BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL

SOUTH ZONE CHENNAI BENCH

Original Application No. 439 of 2013(SZ)
(THC) (W.P. (C) No. 3637/2012)

&

Original Application No. 456 of 2013 (SZ)
(THC) (W.P. (C) No. 1367/2011)

Chandran Pillai, Kollam and Anr. ... Applicant(s)
Versus
Union of India and Ors. ...Respondent(s)

&

Manushyavakasha Paristhithi
Samarakshana Samithy ... Applicant(s)
Versus
Union of India and Ors. ... Respondents

REPORT FILED BY THE ENVIRONMENTAL ENGINEER, KERALA STATE POLLUTION CONTROL BOARD, DISTRICT OFFICE, KOLLAM, THE 3RD RESPONDENT IN APPLICATION NO. 439 of 2013(SZ)

BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL
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REPORT FILED BY THE ENVIRONMENTAL ENGINEER, KERALA STATE POLLUTION CONTROL BOARD, DISTRICT OFFICE, KOLLAM, THE 3RD RESPONDENTIN APPLICATION NO. 439/2013(SZ)

I, Simi P., aged 40 years, D/o. T.V. Baby residing at Anizham, Maithanam, Varkala P.O., Thiruvananthapuram- 695141, Environmental Engineer, Kerala State Pollution Control Board, District Office, Kollam, do solemnly affirm and state as follows:

The Hon'ble NGT in its Order dated 14.09.2021 had directed the Board to file periodical report regarding the progress of the bio-mining and also implementation of the Solid Waste Management Rule, 2016 within Kollam Corporation. In continuation with the report dated 14.12.2021, I may humbly submit that as per the latest status report dated 18.03.2022 submitted by the Secretary, Kollam Corporation, the biomining activity commenced on 01.01.2022. As on 17.03.2022, 47121.25 m^3 of legacy waste had been processed. By the end of March 2022 more than 50% of Bio-mining process is expected to be completed. The segregated materials like refuse derived fuel (RDF), recyclables, rejects, soil etc. from the plant are stored and disposed in compliance of the Solid Waste Management Rules, 2016.

It is most humbly submitted that the biomining site of Kollam Corporation is periodically inspected by the Board. The site was last inspected by this respondent on 18.03.2022. The biomining activities were found to have progressed considerably. The machinery is installed in the existing building of the old solid waste processing plant having flooring and roofing. The plot boundary was enclosed additionally using corrugated sheets above the existing compound wall at the side where

residences are present. The other portions are provided additional enclosure using garden net above the compound wall. The total height of the enclosure was found sufficient. The pre-stabilized legacy waste from the dumpsite is loaded into trucks using excavators. The waste is weighed and loaded into the machinery for segregation using various physical separation methods. The RDF segregated from the landfill is dried, baled and sent to cement companies for co-incineration in the kilns. As per the report of the Secretary, Kollam Corporation, the RDF from the biomining plant at Kureepuzha is being sent to various cement factories like ACC Limited (Wadi), Dalmia Cement Limited (Ariyalur), Dalmia Cement Limited (Dalmiapuram), Ultratech Cement Limited (Reddipalayam). Other materials such as tyres, chappals, ferrous & non – ferrous metals etc are sent for recycling. Monthly report regarding traceability of disposal items and laboratory test reports of RDF, soil, water, noise, air quality etc. were submitted by the contractor to the Corporation.

Dispatch details of various segregated items from 01.01.2022 to 17.03.2022

Item Name	Quantity (Tonnes)
Coarse Fraction Soil	5,834.28
Footwear	31.55
Segregated Combustible Fraction	160.88
Stones	78.03
Tyre	2.64
RDF	948.54
Grand Total	**7,055.92**

The total volume of legacy waste to be disposed is 105000 m^3. Biomining of 44.87% of this legacy waste had been completed as on 17.03.2022. The biomining is expected to be completed by May 2022.

As per the latest status report on solid waste management dated 18.03.2022 submitted by the Secretary, Kollam Corporation (KMC), non-biodegradable waste is collected from households and individual establishments by Haritha Karma Sena (HKS), an initiative of Govt. of Kerala and LSGD. Currently 220 HKS members work across 54 wards of KMC. Number of members working per health circle ranges from 16- 24. Households are visited once in a month and Commercial establishments are visited twice in a month. User fee collected is deposited in bank account (Micro Enterprise Group Account) monthly, which is income source of HKS. Till date, HKS had visited 83% of households and 70% of commercial establishments in KMC. A cluster book is maintained by HKS in which the user fee collected is recorded. The households are given a consumer card for their record. 20 tonnes of legacy waste from

various hotspots in Kollam Corporation had been collected and disposed through Clean Kerala Company. Night squads were constituted for continuous monitoring of the hot spots and spot fines were induced for the defaulters. Plastic squad of KMC has served notice to 135 numbers of shops for use of banned plastics.

Details of non-biodegradable waste management	
Total number of households	**112823**
Total number of shops	**10346**
Total number of wards	**55**
Percentage of door to door collection in households	**83%**
Percentage of door to door collection in shops	**70%**
Number of Haritha Karma Sena Members	**220**
Number of Mini-MCF facilities	**200**
Number of MCF facilities	**8**
Number of MRF(With shredding machine and bailing machine)	**1**
Number of RRF	**1**
User fee collected till date	**13579204**
Quantity of scrap sold to local scrap dealers	**38.30 Ton**
Amount received	**Rs. 582209/-**
Quantity of segregated plastic sold to Clean Kerala Company	**63.51 tons**
Quantity of baled plastic sold to Clean Kerala Company	**14.93 tons**
Quantity of un baled plastic sold to Clean Kerala Company	**48.58 tons**
Quantity of non-recyclable plastic (less than 50 micron) sold	**12.17 tons**
As per calendar, quantity of glass waste sold	**16 tons**
As per calendar, quantity of chapels, bags and tablet stripes sold	**11.86 tons**

Kollam Corporation had provided bio-degradable waste management facilities at source level like bio digesters, biogas plant, bio compost bins, pipe compost, ring compost) for treatment of biodegradable waste household and commercial establishment. KMC is providing bio compost bins at subsidized rates with an aim of achieving 100% conversion of biodegradable waste at source level itself. At community level Kollam Corporation had provided de-centralised treatment systems viz, aerobic composting units, community based biogas plants etc. An integrated solid waste management project comprising of a Waste to Energy Plant of capacity 200 TPD is proposed by the Government of Kerala at Kureepuzha.

Details of Biodegradable Waste Management

Treatment Facilities	No's	Installed capacity (TPD)
Household Level		
Biogas Plants(HH)	3791	7.5
Pipe Compost(HH)	1750	2.6
Bio-composter(HH)	20000	30
Vermicomposting(HH)	189	0.2
Ring compost(HH)	2200	2.2
Compost pit(HH)	7025	10.50
Bucket compost(HH)	3200	4.8
Community Level(Decentralized Facility)		
Aerobic Composting Unit	27	1.30
Biogas Plants(Community Level)	13	5.60
Informal Waste Collectors (Hotels and Chicken Stall)		25.0
Total installed capacity for Bio- degradable waste treatment		**89.7**

The Corporation is submitting quarterly progress report on the implementation of Solid Waste Management Rules, 2016. The Board through routine surveillance is verifying the action taken by the Corporation for implementation of the SWM Rules. There are 2 nos of RRFs in the Corporation. Currently the Corporation had provided 27 aerobic composting units and 13 biogas plants at community level and 38155 units at house hold level for treatment of biodegradable waste. Informal waste collectors are handling 25 TPD of wet waste generated from hotels and chicken stalls. Currently around 48580 households are benefitted from the existing community and household level biodegradable waste management facilities provided by the Corporation. In the periodic inspection of the waste management facilities of

the Corporation it was noticed that out of the 2 RRFs, the one at Anchalummodu alone is operational and there is space constraint at the same resulting in storage of the dry waste even outside the RRF building. The newly constructed RRF at Kureepuzha has not yet started operation. There is overall improvement in the solid waste management compared to previous years. The proposed waste to energy plant is bio-methanation based and is having a capacity of 200 TPD. On commissioning of the same, the biodegradable waste management will be satisfactory. The Corporation is currently holding Authorization under the Solid Waste Management Rules, 2016 valid up to 06.08.2026. The Board vide the same had authorized the Secretary, Kollam Corporation for setting up and operation of solid waste management facilities for biodegradable/ non-biodegradable waste treatment and processing including MCFs, RRF, composting units, biogas plants and biomining of legacy waste. The Board had also granted Consent to Establish to the 200 TPD Waste to Energy Plant of the Corporation. The copy of the Consent to Establish dated 10.01.2022 is produced herewith and marked as **Annexure R3(a)**.

If the biomining is completed as per the proposed schedule and the waste management facilities as per the action plan are implemented, the Solid Waste Management Rules, 2016 can be implanted successfully in Kollam Corporation.

All that stated above are true to the best of my knowledge information and belief.

Dated this the 21st day of March 2022

ENVIRONMENTAL ENGINEER

Simi P

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Date: 2022.03.21 15:40:40 +05'30'

Respondent

Solemnly affirmed and signed by the deponent who is known to me on this the 21st day of March 2022.

BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL

SOUTHEN ZONE CHENNAI BENCH

Original Application No. 439 of 2013(SZ)
(THC) (W.P. (C) No. 3637/2012)
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Manushyavakasha Paristhithi
Samarakshana Samithy ... Applicant(s)
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Union of India and Ors. ... Respondents

I N D E X

Dated this the 21st day of March 2022

FILE NO. :PCB/HO/KLM/R21KOL759328/2022
Date of issue :10/01/2022

KERALA STATE POLLUTION CONTROL BOARD

CONSENT TO ESTABLISH

ISSUED UNDER

Section 25 of Water (Prevention & Control of Pollution) Act, 1974
Section 21 of the Air (Prevention & Control of Pollution) Act, 1981

and

Environment (Protection) Act, 1986

As per Application No. :15193444
Dated:09-09-2021

TO

M/s VENAD WASTE MANAGEMENT PRIVATE LIMITED
Sakthikulangara,
Kollam-691581.

Consent No. :PCB/HO/KLM/ICE/01/2022

Valid Upto :09/01/2025

Simi P

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1. GENERAL

This integrated consent is granted subject to the power of the Board to withdraw consent, review and make variation in or revoke all or any of the conditions as the Board deems fit.

1	**VALIDITY**	09/01/2025
2	Name and Address of the establishment	VENAD WASTE MANAGEMENT PRIVATE LIMITED SAKTHIKULANGARA,KOLLAM,KOLLAM 691581
3	Communication	Telephone :80-67292100 Fax :- E-mail:raj.kumar@zontaglobal.com
4	Occupier Details	Mr. Rajkumar Chellappan Pillai MALABAR WASTE MANAGEMENT PRIVATE LIMITED 1ST FLOOR,RELIABLE PHOENIX TOWERS, 16 16/1 MUSEUM ROAD BANGALORE MAHATMA GANDHI ROAD S.O BANGALORE KARNATAKA 560001
5	Local Body	Kollam
6	Survey Number	411,412,413,414 &416 297 298,2/13,2/14,2/15,2/20
7	Village	Sakthikulangara
8	Taluk	KOLLAM
9	District	Kollam
10	Capital Investment(Rs in Lakhs)	Rs.14501
11	Scale	Large
12	Category	RED
13	Annual fee(Rs) Total Fee remitted(Rs)	Rs.3,42,500/- Rs.10,27,545/-
14	RAW MATERIAL	PRODUCTS
	NON HAZARDOUS MSW @200 Metric Tonnes per day	COMPRESSED BIOGAS @8.165 Metric Tonnes per day
15	Total Power Required (HP)	

2. CONDITIONS AS PER

The Water(Prevention and Control of Pollution)Act, 1974

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In case of generation of trade effluent from the industry, effluent treatment system consisting of treatment units having adequate capacity established as per the proposal submitted along with the application shall be made functional before commissioning. Additional facilities required, if any, to achieve the standards laid down by the Board u/s 17(1) (g) of the Water Act shall also be made alongwith.

Water Consumption : 70 KLD

Effluent Generation : 183 KLD

The characteristics of effluent after treatment shall confirm to the following tolerance limits:

SI.NO.	**Characteristics**	**Unit**	**Tolerance Limit**	
			Sewage	**Trade Effluent**
1	pH	-	-	5.5-9
2	Suspended Solids	mg/l	-	200
3	Arsenic(as As)	mg/l	-	0.2
4	Cyanide(as CN)	mg/l	-	0.2
5	Chloride(as Cl)	mg/l	-	600
6	Dissolved Solids(Inorganic)	mg/l	-	2100
7	BOD(3 days at 27 degree Celsius)	mg/l	-	100

Mode of disposal of treated effluent : MUNICIPAL SEWER

3. CONDITIONS AS PER
The Air(Prevention and Control of Pollution)Act, 1981

Adequate air pollution control measures shall be provided before commissioning of the industry. Additional facilities required, if any, to achieve the standards laid down by the Board shall also be madealong with.

Stack No.	Sources of Emission	Emission Rate(Nm3/Hr)	Stack Height above		Control Equipment
			Ground Level	Roof Level	
1	350 KVA D.G.SET	-	-	3 m	Acoustic enclosure

Emission characteristics shall not exceed the following:

SI.No.	Parameter	Limiting Standards (mg/Nm3)
1	HCl	50
2	Particulates	50
3	SO2	200
4	CO	100
5	Total Organic Carbon	20

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6	HF	4
7	NOx	400
8	Total Dioxins and Furans(unit-ng/TEQ/NM3)	0.1
9	Cd+Th+ their compounds	0.05
10	Hg and its compounds	0.05
11	Sb+As+Pb+Cr+Co+Cu+Mn+Ni+V+their compounds	0.5

4. CONDITIONS AS PER The Environment (Protection) Act, 1986.

The construction activities shall be carried out strictly in compliance with the provisions of the NoisePollution (Regulation and Control)Rules 2000.

Used lead acid batteries shall be disposed of as per the Batteries (Management and Handling) Rules, 2001

Hazardous waste generated, if any, shall be handled as per the Hazardous and Other Wastes(Management and Transboundary Movement) Rules, 2016.

e-waste shall be disposed off safely as per the E-Waste (Management) Rules, 2016.

5. SPECIFIC CONDITIONS

5.1. This consent is granted subject to the power of the Board to review and make variations in all or any of the conditions as per section 21 of the Air (Prevention and Control of Pollution) Act 1981 and section 25of the Water (Prevention and Control of pollution) Act 1974.

5.2. At the end of the validity period if the construction is in progress, the same shall be got renewed. If the construction is not started in the consent period, the applicant shall apply afresh for consent to establish.

5.3. The applicant shall comply with the instructions that the Board may issue from time to time regarding prevention and control of air, water, land and sound pollution.

5.4. Consent to Operate under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 shall be obtained before commissioning the project. The date of commissioning of the project shall be intimated at least one month in advance to the District Officeof the Board.

5.5. Water & energy conservation measures shall be adopted. Renewable source of energy namely solar energy shall be utilized.

5.6. Adequate safety measures shall be provided in accordance with fire safety regulation.

5.7. No excavation of soil shall be carried out without adequate dust mitigation measures in place.

5.8. No loose soil or sand or Construction & Demolition Waste or any other construction material that causes dust shall be left uncovered.

5.9. Dust mitigation measures shall be displayed prominently at the construction site.

5.10. Grinding and cutting of building materials in open area shall be prohibited.

5.11. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.

5.12. No uncovered vehicles carrying construction material and waste shall be permitted.

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5.13. Construction and Demolition Waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site.

5.14. The construction camp shall have a well maintained waste management system and sewage and effluent shall be treated to meet the standards. The solid waste and debris from the construction shall bedisposed without causing environmental problems. The dredging shall be carried out without causing significant disturbance to the back water system, if any.

5.15. The area near the boundary and the buildings and the set back shall be utilized for the development of green belt.

5.16.Arrangements shall be provided for rainwater harvesting before commissioning.

5.17. Necessary statutory clearances, if needed shall be obtained.

5.18.Standards of processing and treatment od solid waste shall be as per Schedule II of Solid Waste Management Rules,2016.

5.19. Arrangements shall be provided for the proper treatment of leachate. The treated leachate shall conform to the standards specified in condition no.2.4 of this consent.

5.20. Emission from the thermal technologies in solid waste treatment shall meet the standards specified in Condition no.3.2 of the consent.

5.21. Odour control measures shall be provided.

5.22. Online Continuous Emission/Effluent Monitoring System (OCEMS) shall be installed and shall be connected to Board's Central Server.

A B Pradeep Kumar

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DATE :10/01/2022

SIGNATURE & SEAL OF ISSUING AUTHORITY
CHAIRMAN

KERALA STATE POLLUTION CONTROL BOARD
KERALA

To

Mr. Rajkumar Chellappan Pillai
MALABAR WASTE MANAGEMENT PRIVATE LIMITED,
1ST FLOOR,RELIABLE PHOENIX TOWERS,
16 16/1, MUSEUM ROAD,
MAHATMA GANDHI ROAD S.O.,
BANGALORE, KARNATAKA-560001.

Simi P

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Date: 2022.03.21
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1. This digitally signed document is legally valid as per the Information Technology Act 2000

2. For verifying this document please go to krocmms.nic.in and search using date of issue/name of the unit/Application Number in “Consent Granted Applications” link in the home page of the Board’s Online Consent Management and Monitoring System.

Simi P

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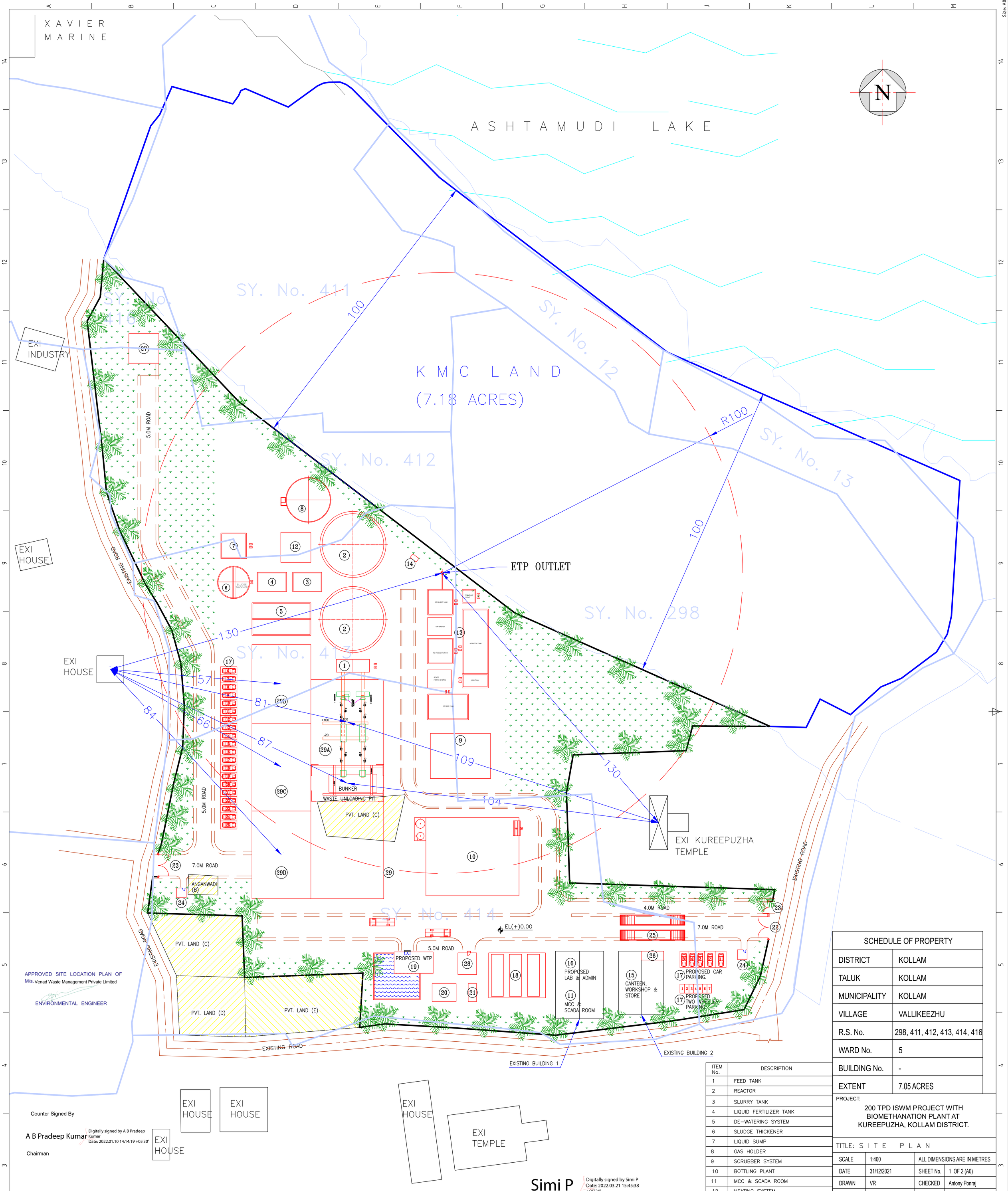

APPROVED SITE LOCATION PLAN OF
M/s. Venad Waste Management Private Limited

ENVIRONMENTAL ENGINEER

Counter Signed By

A B Pradeep Kumar
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Date: 2022.01.10 14:14:19 +05'30'

Chairman

Simi P
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NOTES:–

1) ALL DIMENSIONS & ELEVATIONS ARE IN METRES.
2) PVT. LAND A: KSIDC SHALL ACQUIRE THIS LAND AS THIS IS COMING WITHIN THE BOUNDARY OF THE KSIDC LAND MEANT FOR ISWM.
3) ANGANWADI B SHALL BE DEMOLISHED.
4) PVT. LANDS C, D & E: KSIDC SHALL ACQUIRE THESE LANDS TO MEET THE DISTANCE CRITERIA FROM THE HABITATIONS.

LEGEND:–

- BOUNDARY: KSIDC LAND (7.05 ACRE)
- BOUNDARY: KMC LAND (7.18 ACRE)
- BOUNDARY: SURVEY MAP

LAND USE PATTERN			
SL. No.	PARTICULARS	AREA (ACRE)	PERCENTAGE (%)
1	PLANT AREA	0.75	10.0
2	PLANT BUILDINGS (EXISTING, & NEW)	1.25	18.0
3	HARD PAVED AREAS & PARKING AREAS.	2.01	28.0
4	ROADS & DRAINS	1.04	15.0
5	SUB TOTAL	5.05	72.0
6	GREEN BELT	2.0	28.0
7	TOTAL	7.05	100

CATEGORY	No. OF TOILET REQUIRED	No. OF TOILET PROVIDED
MALE	6	6
FEMALE	5	5
TOTAL	11	11

MACHINERY POWER (KW)	
EXISTING	NIL
PROPOSED	1728.4
TOTAL	1728.4

EXISTING BUILDING AREA DETAILS			
Sl. No,	PROPOSED AREA	PLINTH AREA (SQM)	BUILTUP AREA (SQM)
1	EXISTING BUILDING 1 (LAB & ADMIN, MCC & SCADA ROOM)	360.0	360.0
2	EXISTING BUILDING 2 (WEIGH BRIDGE CONTROL ROOM, CANTEEN, WORKSHOP & STORE)	315.0	315.0

PROPOSED BUILDING AREA DETAILS			
Sl. No,	PROPOSED AREA	PLINTH AREA (SQM)	BUILTUP AREA (SQM)
1	WATER TREATMENT PLANT BUILDING	93.0	93.0
2	BOTTLING PLANT BUILDING	805.2	805.2
3	SECURITY BUILDINGS (TWO Nos.)	20.8	20.8
4	LABOUR REST & WASH ROOM	45.0	45.0
5	WASTE HANDLING SHED	3423.5	3423.5

ITEM No.	DESCRIPTION
1	FEED TANK
2	REACTOR
3	SLURRY TANK
4	LIQUID FERTILIZER TANK
5	DE–WATERING SYSTEM
6	SLUDGE THICKENER
7	LIQUID SUMP
8	GAS HOLDER
9	SCRUBBER SYSTEM
10	BOTTLING PLANT
11	MCC & SCADA ROOM
12	HEATING SYSTEM
13	EFFLUENT TREATMENT PLANT
14	FLARE STACK
15	CANTEEN, WORKSHOP & STORE
16	LAB, & ADMIN BUILDING
17	PARKING FOR PERSONNEL VEHICLES
18	PARKING FOR HEAVY VEHICLES
19	WATER TREATMENT PLANT
20	TRANSFORMER
21	EMERGENCY DG SET
22	PERSONNEL/MATERIAL GATE
23	GATE 2 & 3
24	SECURITY ROOM
25	WEIGH BRIDGE
26	WEIGH BRIDGE CONTROL ROOM
27	RAIN WATER HARVESTING PIT
28	LABOUR REST & WASH ROOM
29	WASTE HANDLING SHED 29A: WASTE PROCESSING AREA 29B: FERTILIZER YARD 29C: INERTS STORAGE AREA 29D: RDF STORAGE/BAILING AREA

SCHEDULE OF PROPERTY	
DISTRICT	KOLLAM
TALUK	KOLLAM
MUNICIPALITY	KOLLAM
VILLAGE	VALLIKEEZHU
R.S. No.	298, 411, 412, 413, 414, 416
WARD No.	5
BUILDING No.	-
EXTENT	7.05 ACRES

PROJECT:

200 TPD ISWM PROJECT WITH BIOMETHANATION PLANT AT KUREEPUZHA, KOLLAM DISTRICT.

TITLE: SITE PLAN

SCALE	1:400	ALL DIMENSIONS ARE IN METRES	
DATE	31/12/2021	SHEET No.	1 OF 2 (A0)
DRAWN	VR	CHECKED	Antony Ponraj
DRG. No.	VWM-DWG-001	REVISION	0

Designed by:

M/s. Zonta Infratech Private Limited
1st Floor, Reliable Phoenix Towers
#16, 16/1 Musuem Road, Bengaluru 560 001.

Factory name & address:

M/s. Venad Waste Management Private Limited
Kureepuzha, Kollam.

Applicant:

Mr. Rajkumar Chellappan Pillai
Venad Waste Management Private Limited
1st Floor, Reliable Phoenix Towers
#16, 16/1 Musuem Road, Bengaluru 560 001.

Engineer:

D. Pushpanathan
Chartered Engineer [India]
The Institution of Engineers (India)
Reg. No. F 104995/8

Biomethanation Plant

Sl. No,	Proposed Machineries	No.	Proposed Power (KW)	Total Power (KW)
1	Terminator	1	168	168
2	Splitter Unit 625	1	16	16
3	MS 2SE	1	22	22
4	Set of Belt Conveyors	6	33	198
5	Hopper 32 M^3	1	18	18
6	Screw Conveyor	1	30	30
7	Pulper 12 M^3	1	132	132
8	Screw Conveyor Reversible	1	18.5	18.5
9	Wet Screen	1	8	8
10	Sand Screw Conveyor	1	1.1	1.1
11	Worm Extruder	1	30	30
12	Screw Conveyor Pressed Material	1	7.5	7.5
13	Pump 1	1	11	11
14	Pump 2	1	5.5	5.5
15	Pipe Shredder	1	18.5	18.5
16	Compressor System	1	11	11
17	Feed Tanks Agitator	2	7.5	15
18	Feed Pump	1	5.5	5.5
19	Reactor Gas Mixing	6	30	180
20	Air Blowers for Reactor Membrane	2	1.2	2.4
21	Air Blowers for Gas Holder Membrane	1	1.2	1.2
22	Reactor Heating System	1	60	60
23	Scrubber System	1	15	15
24	Sludge Pump to Screw Press	1	3.7	3.7
25	Screw Press System	1	5.5	5.5
26	Liquid Fertilizer Pump	1	3.7	3.7
27	Decanter System	1	45	45
28	Sludge Thickener Mechanism	1	2.2	2.2
29	Sludge Transfer Pump_Thickener	1	2.2	2.2
30	Treated Water Transfer Pump	1	3.7	3.7
31	Booster Blower for Scrubber	1	5.5	5.5
32	Biogas Purification System	1	110	110
33	BioCNG Compressor System	2	90	180
34	Plant Lighting	1	10	10
35	Effluent Treatment Plant	1	90	90
36	Compost Packing & Conveyor System	1	10	10
37	Water Pump	1	3.7	3.7
38	Air Centrifugal Fan	6	15	90
	Total			1539.4

Water Treatment Plant

Sl. No,	Proposed Machineries	No.	Proposed Power (KW)	Total Power (KW)
1	Raw water pumps	2	3	6
2	PSF transfer pumps	2	1.5	3
3	ACF transfer pumps	2	1.5	3
4	NFP transfer pumps	2	1.5	3
5	Potable transfer pumps	2	0.5	1
6	Service water pumps	2	0.5	1
7	Hydrant pump	2	64	128
8	Jockey pump	2	10	20
	Total			165

Security Buildings

Sl. No,	Proposed Machineries	No.	Proposed Power (KW)	Total Power (KW)
1	Lighting, fans.	1	1	1
	Total			1

Labour Rest and Wash Room

Sl. No,	Proposed Machineries	No.	Proposed Power (KW)	Total Power (KW)
1	Lighting, Geyser, fans.	1	2	2
	Total			2

Workshop and Store

Sl. No,	Proposed Machineries	No.	Proposed Power (KW)	Total Power (KW)
1	Hoist 5t	1	5	5
2	Machineries (lathe, drilling machine etc.)	1	4	4
3	Lighting fans.	1	1	1
	Total			10

Laborotary, Canteen and Admin building

Sl. No,	Proposed Machineries	No.	Proposed Power (KW)	Total Power (KW)
1	Lighting, fans and AC	1	1	1
2	Lab Equipments	1	1	1
4	Kitchen Appliances	1	2	2
	Total			4

PANEL & SCADA ROOM

Sl. No,	Proposed Machineries	No.	Proposed Power (KW)	Total Power (KW)
1	Lighting, fans, etc.	1	2	2
	Total			2

WEIGHBRIDGE CONTROL ROOM

Sl. No,	Proposed Machineries	No.	Proposed Power (KW)	Total Power (KW)
1	Lighting, fans.	1	1	1
2	Weighbridge	2	2	4
	Total			5

SCHEDULE OF PROPERTY	
DISTRICT	KOLLAM
TALUK	KOLLAM
MUNICIPALITY	KOLLAM
VILLAGE	VALLIKEEZHU
R.S. No.	298, 411, 412, 413, 414, 416
WARD No.	5
BUILDING No.	-
EXTENT	7.05 ACRES

Project:

200 TPD ISWM PROJECT WITH BIOMETHANATION PLANT AT KUREEPUZHA, KOLLAM DISTRICT.

TITLE: SITE PLAN

SCALE	-	ALL DIMENSIONS ARE IN METRES	
DATE	31/12/2021	SHEET No.	2 of 2 (A2)
DRAWN	VR	CHECKED	Antony Ponraj
DRG. No.	VWM-DWG-001	REVISION	0

Designed by:

M/s. Zonta Infratech Private Limited
1st Floor, Reliable Phoenix Towers
#16, 16/1 Musuem Road, Bengaluru 560 001.

Factory name & address:

M/s. Venad Waste Management Private Limited
Kureepuzha, Kollam.

Applicant:

Mr. Rajkumar Chellappan Pillai
Venad Waste Management Private Limited
1st Floor, Reliable Phoenix Towers
#16, 16/1 Musuem Road, Bengaluru 560 001.

Engineer:

D. Pushpanathan
Chartered Engineer [India]
The Institution of Engineers (India)
Reg. No. F 104995/8

Size: A2