed to)

TOWARDS ODF+

FAECAL SLUDGE AND SEPTAGE MANAGEMENT

LICENSED DESLUDGING OPERATOR

This is to certify that CH. SHUBHASH with Vehicle No. AP27V5482 is a licensed Desludging operator

Validity Period: 12/08/2020 to 12/08/2021

B. [illegible]
Commissioner
Nalgonda Municipality

POSTERS OF IEC ACTIVITIES ON IMPLEMENTATION OF FSSM POLICY – BY ASCI

POSTERS OF IEC ACTIVITIES ON IMPLEMENTATION OF FSSM POLICY – BY ASCI

#1

మీ సెప్టిక్ ట్యాంక్
సరైనది అవునో కాదో
తెలుసుకోండి

#2

సెప్టిక్ ట్యాంక్
పొంగి పొర్లక ముందే
శుభ్రం చేయించండి

గుర్తుంచుకోండి

చేయాల్సినవి	చేయకూడనివి
1 ఒక నివాస ప్లాట్ గల రెండు చేంబర్ల సెప్టిక్ ట్యాంక్ కల్గించుకోండి.	1 ఒక చేంబర్ గల సెప్టిక్ ట్యాంక్ కల్గించుకోకండి.
2 ట్యాంక్ సైజ్ నగరపాలికా నియమాలకు అనుగుణంగా ఉండాలి.	2 పెద్ద సైజ్ గల ట్యాంక్‌లు కల్గించుకోరాదు.
3 సెప్టిక్ ట్యాంక్ ఎల్లప్పుడూ ఇటుకలు, రాళ్ళు, కాంక్రీట్ లేదా ప్రీ-కాస్ట్ మెటీరియల్‌తో కల్గించుకోవాలి.	3 గొయ్యిని త్రవ్వి సెప్టిక్ ట్యాంక్‌గా వాడవద్దు.
4 ఎల్లప్పుడూ సెప్టిక్ ట్యాంక్‌ని కట్టడాలకు దూరంగా నిర్మించుకోవాలి.	4 ఇక ట్యాంక్ పైనే మరుగుదొడ్డిని నిర్మించరాదు.

గుర్తుంచుకోండి

1

మీ సెప్టిక్ ట్యాంక్
మున్సిపాలిటీ లైసెన్స్ కలిగిన ట్రక్ ఆపరేటర్
ద్వారా మాత్రమే శుభ్రం చేయించాలి.
ప్రతి 3 సంవత్సరాలకు.

2

శుభ్రం చేసే
వ్యక్తి సురక్షితమైన
దుస్తులు, తొడుగులు
ధరించేలా చూడండి.

3

శుభ్రం చేసే వారిని
గౌరవంతో
పలకరించండి.
అది చాలా
మంచిదిషయం.

4

సెప్టిక్ ట్యాంకులోకి
వ్యక్తులు దిగి
శుభ్రం చేయడం
చట్టవిరుద్ధం.

5

సెప్టిక్ ట్యాంక్ శుభ్రం చేసేటప్పుడు
2 ఇంచుల మేర వ్యర్థం అందులోనే
ఉండాలని
శుభ్రం చేసే
వ్యక్తికి
చెప్పండి.

6

మేల వ్యర్థం
రాజాంలో
ఉన్న మేల
శుద్ధి ప్లాంటుకు
తీసుకు వెళ్లేలా చూడండి.

Thank You

Website: https://nalgondamunicipality.telangana.gov.in/

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