### HARYANA STATE POLLUTION CONTROL BOARD C-11, SECTOR-6, PANCHKULA Website – www.hspcb.org.in E-Mail :hspcbsolidwaste@gmail.com Ph:0172-2577870-873

### Dated:26-09-2024

То

The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032.

# Subject: Submission of Annual Report for the year 2023-24 under Solid Waste Management Rules, 2016.

Ref: Form V [Rules 24(3)] of Solid Waste Management Rules 2016

Kindly refer to the subject noted above.

In this connection, I have been directed to enclose herewith the Annual Report for the year 2023-24 under Solid Waste Management Rules, 2016 for your kind information and further necessary action please.

DA/As above

Signed by Vikas Chand Date: 26-09-2024 10:10:45 Env.Engineer(HQ) For Chairman

### CC to:-

A copy of the above is forwarded to Sr. Environmental Engineer (IT) for uploading the annual report on the website of the Board.

### $\mathbf{Form} - \mathbf{V}$

Format of annual report to be submitted by the state pollution control board or pollution control committee committees to the central pollution control board

Sector-
Sector-



### Towns/cities:-

1)	Total number of towns/cities	88	
2)	Total number of ULBs	88	
3)	Number of class I & class II cities/towns	29	
Author	ization status (names/number):-		
1)	Number of applications received	2	
2)	Number of authorizations granted	2	
3)	Authorizations under scrutiny	0	
Solid V	Vaste Generation status:-	(ULBD and	Development
bond v			-
Jona v		Panchayat	Department)
1)	Solid waste generation in the state (TPD)		-
		Panchayat	-
1)	Solid waste generation in the state (TPD)	<b>Panchayat</b> 9662.21	-
1) 2) 3)	Solid waste generation in the state (TPD) Collected (TPD)	<b>Panchayat</b> 9662.21 7248.72	-
1) 2) 3) 4)	Solid waste generation in the state (TPD) Collected (TPD) Treated (TPD)	Panchayat           9662.21           7248.72           4859.31           2213.31	-
1) 2) 3) 4) Compli	Solid waste generation in the state (TPD) Collected (TPD) Treated (TPD) Land filled/Dumped (TPD)	Panchayat           9662.21           7248.72           4859.31           2213.31	-

&

3)	Segregation	80%
4)	Storage	Yes(Partial)
5)	Covered transportation	88%

## PART A

### Processing of SW (Number/names of towns/capacity)

Solid waste processing facilities setup (MC Wise)

Sr.	Composting	Vermi	Bio gas	RDF / Palletization
no.		composting		
1.	3 Plants in 3 MCs 3200 composting Pits. including park pit in 88 MCs	10	3	3 Plant Waste to Compost+ RDF in 3 MCs

## **Processing facility operational**

Sr. no.	Composting	Vermi composting	Bio gas	RDF / Palletization
1.	3 Plants in 3 MCs 3200 composting Pits including park pit in 88 MCs	12	3	3 Plant Waste to Compost+ RDF in 3 MCs

### Processing facility under installation / planned

Sr. no.	Composting	Vermi composting	Bio gas	RDF / Palletization		
	The State of Haryana has been divided into 13 Integrated Solid Waste Management Clusters					
	to provide end to en	d solution for the man	agement of solid was	ste generated under 88 ULBs		
	of Haryana. Out of 1	3 clusters, the works f	for 5 clusters have bee	en allotted.		
	As 2 out of remain	ing 8 Clusters, name	ly ISWM Panchkula	cluster and ISWM Farukh		
	Nagar cluster are fa	acing problem in allo	ocating the suitable	land for ISWM project, the		
	proposal for merging	g these two clusters in	to other cluster cluste	ers is under approval. Hence,		
	there are currently 1	1 Clusters.				
	Out of these 11 Ch Bhiwani Cluster (15) are under implement the concessionaires transportation of was Sonipat-Panipat (70) operational with th	usters, 3 clusters nam 5) and Sirsa Cluster (1 tation and these cluster of the respective cl ste. Tender for rest 8 C 0 TPD) waste to energy	ely Karnal-Kaithal-T 68TPD) have been avers are based on waster usters have started Clusters will be invited gy plant is completed of 8MW. The com	l on 15, August, 2021 and is struction of WTE Plant at		

### Waste to energy plants (Number / names of towns / capacity)

Sr. no.	Plant location	Status of operation	Power generation (MW)	Remarks
1.	Sonipat	Operational	8	Started on 15, August 2021 and operational.
2.	Gururgram (Bhandwari)	Under implementation	23	The construction of WTE Plant(cluster) at Gurugram- Faridabad is expected to be completed by August 2025

### Disposal of Solid Waste (number/names of towns/ capacity):-

1)	Landfill sites identified	7 Existing and 11 Proposed.
2)	Landfill constructed	7
3)	Landfill under construction	NIL
4)	Landfill in operation	3
5)	Landfill exhausted	4
6)	Land filled capped	NIL

# Solid Waste Dumpsites (number/names of towns/capacity):-

1) Total number of existing dumpsites:-	75
2) Dumpsites reclaimed/capped:-	20 Dumpsites has been reclaimed.
3) Dumpsites converted to sanitary landfill:-	Nil

## Monitoring at Waste processing/Landfills sites:-

Sr. no.	Name of Facilities	Ambient Air	Ground Water	Leachate Quality	Compost Quality	VOCs
1	Solid Waste Management Project Karnal Vpo Shiekhpura, Karnal	AR attached	AR attached	AR attached	NA	NA
2	Integrated Solid Waste Report Management Facility at attached Murthal Village, Sonipat District, Haryana by Directorate of Urban Local Bodies C/O JBM Environment Management Private Limited Near 132 KV HVPNL Substation, Tajpur- Murthal Road,	AR attached	AR attached	AR attached	Waste to energy plant, no composting carried out by the unit.	-

	Murthal Village, Sonipat, Haryana- 131027					
3	M/s Tubewell at MSW site , Ambala road, Jagadhri	-	AR attached	-	-	-
4	Waste collection point at Village Binjhol, Panipat	No monitoring done	AR attached	No Leachate	No processing done at the Binjhol site, waste is sent to Sonepat for processing	No monitoring done
	Location : Near Municipal Solid Waste Dumping Site (Baba Chander Bhan Market, Bhiwani)	-	(AR attached	-	-	-
5	Location : Near Municipal Solid Waste Dumping Site (Auto Market, Bhiwani)	-	AR attached	-	-	-
5	Location : Near Municipal Solid Waste Dumping Site (Auto Market- II, Bhiwani)	-	AR attached	-	-	-
	Location : Near Municipal Solid Waste Dumping Site (Shree Shyam Motor Works Bhiwani)	-	AR attached	-	-	-
6	M/s IMFMH facility Municipal corporation Ambala,vill patvi teh shahjadpur ambala	AR attached	AR Attached	-	AR attached	AR attached
7	Common MSW management facility at village Bhandhwari, Distt Gurugram	-	AR attached	AR attached	-	-

Status of Action Plan prepared by Municipalities:-

Total number of Municipalities

Number of Action Plan Submitted

88

Vide letter memo no. Tech/SBM/2022/5035 dated 29.08.2022, action plan for legacy waste and ISWM Cluster already submitted to MoHUA for the funds tune to the Rs. 105.27 Cr. and 155.00 Cr. for ISWM cluster & Legacy waste.

## <u>Sub: Summary Statement on progress by Local Bodies in respect of Solid Waste</u> <u>Management</u>

As per the annual report submitted by Urban Local Bodies (ULB) department, there are 88Urban Local Bodies in the State. All these 88 nos. of ULBs are generating about 6387Tons per day (TPD) of municipal solid waste, out of which 6375 TPD is collected. Out of total collected waste, 4161 TPD is being treated/processed and remaining 2213 TPD waste is being Landfill/dumped.

Total 13 Integrated Solid Waste Management clusters have been formed in Haryana. Out of 13 clusters, 2 waste to energy clusters namely Sonipat-Panipat &Gurugram-Faridabad WTE are under implementation. Sonipat-Panipat (700 TPD) waste to energy plant is completed on15,August, 2021 The construction of WTE Plant at Gurugram- Faridabad cluster has been started and is expected to be completed by August 2025.

11 clusters are based on open technology and the selected agency to decide the technology. Out of these 11 Clusters, 3 clusters namely Karnal-Kaithal-Thanesar Cluster (638 TPD), Bhiwani Cluster (155) and Sirsa Cluster (168TPD) have been awarded to the agencies which are under implementation and these clusters are based on waste to compost technology and the concessionaires of the respective clusters have started the work of collection and transportation of waste. Tender for rest 8 Clusters will be invited shortly. The details of the clusters are attached at**Table-1**.

Urban local bodies are doing collection of domestic, trade and institutional food/ biodegradable waste from the doorstep or from the community bin on daily basis. Local bodies are using containerized handcarts/tricycles/ Tractor Trolly / Refuse Compactor or other similar means for the primary collection of waste stored at various sources of waste generation. The solid waste thus collected from households and other sources is transported to Primary Collection Centre, where, the waste would be primarily segregated i.e. recyclables are sorted out by the workers and stored separately For secondary transportation of solid waste from the Primary Collection Centre to the designated processing plant site or sanitary landfill site/ dumping sites, Dumper Placers with twin bin containers are provided.

### <u>Table:- 1</u>

## Integrated Solid Waste Management Cluster Projects in Haryana

S.N.	Name of Cluster	Number of ULBs	Name of ULBs in the cluster	Estimated Capacity in (TPD)
1.	Sonipat-Panipat	4	Sonipat, Panipat, Gannaur, Samalkha	700
2.	Faridabad- Gurugram	2	Faridabad, Gurugram	2100
3.	Karnal-Kaithal- Thanesar	18	Karnal, Indri, Nilokheri, Tarori, Gharaunda, Nissing, Assandh, Thanesar, Shahbad, Ladwa, Kaithal, Kalayat, Rajound, Cheeka, Pundri, Pehowa, Ismailabad, Siwan	638
4.	Bhiwani	4	Bhiwani, Bawani Khera, Charkhi Dadri, Loharu	155
5.	Sirsa	5	Sirsa, Rania, Ellenabad, Kalanwali, Mandi Dabwali	168
6.	Ambala- Yamunanagar- Panchkula	9	Ambala, Ambala Sadar, Naraingarh, Panchkula, Kalka, Yamunanagar-Jagadhari, Barara, Radaur, Sadhaura	760
7.	Rohtak- Bahadurgarh- Jhajjar	12	Rohtak, Kalanaur, Meham, Gohana, Bahadurgarh, Kundli, Kharkhoda, Jhajjar, Sampla, Beri, Farukhnagar, Pataudi- Mandi	640
8.	Hisar- Hansi- Fatehabad	11	Hisar, Adampur, Barwala, Hansi, Siwani, Fatehabad, Bhuna, Ratia, Tohana, Jakhal Mandi, Uklana	500
9.	Jind	6	Jind, Narwana, Uchana, Safidon, Narnaund, Julana	230

S.N.	Name of Cluster	Number of ULBs	Name of ULBs in the cluster	Estimated Capacity in (TPD)
10.	Manesar- Rewari	9	Manesar, Rewari, Bawal, Dharuhera, Mahendergarh, Kanina, Nangal Choudhary, Narnaul, Ateli-Mandi	470
11.	Palwal-Sohna	8	Palwal, Sohna, Hathin, Hodal, Nuh, Tauru, Punhana, Firozpur Jhirka	250

# Sub: Summary Statement on progress made by Local Bodies in respect of waste collection, segregation, transportation and disposal.

As per the status submitted by ULB department, the detail on progress made by Local Bodies in respect of waste collection, segregation, transportation and disposal is given below:

#### A. Waste Collection

Door to door collection is being done in around 1671wards out of 1702 wards (Approx. 98%) and existing waste collection vehicles are being modified into two covered compartments for collection of waste in segregated manner. Freshly deployed vehicles are having two covered compartments for collection of wet and dry waste in a segregated manner. A Separate basket/bin is kept in waste collection vehicle/ tricycle for segregated collection of domestic hazardous waste.

Urban local bodies are doing collection of domestic, trade and institutional food/ biodegradable waste from the doorstep or from the community bin on a daily basis. Large containers kept in the fruit and vegetable markets and removed during night time or non-peak hours by the local body.

#### **B.** Transportation

Local bodies are using covered containerized handcarts/tricycles/ Tractor Trolly/Refuse Compactor or other similar means for the primary collection of waste stored at various sources of waste generation. Existing waste collection vehicles are being modified into two covered compartments for collection of waste in segregated manner. Deployed vehicles are having two covered compartments for collection of wet and dry waste in a segregated manner. For secondary transportation of solid waste from the Primary Collection Centre to the designated processing plant site or sanitary landfill site, "Dumper Placers with twin bin containers" is provided.

#### **C. Segregation**

Out of 1702 wards, source segregation has been achieved in 1369 wards (Approx. 80%) and for coverage in remaining wards, rigorous IEC campaign is being organized across the State in all ULBs.

#### **D.** Disposal

Rejects and residues collected from the above-mentioned processes are disposed in dumping sites and further processed for energy. Presently, there are (3 plants in 3 MCs 3200 Composting Pits including park pits in 88 MCs), (10 nos. Vermi Composting Facilities), (3 nos Bio Gas Plant) and (3 plant waste to compost +RDF in 3 MCs). Total 18 nos of landfill have been identified out of which 7 no. are existing and 11 are proposed. 3 no. of landfill are operational and 4 are exhausted.

# Sub: Summary Statement on progress made by Local Bodies in respect of implementation of Schedule-II.

Presently there are (3 plants in 3 MCs 3200 Composting Pits including park pits in 88 MCs), (10 nos. Vermi Composting Facilities), (3 nos. Bio Gas Plant) and (3 plant waste to compost +RDF in 3 MCs) in the State of Haryana.

The approach adopted by the state is broadly categorized under two heads,

### a. Decentralized Approach (Town/City Wise)

Decentralized Approach is being adopted with an objective to create an atmosphere which impacts the ideology and mind set of people as to how important is their role in ensuring effective and efficient waste management with minimal resources and which is self-driven.

As part of this approach presently around 3200 Compost pits including park pits have been constructed across all the ULBs Also 88Material Recovery Facilities have been set up and the target is to reach 114 MRF, within a span of next 3 months with each ULB having at-least 1(One) MRF Apart from setting up Compost pits, Vermi Composting facility, Bio-methanation plant, windrow composting at existing dumpsite is being currently practiced. Also, in Karnal city alone approx. 2000 Household composting pits have been recorded.

All the ULBs have also ensured that all the Bulk Waste Generators are identified and have started processing their wet waste, this resulted in overall reduction in volume of wet waste being sent for disposal.

The nos. pertaining to Compost pits, Household composting, Wet Waste Processing through Vermi-Composting, Windrow composting and bio-methanation and dry waste recovery, reuse and recycling through MRFS are continuously increasing and all the efforts are being made to improve the Solid Waste Management Scenario in time bound manners.

### b. Integrated Centralized Waste Processing Approach (Cluster Wise)

As per action plan submitted by ULB department. Government of Haryana has adopted cluster based integrated approach for Solid Waste Management. The Integrated Centralized Waste Processing Approach (Cluster Wise) is being adopted as a long-term approach within an overall objective to setup regional Waste to Energy & Waste to Compost + RDF processing facilities and Secured Sanitary landfills for scientific disposal of Solid Waste. This approach is more coveted considering the constraints posed by the decentralized approach and its sustainability over long run.

As part of this approach, total 13 Cluster have been formed covering all the ULBs. Two (2) Clusters are Waste to Energy having average solid waste quantum more than 500 TPD and remaining Eleven (11) are Open technology cluster. Also, under this approach the projects will be set up on PPP mode and single agency/concessionaire will be responsible for Door-to-Door Collection transportation, processing and disposal of Solid Waste for a concession period of 22 years.

Currently 2 Waste to Energy Cluster Projects namely Sonipat-Panipat and Gurugram-Faridabad and 3 Waste to Compost Projects namely Karnal-Kaithal-Thanesar Cluster (638 TPD), Bhiwani Cluster (155TPD) and Sirsa Cluster (168TPD) have been awarded. The Waste to Energy Plant at Sonipat-Panipat Cluster (700 TPD) is completed and is operational since 15th August 2021. The construction of plants at Gurugram-Faridabad Cluster, Karnal-Kaithal-Thanesar Cluster (638 TPD), Bhiwani Cluster (155TPD)

and Sirsa Cluster has been started and the plant is under implementation. Collection & Transportation has been Started by the Concessionaire. The Remaining 8 clusters are based on open technology and the selected agency to decide the technology.

Also, there are two existing operational centralized waste to compost processing facilities in the State i.e. Rohtak (150 TPD) & Karnal (150 TPD). Under this approach these plants will be upgraded and expanded to cater the future waste generation requirements.

The sites have been identified for all the clusters and the tendering is under progress.



Laboratory: A-114, Sector-80, Phase-II Noida, Gautam Budh Nagar - 201305, (U.P.) (An ISO 9001: 2015, ISO 14001:2015 & ISO 45001:2018 Certified Laboratory) MOEF & CC (Ministry of Environment Forest & Climate Change)



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#### Report Code: AAQ-101123-03, Page - 1 of 2

TEST REPORT

**Ambient Air Quality Analysis** 

Report Code: AAQ-101123-03

Issue Date: 17/11/2023

ISSUED TO: M/S. PIONEER FOUNDATION ENGINEERS PVT. LTD. Office No. – 1217, Tower – B, The I-Thum, A – 40, Block – A, Sector – 62, Noida, (U.P.) Site Address: Legacy Waste Dump Site, Patwi, Ambala, Haryana

#### SAMPLING & ANALYSIS DATA

Sample Description	:	Ambient Air
Date of Sampling	:	09/11/2023
Sample Drawn By	:	ITS Representative
Sampling Location	:	Near Plant Area
Sampling Plan & Procedure	:	IS:5182 & CPCB Guidelines
Average Flow Rate of SPM (m <sup>3</sup> /min.)	:	1.11
Average Flow Rate of Gases (lpm)	:	0.2
Sampling Instrument Used	:	Respirable Dust Sampler (PM <sub>10</sub> ) Fine Particulate Sampler (PM <sub>2.5</sub> ) With Gaseous Attachment
Ambient Temperature & Humidity	:	28°C & 69%
Weather Condition	:	Clear
Sample Received On	:	10/11/2023
Analysis Duration	:	10/11/2023 To 17/11/2023

	TEST RESULT							
S.No.	Parameter	Test Method	Results	Units	Limits as per Environment (Protection) Act.			
1.	Particulate Matter (PM <sub>10</sub> )	IS:5182 Part-XXIII	204.8	$\mu g/m^3$	100			
2.	Sulphur dioxide (as SO <sub>2</sub> )	IS:5182 Part-II	27.2	$\mu g/m^3$	80			
3.	Nitrogen dioxide (as NO <sub>2</sub> )	IS:5182 Part-VI	59.9	$\mu g/m^3$	80			
4.	Ammonia (as NH <sub>3</sub> )	IS:5182 Part-XXV	284	$\mu g/m^3$	400			
5.	Lead (as Pb)	IS:5182 Part-XXII	< 0.1	$\mu g/m^3$	1.0			
6.	Ozone ( as O <sub>3</sub> )	IS:5182 Part-IX	27.6	$\mu g/m^3$	180			
7.	Benzene ( as C <sub>6</sub> H <sub>6</sub> )	IS:5182 Part-XI	1.28	$\mu g/m^3$	5.0			

CHECKE

Terms & Conditions :

1. Test reports are valid only for the samples tested in our laboratory. 2. Samples will destroyed as per quality policy. 3. Any complaints about the report should be communicated in writing within 7 days.

SIGNATORY



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# ITS TESTING LABORATORY (P) LTD.

Laboratory: A-114, Sector-80, Phase-II Noida, Gautam Budh Nagar - 201305, (U.P.) (An ISO 9001: 2015, ISO 14001:2015 & ISO 45001:2018 Certified Laboratory) MOEF & CC (Ministry of Environment Forest & Climate Change)

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		F	Report Code	e: AAQ-10112	3-03, Page - 2 of 2
8.	Particulate Matter (PM <sub>2.5</sub> )	IS:5182 Part-XXIV	121	$\mu g/m^3$	60
9.	Carbon monoxide (as CO)	IS:5182 Part-X	1.40	mg/m <sup>3</sup>	4.0
10.	Benzo (a) Pyrine	IS:5182 Part-XI	0.39	$ng/m^3$	1.0
11.	Nickel (as Ni)	APHA-AIR420	<1.0	$ng/m^3$	20
12.	Arsenic (as As)	APHA-AIR302	<1.0	ng/m <sup>3</sup>	6.0

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Laboratory: A-114, Sector-80, Phase-II Noida, Gautam Budh Nagar - 201305, (U.P.) (An ISO 9001: 2015, ISO 14001:2015 & ISO 45001:2018 Certified Laboratory) MOEF & CC (Ministry of Environment Forest & Climate Change)



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## TEST REPORT

**Ambient Noise Analysis** 

Report Code: N-101123-03

Issue Date: 17/11/2023

### ISSUED TO: M/S. PIONEER FOUNDATION ENGINEERS PVT. LTD. Office No. – 1217, Tower – B, The I-Thum, A – 40, Block – A, Sector – 62, Noida, (U.P.) Site Address: Legacy Waste Dump Site, Patwi, Ambala, Haryana

### SAMPLING & ANALYSIS DATA

Sample Description Date of Sampling Sample Drawn By Sampling Location Sampling Plan &Procedure Sampling Instrument Used Weather Condition Sample Received On Analysis Duration

- : Ambient Noise
- : 09/11/2023
- : ITS Representative
- : Inside Plant Area
- : ITS/LAB/SOP/N/02
- : Noise Meter
- : Clear
- : 10/11/2023
- : 10/11/2023 To 17/11/2023

		T	EST RESU	LTS		
S. No	Test Parameters	Results	Requirement (as per CPCB Guideline Limits in dB (A) Leq			
1.	EQUIVALENT	71.6	dB(A)	Category of Area/ Zone	Day Time	Night Time
	NOISE LEVEL			Industrial Area	75	70
				Commercial Area	65	55
				Residential Area	55	45
				Silence Zone	50	40

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Laboratory: A-114, Sector-80, Phase-II Noida, Gautam Budh Nagar - 201305, (U.P.) (An ISO 9001: 2015, ISO 14001:2015 & ISO 45001:2018 Certified Laboratory) MOEF & CC (Ministry of Environment Forest & Climate Change)

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## TEST REPORT

**RDF** Sample Analysis

Report Code: SL: 101123-06

Issue Date: 17/11/2023

ISSUED TO: M/S. PIONEER FOUNDATION ENGINEERS PVT. LTD. Office No. – 1217, Tower – B, The I-Thum, A – 40, Block – A, Sector – 62, Noida, (U.P.) Site Address: Legacy Waste Dump Site, Patwi, Ambala, Haryana

### Sampling & Particulate Detail

Sample Description	: RDF Sample
Date of Sampling	: 09/11/2023
Sample Drawn By	: ITS Representative
Sample Quantity	: 1.0 Kg in Zip Poly Bag
Sample Condition	: Plastic Packed Good Condition
Sample Received On	: 10/11/2023
Analysis Duration	: 10/11/2023 To 17/11/2023

	TEST RESULTS						
S. No.	Name of Parameters	Protocol Used	Observe Value				
1.	Gross Calorific Value, KCal /Kg	IS:1350(Pt-II) 1970 Reaff-2002	4164				
2.		Proximate Analysis % by mass					
(a)	Ash (%by mass)	IS:1350(Pt-I) 1984, Reaff-2007 Guidelines	19.75				
(b)	Volatile Matter (%by mass)	IS:1350(Pt-I) 1984, Reaff-2007 Guidelines	57.29				
(c)	Fixed Carbon (by Diff.) (%by mass)	IS:1350(Pt-I) 1984, Reaff-2007 Guidelines	7.14				
(d)	Total Moisture Content (%by mass)*	IS:1350(Pt-I) 1984, Reaff-2007 Guidelines	15.82				

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Terms & Conditions :



# ITS TESTING LABORATORY (P

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#### Report Code: W-101123-04, Page 1 of 2

Issue Date: 17/11/2023

TEST REPORT

### Water Sample Analysis

Report Code: W-101123-04

Date of Sampling

Sample Drawn By

Sample Location

Sample Quantity

Sample Condition

**Analysis Duration** 

Sample Received On

### ISSUED TO: M/S. PIONEER FOUNDATION ENGINEERS PVT. LTD.

Office No. - 1217, Tower - B, The I-Thum, A - 40, Block - A, Sector - 62, Noida, (U.P.) Site Address: Legacy Waste Dump Site, Patwi, Ambala, Haryana

**Sample Description Ground Water Sample** :

- 09/11/2023 :
- : ITS Representative
- : Inside Plant Area
- 2.0 Ltr. in Pet Bottle & 500 ml in Sterilized Glass Bottle .
- : Plastic Packed Good Condition
- : 10/11/2023
- 10/11/2023 To 17/11/2023 .

### **TEST RESULTS**

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	pH value	IS-3025(P-04)	7.55	-	6.5-8.5	÷
2.	Total dissolve solids (TDS)	IS-3025(P-16)	400	mg/l	500	2000
3.	Chloride (as Cl)	IS: 3025 (P- 32)	88.5	mg/l	250	1000
4.	Fluoride (as F)	IS: 3025 (P-60)	0.34	mg/l	1.0	1.5
5.	Iron (as Fe)	IS: 3025(P-53)	0.162	mg/l	1.0	•
6.	Nitrate (as NO <sub>3</sub> )	IS: 3025 (P- 34)	2.78	mg/l	45	No Relaxation
7.	Sulphate (as SO <sub>4</sub> )	IS: 3025 (P-24)	39.2	mg/l	200	400
8.	Alkalinity (as CaCO <sub>3</sub> )	IS: 3025 (P-23)	172	mg/l	200	600
9.	Total Hardness (as CaCO <sub>3</sub> )	IS: 3025 (P-23)	164	mg/l	200	600
10.	Total Suspended Solids	IS:3025(Part-17)	<1.0	mg/l	-	-
11.	Chemical Oxygen Demand (as O <sub>2</sub> )	IS:3025(Part-58)	<4.0	mg/l		-
12.	Biological Oxygen Demand (at 27°C for 3 days)	IS:3025(Part-44)	<2.0	mg/l	-	-
13.	Total Kjeldahal Nitrogen	IS:3025(Part-34)	BDL	mg/l	-	
14.	Total Ammonical Nitrogen	IS:3025(Part-34)	BDL	mg/l	-	-
15.	Conductivity @ 25°C	IS:3025(Part-14)	645	µS/cm	-	-





Terms & Conditions :



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### Report Code: W-101123-04, Page 2 of 2

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
16.	Cyanide (as CN)	IS-3025(P-27)	BDL	mg/l	0.05	No Relaxation
17.	Phenol Compound (as $C_6H_5OH$ )	IS: 3025 (P-43)	BDL	mg/l	0.001	0.002
18.	Copper (as Cu)	IS: 3025 (P-42)	BDL	mg/l	0.05	1.5
19.	Mercury (as Hg)	IS-3025(P-48)	BDL	mg/l	0.001	No Relaxation
20.	Cadmium (as Cd)	IS-3025(P-41)	BDL	mg/l	0.003	No Relaxation
21.	Arsenic (as As)	IS-3025(P-37)	BDL	mg/l	0.01	0.05
22.	Zinc (as Zn)	IS: 3025 (P- 49)	BDL	mg/l	5.0	15
23.	Lead ( as Pb)	IS-3025 (P-47)	BDL	mg/l	0.01	No Relaxation
24.	Nickel (as Ni)	IS-3025 (P-47)	BDL	mg/l	0.02	No Relaxation
25.	Total Chromium (as Cr)	IS:3025(Part-52)	BDL	mg/l	0.05	No Relaxation

### Microbiological:

RESULTS					
Required as per IS-10500:2012					
Absent/100ml					
Absent/100ml					

**BDL: Below Detection limit.** 

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#### Report Code: W-101123-05, Page 1 of 2

Issue Date: 17/11/2023

TEST REPORT

Water Sample Analysis

Report Code: W-101123-05

# ISSUED TO: M/S. PIONEER FOUNDATION ENGINEERS PVT. LTD.

Office No. – 1217, Tower – B, The I-Thum, A – 40, Block – A, Sector – 62, Noida, (U.P.) Site Address: Legacy Waste Dump Site, Patwi, Ambala, Haryana

Sample Description	: Ground Water Sample
Date of Sampling	: 09/11/2023
Sample Drawn By	: ITS Representative
Sample Location	: Outside Plant Area
Sample Quantity	: 2.0 Ltr. in Pet Bottle & 500 ml in Sterilized Glass Bottle
Sample Condition	: Plastic Packed Good Condition
Sample Received On	: 10/11/2023
Analysis Duration	: 10/11/2023 To 17/11/2023

### TEST RESULTS

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	pH value	IS-3025(P-04)	7.28	-	6.5-8.5	-
2.	Total dissolve solids (TDS)	IS-3025(P-16)	360	mg/l	500	2000
3.	Chloride (as Cl)	IS: 3025 (P- 32)	79.5	mg/l	250	1000
4.	Fluoride (as F)	IS: 3025 (P-60)	0.28	mg/l	1.0	1.5
5.	Iron (as Fe)	IS: 3025(P-53)	0.146	mg/l	1.0	-
6.	Nitrate (as NO <sub>3</sub> )	IS: 3025 (P- 34)	2.16	mg/l	45	No Relaxation
7.	Sulphate (as SO <sub>4</sub> )	IS: 3025 (P-24)	31.8	mg/l	200	400
8.	Alkalinity (as CaCO <sub>3</sub> )	IS: 3025 (P-23)	160	mg/l	200	600
9.	Total Hardness (as CaCO <sub>3</sub> )	IS: 3025 (P-23)	148	mg/l	200	600
10.	Total Suspended Solids	IS:3025(Part-17)	<1.0	mg/l	-	-
11.	Chemical Oxygen Demand (as O <sub>2</sub> )	IS:3025(Part-58)	<4.0	mg/l	-	<b>.</b>
12.	Biological Oxygen Demand (at 27°C for 3 days)	IS:3025(Part-44)	<2.0	mg/l	۲	-
13.	Total Kjeldahal Nitrogen	IS:3025(Part-34)	BDL	mg/l	-	-
14.	Total Ammonical Nitrogen	IS:3025(Part-34)	BDL	mg/l	-	-
15.	Conductivity @ 25°C	IS:3025(Part-14)	580	µS/cm	-	-

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#### Report Code: W-101123-05, Page 2 of 2 S. No. Parameter Test method Result Unit Requirement **Permissible Limit** (Acceptable in absence of Limit) alternate source 16. Cyanide (as CN) IS-3025(P-27) BDL mg/l 0.05 No Relaxation 17. Phenol Compound IS: 3025 (P-43) BDL mg/l 0.001 0.002 (as C<sub>6</sub>H<sub>5</sub>OH) 18. Copper (as Cu) IS: 3025 (P-42) BDL mg/l 0.05 1.5 19. Mercury (as Hg) IS-3025(P-48) BDL 0.001 mg/l No Relaxation 20. Cadmium (as Cd) IS-3025(P-41) BDL mg/l 0.003 No Relaxation IS-3025(P-37) 21. Arsenic (as As) BDL 0.01 0.05 mg/l 22. Zinc (as Zn) IS: 3025 (P-49) 6.0 15 BDL mg/l 23. BDL Lead (as Pb) IS-3025 (P-47) 0.01 No Relaxation mg/l 24. Nickel (as Ni) IS-3025 (P-47) BDL 0.02 mg/l No Relaxation 25. Total Chromium (as Cr) IS:3025(Part-52) BDL mg/l 0.05 No Relaxation

### Microbiological:

RESULTS				
S.No.	Parameter	Test Method	Results	Required as per IS-10500:2012
1.	Escherichia coli	IS-1622:1981	Absent	Absent/100ml
2.	Coliform Bacteria	IS-1622:1981	Absent	Absent/100ml

**BDL: Below Detection limit.** 



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# TEST REPORT

**Bio-Compost Sample Analysis** 

Report Code: SL: 101123-05

Issue Date: 17/11/2023

### ISSUED TO: M/S. PIONEER FOUNDATION ENGINEERS PVT. LTD. Office No. – 1217, Tower – B, The I-Thum, A – 40, Block – A, Sector – 62, Noida, (U.P.) Site Address: Legacy Waste Dump Site, Patwi, Ambala, Haryana

### Sampling & Particulate Detail

Sample Description	:	Bio Earth Compost Sample
Date of Sampling	:	09/11/2023
Sample Drawn By	:	ITS Representative
Sample Quantity	:	2.0 Kg in Zip Poly Bag
Sample Condition	:	Plastic Packed Good Condition
Sample Received On	:	10/11/2023
Analysis Duration	:	10/11/2023 To 17/11/2023

S. No.	Parameter	Test Method	Result	Unit
1.	pH (1:2 suspension)	IS:2720(Part-26)	7.66	-
2.	Electrical Conductivity at 25 <sup>o</sup> C (1:2suspension.)	IS:2720(Part-21)	1.581	dS/em
3.	Moisture Content	IS:2770-01-2011	26.8	%
4.	Particle Size	IS:2770-04-2004	96.7	% Qty pass through 4 mm sieve
5.	Bulk Density	ISO-11272-1998	0.72	gm/cm <sup>3</sup>
6	Total Viable Count (N,P,K and Zn)	APHA-21 <sup>st</sup> Edit.	$3.9 \times 10^{6}$	-
7.	Total Nitrogen	IS: 10158:1982	1.495	% By mass
8.	Total Phosphate (as P2O5)	IS: 10158:1982	0.817	% By mass
9.	Total Potassium (as K <sub>2</sub> O)	IS: 10158:1982	0.438	% By mass
10.	Total Organic Carbon	IS:2720 (P-21)	0.84	% By mass
11.	Arsenic (as As)	US EPA-3050B	BDL	mg/kg
12.	Mercury (as Hg)	US EPA-3050B	BDL	mg/kg
13.	Lead (as Pb)	US EPA-3050B	1.94	mg/kg
14.	Cadmium (as Cd)	US EPA-3050B	BDL	mg/kg
15.	Chromium (as Cr)	US EPA-3050B	BDL	mg/kg
16.	Hexavalent Chromium (as Cr+6)	US EPA-3050B	BDL	mg/kg
17.	Copper (as Cu)	US EPA-3050B	5.58	mg/kg
18.	Zinc (as Zn)	US EPA-3050B	34.72	mg/kg
19.	Nickel (as Ni)	US EPA-3050B	BDL	mg/kg

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Terms & Conditions :



Laboratory: A-114, Sector-80, Phase-II Noida, Gautam Budh Nagar - 201305, (U.P.) (An ISO 9001: 2015, ISO 14001:2015 & ISO 45001:2018 Certified Laboratory) MOEF & CC (Ministry of Environment Forest & Climate Change)

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## **TEST REPORT**

Soil Sample Analysis

Report Code: SL: 101123-04

Issue Date: 17/11/2023

ISSUED TO: M/S. PIONEER FOUNDATION ENGINEERS PVT. LTD. Office No. – 1217, Tower – B, The I-Thum, A – 40, Block – A, Sector – 62, Noida, (U.P.) Site Address: Legacy Waste Dump Site, Patwi, Ambala, Haryana

### Sampling & Particulate Detail

Sample Description	:	Soil Sample From Outside Plant Area
Date of Sampling	:	09/11/2023
Sample Drawn By	:	ITS Representative
Sample Quantity	:	1.0 Kg in Zip Poly Bag
Sample Condition	:	Plastic Packed Good Condition
Sample Received On	:	10/11/2023
Analysis Duration	:	10/11/2023 To 17/11/2023

S. No.	Parameter	Test Method	Result	Unit
1.	pH (1:2 suspension)	IS:2720(Part-26)	7.42	
2.	Electrical Conductivity at 25 <sup>o</sup> C (1:2suspension.)	IS:2720(Part-21)	0.729	dS/cm
3.	Total Nitrogen	IS: 10158:1982	0.253	% By mass
4.	Total Phosphate (as P2O5)	IS: 10158:1982	0.138	% By mass
5.	Total Potassium (as K <sub>2</sub> O)	IS: 10158:1982	0.072	% By mass
6	Total Organic Carbon	IS:2720 (P-21)	0.64	% By mass
7.	Arsenic (as As)	US EPA-3050B	BDL	mg/kg
8.	Mercury (as Hg)	US EPA-3050B	BDL	mg/kg
9.	Lead (as Pb)	US EPA-3050B	4.25	mg/kg
10.	Cadmium (as Cd)	US EPA-3050B	BDL	mg/kg
11.	Chromium (as Cr)	US EPA-3050B	BDL	mg/kg
12.	Hexavalent Chromium (as Cr+6)	US EPA-3050B	BDL	mg/kg
13.	Copper (as Cu)	US EPA-3050B	7.73	mg/kg
14.	Zinc (as Zn)	US EPA-3050B	11.59	mg/kg
15.	Nickel (as Ni)	US EPA-3050B	BDL	mg/kg





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## **TEST REPORT**

Soil Sample Analysis

Report Code: SL: 101123-03

Issue Date: 17/11/2023

ISSUED TO: M/S. PIONEER FOUNDATION ENGINEERS PVT. LTD. Office No. – 1217, Tower – B, The I-Thum, A – 40, Block – A, Sector – 62, Noida, (U.P.) Site Address: Legacy Waste Dump Site, Patwi, Ambala, Haryana

### Sampling & Particulate Detail

Sample Description	:	Soil Sample Near Trommel Area
Date of Sampling	:	09/11/2023
Sample Drawn By	:	ITS Representative
Sample Quantity	:	1.0 Kg in Zip Poly Bag
Sample Condition	:	Plastic Packed Good Condition
Sample Received On	:	10/11/2023
Analysis Duration	:	10/11/2023 To 17/11/2023

S. No.	Parameter	Test Method	Result	Unit
1.	pH (1:2 suspension)	IS:2720(Part-26)	7.79	-
2.	Electrical Conductivity at 25 <sup>o</sup> C (1:2suspension.)	IS:2720(Part-21)	5.94	dS/cm
3.	Total Nitrogen	IS: 10158:1982	0.117	% By mass
4.	Total Phosphate (as P2O5)	IS: 10158:1982	0.072	% By mass
5.	Total Potassium (as K <sub>2</sub> O)	IS: 10158:1982	0.041	% By mass
6	Total Organic Carbon	IS:2720 (P-21)	1.76	% By mass
7.	Arsenic (as As)	US EPA-3050B	BDL	mg/kg
8.	Mercury (as Hg)	US EPA-3050B	BDL	mg/kg
9.	Lead (as Pb)	US EPA-3050B	92.78	mg/kg
10.	Cadmium (as Cd)	US EPA-3050B	10.56	mg/kg
11.	Chromium (as Cr)	US EPA-3050B	48.27	mg/kg
12.	Hexavalent Chromium (as Cr+6)	US EPA-3050B	BDL	mg/kg
13.	Copper (as Cu)	US EPA-3050B	123.19	mg/kg
14.	Zinc (as Zn)	US EPA-3050B	82.25	mg/kg
15.	Nickel (as Ni)	US EPA-3050B	41.64	mg/kg

## TEST RESULT



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Paid / Monitoring

### Description

Groundwater sample from :-

1. Auto Market-1, Bhiwani N 28<sup>0</sup> 47'3.80976'' E 76<sup>0</sup>7'22.92816"

Sr. No. Parameters

Report No: 204 Dated: 22.08.2023 -

Description of the Sample: - Received on 18.08.2023 sample of Groundwater from Sh. Vijay Chaudhary, RO Bhiwani collected on 18.08.2023

ANALYSIS REPORT	
RESULTS	

	and telefo	Groundwater
1.	Colour	Colourless
2.	Odour	Odourless
З.	pH value	6.8
4.	Suspended Solids mg/l	
5.	B.O.D. for 3 days at 27°C mg/l	22
6.	C.O.D. mg/l	ND
7.	Oil & Grease mg/l	08
8.	Conductivity us/cm	ND
9.	Total Dissolved Solids mg/l	3680
10.	Chlorides as Cl mg/l	1816
11.	Sulphide as S mg/l	465
12.	Total Hardness as CaCO <sub>3</sub> mg/l	ND
13.	Fluoride as F mg/l	810
14.	Iron as Fe mg/l	ND
15.	Phosphate as P mg/l	ND
16.	Nickel as Ni mg/l	ND
17.	Total Chromium as Cr mg/l	ND
18.	Zinc as Zn mg/l	ND
19.	Calcium as Ca mg/l	ND
20.	Magnesium mg/l	216.6
21.	Sulphate as SO4 mg/l	97.1
		188.4
22.	Sodium mg/l	248.2
23.	Dissolved Oxygen, mg/l	5.4
24.	Boron as B mg/I	ND
25.	Nitrite (NO <sub>2</sub> ) mg/l	ND
26.	Nitrate (NO <sub>3</sub> ) mg/l	ND
27.	Turbidity NTU Sample Collected/Not Collected by us Sample Consumed in testing	1.7

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Tel-2332596

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# Paid / Monitoring

Cree	Description:-	
6.00	indwater sample from :-	Report No: 203
1_ 63	aba Chandar Bhan Market, Bhiwani	
N 28	"0 50.21196" E 76°7'18 45876"	Dated: 22.08.2023
	Description of the Sample: Description	08.2023 sample of Groundwater from Sh. Vijay
	Chaudhary, RO collected on 18.08.2023	vol.2025 sample of Groundwater from Sn. vijay
	ANALYSIS REPO	OBT
S. M	p. Parameters RESULTS	
91.11	o- Farameters	Groundwater
1.	Colour	
2.	Odour	Colourless
3.	pH value	Odourless
4.	Suspended Solids mg/l	6.7
5.	B.O.D. for 3 days at 27°C mg/l	12
6.	C.O.D. mg/l	ND
7.	Oil & Grease mg/l	ND
8.	Conductivity us/cm	ND
9.	Total Dissolved Solids mg/l	5890
10.	Chlorides as Cl mg/l	3276
11.	Sulphide as S mg/l	940
12	Total Hardness as CaCO <sub>3</sub> mg/l	ND
13.	Fluoride as F mg/I	1475
14.	Iron as Fe mg/l	ND
15.	Phosphate as P mg/l	ND
16.	Nickel as Ni mg/l	ND
17.	Total Chromium as Cr mg/l	ND
18	Zinc as Zn mg/l	ND
19	Calcium as Ca mg/l	349.3
20.	Magnesium mg/l	148.6
21.	Sulphate as SO <sub>4</sub> mg/l	282.2
22.	Sodium mg/l	316.4
23.	Dissolved Oxygen, mg/l	5.5
24	Boron as B mg/l	ND
23	Nitrite (NO <sub>2)</sub> mg/l	ND
25	Nitrate (NO <sub>3</sub> ) mg/l	ND
		2.6
27	Turbidity NTU Sample Collected/Not Collected by us	2.0
	Sample Conected/Not Conected by ds	

Sample Consumed in testing

# HSPCB/Lab/GR/2023/ 785 - 786 Copy to M.S./R.O.

LABINCHARGE Dated 77 8-23 --1

Tel-2332596

Tel-2332596



Laboratory Of The Haryana State Pollution Control Board Vikas Sadan Ist Floor Gurgaon

# Paid / Monitoring

## Description:-

Sr. No. Parameters

Groundwater sample from :-

1. Shri Shyam Motorworks, Bhiwani N 28<sup>0</sup> 46'47.0928'' E 76<sup>0</sup>7'23.30148

Report No: 206 Dated: 22.08.2023

Description of the Sample: - Received on 18.08.2023 sample of Groundwater from Sh. Vij Chaudhary, RO Bhiwani collected on 18.08.2023. ANALYSIS REPORT	ay

RESULTS

Sr. No.	Parameters	THE OLI D
		Groundwater
1.	Colour	Colourless
2.	Odour	Odourless
3.	pH value	6.7
4.	Suspended Solids mg/l	11
5.	B.O.D. for 3 days at 27°C mg/l	ND
6.	C.O.D. mg/l	ND
7.	Oil & Grease mg/l	ND
8.	Conductivity us/cm	5310
9.	Total Dissolved Solids mg/l	2652
10.	Chlorides as CI mg/I	590
11.	Sulphide as S mg/l	ND
12.	Total Hardness as CaCO <sub>3</sub> mg/l	960
13.	Fluoride as F mg/l	ND
14.	Iron as Fe mg/l	ND
15.	Phosphate as P mg/l	ND
16.	Nickel as Ni mg/l	ND
17.	Total Chromium as Cr mg/l	ND
18.	Zinc as Zn mg/l	ND
19.	Calcium as Ca mg/l	198.2
20.	Magnesium mg/l	121.9
21.	Sulphate as SO4 mg/l	236.4
22.	Sodium mg/l	294.8
23.	Dissolved Oxygen, mg/l	5.2
24.	Boron as B mg/l	ND
25.	Nitrite (NO <sub>2)</sub> mg/l	ND
26.	Nitrate (NO <sub>3</sub> ) mg/l	ND
27.	Turbidity NTU	1.4
1011.0123	Sample Collected/Not Collected by us	
	Sample Consumed in testing	

# HSPCB/Lab/GR/2023/791-792

NU LAB INCHARGE Dated 22-8-23

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# Paid / Monitoring

Tel-2332596

Description:- Groundwater sample from :-		
1. Auto Market-II. Bhiwani		Report No: 205
N 28° 47'4.30404" E 76°7'26 41	26"	Dated: 22.08.2023
Description of the Samp Chaudhary, RO Bhiwani c	las a management and an and a second and	Groundwater from Sh. Vijay
Sr. No. Parameters	ANALYSIS REPORT RESULTS	

### Sr. No. Parameters

2	Colour	
2.	Odour	Colourless
3.	pH value	Odourless
4.	Suspended Solids mg/l	6.6
5.	B.O.D. for 3 days at 27°C mg/l	08
6.	C.O.D. mg/l	ND
7.	Oil & Grease mg/l	04
8.	Conductivity us/cm	ND
9.	Total Dissolved Solids mg/l	4350
10,	Chlorides as Cl mg/l	2190
11.	Sulphide as S mg/l	416
12.	Total Hardness as CaCO3 mg/l	ND
13.	Fluoride as F mg/l	890
14.	Iron as Fe mg/l	ND
15.	Phosphate as P mg/l	ND
16.	Nickel as Ni mg/l	ND
17.	Total Chromium as Cr mg/l	ND
18.	Zinc as Zn mg/l	ND
19.	Calcium as Ca mg/l	ND
20.	Magnesium mg/l	242.8
21.	Sulphate as SO <sub>4</sub> mg/I	105.3
22.	Sodium mg/l	208.4
23.	Dissolved Oxygen, mg/l	272.0
24.	Boron as B mg/l	5.6
25.	Nitrite (NO <sub>2</sub> ) mg/l	ND
26.	Nitrate (NO <sub>3</sub> ) mg/l	ND
27.	Turbidity NTU	ND
	Sample Collected/Not Collected by us	2.1
	Sample Consumed in testing	

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LABINCHARGE Dated 22-8-23



#### Paid / Monitoring

Description to-

Tubewell water samples from :-

1. Submersible pump of Sh. Anant Lal, Vill-Bandhwari, Gurgaon

- 2. Mandir Vill-Bandhwari, Gurgaon
- 3. Sansad Sahed Petrol Pump, Faridabad Road, Gurgaon
- 4. Teen Murti Hanuman Mandir, Gurgaon-Faridabad Road, Near Toll Plaza, Gurgaon
- 5. Sh. Lala Ram House, Near School, Vill-Bandhwari Gurgaon
- 6. Chanderpal House near School Bandhwari

Description of the Sample: - Received on 19.05.2023 samples of Borewell Water from Sh. Manish Yadav, AEE collected on 19.05.2023

	8		SIS REPORT				
Sr. N	Parameters	(1)	(2)	(3)	(4)	(5)	(6)
1.	Colour	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless
2.	Odour	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless
3.	pH value	7.7	7.4	7.0	7.5	7.0	7.3
4.	Suspended Solids mg/l	16	11	17	14	11	16
5.	B.O.D. for 3 days at 27°C	ND	ND	ND	ND	ND	ND
	mg/l						
6.	C.O.D. mg/l	ND	ND	ND	ND	ND	ND
7.	Oil & Grease mg/l	ND	ND	ND	ND	ND	ND
8.	Conductivity us/cm	1610	1460	1340	1480	1680	1350
9.	Total Dissolved Solids mg/l	810	768	662	776	896	684
10.	Chlorides as Cl mg/l	75	95	80	105	95	80
11.	Sulphide as S mg/l	ND	ND	ND	ND	ND	ND
12.	Total Hardness as CaCO <sub>3</sub> mg/l	145	130	140	155	125	130
13.	Fluoride as F mg/l	ND	ND	ND	ND	ND	ND
14.	Iron as Fe mg/l	ND	ND	ND	ND	ND	ND
15.	Phosphate as P mg/l	ND	ND	ND	ND	ND	ND
16.	Nickel as Ni mg/l	ND	ND	ND	ND	ND	ND
17.	Total Chromium as Cr mg/l	ND	ND	ND	ND	ND	ND
18.	Cyanide as CN mg/l	ND	ND	ND	ND	ND	ND
19.	Zinc as Zn mg/l	ND	ND	ND	ND	ND	ND
20.	Calcium as Ca mg/l	49.1	53.9	45.3	59.1	61.3	47.6
21.	Magnesium mg/l	8.2	7.8	7.1	8.3	7.9	7.4
22.	Sulphate as SO₄ mg/l	46.6	52.4	48.6	42.2	56.4	48.2
23.	Sodium mg/l	63.9	65.1	73.3	55.0	67.9	57.1
24.	Dissolved Oxygen, mg/l	7.0	6.8	7.1	6.7	7.0	7.3
25.	Boron as B mg/l	ND	ND	ND	ND	ND	ND
26.	Nitrite (NO <sub>2)</sub> mg/l	ND	ND	ND	ND	ND	ND
27.	Nitrate (NO <sub>3</sub> ) mg/l	ND	ND	ND	ND	ND	ND
28.	TKN (Total Kjeldhal Nitrogen) mg/l	ND	ND	ND	ND	ND	ND
29.	Turbidity NTU	ND	ND	ND	ND	ND	ND
30.	Total Coliform, MPN/100 ml	ND	ND	ND	ND	ND	ND
31.	Fecal Coliform, MPN/100ml	ND	ND	ND	ND	ND	ND
32.	Streptococci, MPN/100ml	ND	ND	ND	ND		ND
	Sample Collected/Not Collect		ne		NO	ND	ND

OTC

Sample Consumed in testing

HSPCB/Lab/GR/2023/ 203 - 204 Copy to M.S./R.O.

LAB NCHARGE Dated 30-5-23

Report No: 45 Dated: 30.05.2022



### Paid / Monitoring

Description

Borewell water samples from :-

1. Borewell from Police Station, Village-Banger, Gurugram

- 2. Borewell from Farm House, Village-Banger, Gurugram
- 3. Borewell from Govt. School, Baliyawas, Gurugram
- 4. Borewell from Ram Mandir, Gawal Pahri, Gurugram
- Borewell from Village-Mandir, Vidya Chowk, Mandir, Gurugram Description of the Sample: - Received on 23.01.2024 samples of Tubewell Water from Sh. Aparnesh Kumar, Sc 'B', Sh. Sarjeet, JEE, MCG & Sh. OP Goyal, SBM collected on 23.01.2024.

ANALYSIS REPORT	
RESULTS	

Sr. No	Parameters	(1)	(2)	(3)	(4)	(5)
ι.	Colour	Colourless	Colourless	Colourless	Çolourless	Colourless
2.	Odour	Odourless	Odourless	Odourless	Odourless	Odourless
. 3.	pH value	8.0	8.0	7.9	8.0	8.0
1.	Suspended Solids mg/l	08	07	10	21	08
5.	B.O.D. for 3 days at 27°C mg/l	ND	ND	ND	ND	ND
3.	C.O.D. mg/l	04	04	04	ND	04
7.	Oil & Grease mg/l	ND	ND	ND	ND	NÐ
3.	Conductivity us/cm	680	1750	960	1050	910
э.	Total Dissolved Solids mg/l	340	870	530	520	450
10.	Chlorides as Cl mg/l	78	79	153	154	57
ί1.	Sulphide as S mg/l	ND	ND	ND	ND	ND
ι2.	Total Hardness as CaCO <sub>3</sub> mg/l	552	544	514	446	438
ι3.	Fluoride as F mg/l	0.4	0.5	0.4	0.3	0.5
۱4.	Iron as Fe mg/l	ND	ND	ND	ND	ND
ι5.	Phosphate as P mg/l	ND	ND	ND	ND	ND
16.	Nickel as Ni mg/l	ND	ND	ND	ND	ND
١7.	Total Chromium as Cr mg/l	ND	ND	ND	ND	ND
18.	Calcium as Ca mg/l	119	143	163	120	115
۱9.	Magnesium mg/l	61	45	25	34	36
20.	Sulphate as SO₄ mg/l	32	35	30	30	35
21.	Sodium mg/l	82	83	60	23	81
22.	Dissolved Oxygen, mg/l	5.8	6.0	5.7	5.9	6.1
23.	Boron as B mg/l	ND	ND	ND ·	ND	ND
24.	Nitrite (NO <sub>2)</sub> mg/l	ND	ND	ND	ND	ND
25.	Nitrate (NO <sub>3</sub> ) mg/l	36	25	11	07	59
26.	TKN (Total Kjeldhal Nitrogen) mg/l	ND	ND	ND	ND	ND
27.	Turbidity NTU	02	0	07	02	04
28.	Fecal Coliform, MPN/100ml	ND	ND	ND	ND	ND
	Sample Collected/Not Collected	l by us				

Sample Consumed in testing

HSPCB/Lab/GR/2024/ 2139 Copy to M.S./R.O. LAB INCHARGE Dated 30.1.24

Report No: 525 Dated: 30.01.2024



## **REGIONAL LABORATORY Haryana State Pollution Control Board** Sector-16A, Opp. HEWO Apartment, Faridabad

## TEST REPORT

Test Report No.	:	2297 M (I)
Date		01/04/2024
Issued To	ŝ	Regional Officer, Gurgaon North/Member Secretary HSPCB
Sample Type	;	Ground Water
Sample collected on dated	÷	21/03/2024
Sample Collected by	:	Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-'B'.
Sample received on dated Sample Location	:	21/03/2024 Submersible pump of Sh. Anant Lal Village Bandhwari Gurugram 28.410428°, 77.155194°
Sample Quantity	:	Unknown
Date of Analysis started	:	21/03/2024
Dated of analysis completed		01/04/2024

;

Sr. No.	Parameter	Protocol used	Result	Prescribed Limits	Unit
1.	Colour		Colorless		
2.	Odour		Odourless		
3.	pH	APHA 4500 H <sup>+</sup> B (24 <sup>th</sup> Edition 2023)	7.52	6.5-8.5	
4.	Dissolved Solids	APHA 2540-C (24 <sup>th</sup> Edition 2023)	720	500	mg/L
5.	Total Hardness as CaCO <sub>3</sub>	2340-C-Titrimetric Method (24 <sup>th</sup> Edition 2023)	270	300	mg/L
6.	Chloride as Cl	IS 3025 (Part-32):1988 (Reaffirmed 2014) Argentometric method	97.9	250	mg/L
7.	Sulphate as SO <sub>4</sub>	4500 SO <sub>4</sub> <sup>2-</sup> - E- Turbidimetric Method (APHA 24 <sup>th</sup> Edition 2023)	41	200	mg/L
8.	Nitrate as NO <sub>3</sub>	4500- NO <sub>3</sub> <sup>•</sup> B-UV Spectrophotometric Method (APHA 24 <sup>th</sup> Edition 2023)	140	45	mg/L
9.	Arsenic as As	3120-As- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.01	mg/L
10.	Cadmium as Cd	3120-Cd Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.001)	0.01	mg/L
11.	Hexavalent Chromium as Cr <sup>+6</sup>	APHA 3500-Cr (B) (24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/L
12.	Copper as Cu	3120-Cu- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/L
13.	Lead as Pb	3120-Pb Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/L

14.	Mercury as Hg	3120-Hg Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.0005)	0.01	mg/L
15.	Nickel as Ni	3120-Ni- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)		mg/L
16.	Iron as Ni	3500-Fe-B- Phenanphroline Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.01)	0.3	mg/L
17.	Zinc as Zn	3120-Zn Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	0.003	5.0	mg/L
18.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> 0H mg/l	IS 3025 (Part-43) Sec 1- 2022	BDL (DL=0.0006)	0.001	mg/L

Notes:

- 1. The results relate only to the items tested.
- 2. The test report shall not be reproduced except in full without approval of the laboratory.
- 3. The results apply to the sample as received..
- 4. If sample not preserved, results may vary.

Sample analyzed by:

Varsha Sehrawat/Mohit Kumar Analyst Analyst /

13

HSPCB/LAB/F/2024/

Narender Hooda, Sc-'B' **Regional Laboratory Faridabad** 

Dated 1-4-24



# REGIONAL LABORATORY Haryana State Pollution Control Board Sector-16A, Opp. HEWO Apartment, Faridabad

# TEST REPORT

Test Report	No.	<i>a</i> .	(V2/22/44/30)
Date			2297 M (II)
Issued To		8	01/04/2024
Sample Typ		:	Regional Officer, Gurgaon North/Member Secretary HSPCB
Sample coll	ected on dated	:	Ground Water
Sample Col	ected on dated	:	21/03/2024
oampie Col	lected by	;	Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Inchessor, Balland, Sh. Sandeep Singh,
Sample rece	eived on dated		
Sample Loc	ation	3	- X 03/2024
Sample Qua			Mandir Village Bandhwari Gurugram 28.423642°, 77.147977° Unknown
Date of Ans	alysis started		<b>CHARGE</b>
Dated of an	alysis completed	:	21/03/2024
Dated of all	alysis completed		01/04/2024
Sr. No.	Parameter		

Sr. No.	Parameter	Protocol used	Result	Prescribed	Unit
ĺ.	Colour			Limits	
2.	Odour				
3.	pH		Odourless		
		APHA 4500 H* B (24th Edition 2023)	6.24	6.5-8.5	
4.	Dissolved Solids	APHA 2540-C (24 <sup>th</sup> Edition 2023)	460	500	mg/L
5.	Total Hardness as CaCO <sub>3</sub>	2340-C-Titrimetric Method (24 <sup>th</sup> Edition 2023)	206	300	mg/L
6.	Chloride as Cl	IS 3025 (Part-32):1988 (Reaffirmed 2014) Argentometric method	31.99	250 mg/L	
7.	Sulphate as SO <sub>4</sub>	4500 SO <sub>4</sub> <sup>2</sup> - E-Turbidimetric Method (APHA 24 <sup>th</sup> Edition 2023)	49	200	mg/L
8.	Nitrate as NO <sub>3</sub>	4500- NO <sub>3</sub> B-UV Spectrophotometric Method (APHA 24 <sup>th</sup> Edition 2023)	38	45	mg/L
9.	Arsenic as As	3120-As- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.01	mg/L
10.	Cadmium as Cd	3120-Cd Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.001)	0.01	mg/L
11,	Hexavalent Chromium as Cr <sup>+6</sup>	APHA 3500-Cr (B) (24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/L
12.	Copper as Cu	3120-Cu- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/L
13.	Lead as Pb	3120-Pb Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/l

14.	Mercury as Hg	3120-Hg Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.0005)	0.01	mg/L
15.	Nickel as Ni	3120-Ni- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)		mg/L
16.	Iron as Ni	3500-Fe-B- Phenanphroline Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.01)	0.3	mg/L
17.	Zinc as Zn	3120-Zn Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	0.46	5.0	mg/L
18.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> 0H mg/l	IS 3025 (Part-43) Sec 1-2022	BDL (DL=0.0006)	0.001	mg/L

Notes:

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- 3. The results apply to the sample as received ..
- 4. If sample not preserved, results may vary.

Sample analyzed by:

hrawat/Mohit Kumar Varsha S Analyst / Analyst

Narender oda. Sc-'B'

Regional Laboratory Faridabad

15 HSPCB/LAB/F/2024/

Dated 1-4-24



# REGIONAL LABORATORY Haryana State Pollution Control Board Sector-16A, Opp. HEWO Apartment, Faridabad

# TEST REPORT

Test Report No.	22	2297 M (III)
Date	2	
Issued To		01/04/2024
		Regional Officer, Gurgaon North/Member Secretary HSPCB
Sample Type	:	Ground Water
Sample collected on dated	:	21/03/2024
Sample Collected by	:	Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Faridabad, Sh. Ramniwas
Sample received on dated Sample Location	:	21/03/2024
oumpte rocation		Sansad Saheed Petrol Pump Pump Faridabad Road, Gurugram 28.404574°,
Sample Quantity		77.174845
Date of Arabaia	:	Unknown
Date of Analysis started	:	21/03/2024
Dated of analysis completed	:	01/04/2024

Sr. No. Parameter		Protocol used	Result	Prescribed Limits	Unit
_	1. Colour		Colorless		
	2. Odour		Odourless		
3	3. pH	APHA 4500 H <sup>+</sup> B (24 <sup>th</sup> Edition 2023)	6.56	6.5-8.5	
4	Dissolved Solids	APHA 2540-C (24 <sup>th</sup> Edition 2023)	1385	500	mg/L
5.		2340-C-Titrimetric Method (24 <sup>th</sup> Edition 2023)	384	300	mg/L
6.	Chloride as Cl	IS 3025 (Part-32):1988 (Reaffirmed 2014) Argentometric method	208.9	250	mg/L
7.	Sulphate as SO <sub>4</sub>	4500 SO <sub>4</sub> <sup>2</sup> - E-Turbidimetric Method (APHA 24 <sup>th</sup> Edition 2023)	122	200	mg/L
8.	Nitrate as NO <sub>3</sub>	4500- NO <sub>3</sub> B-UV Spectrophotometric Method (APHA 24 <sup>th</sup> Edition 2023)	115	45	mg/L
9.	Arsenic as As	3120-As- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.01	mg/L
10.	Cadmium as Cd	3120-Cd Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.001)	0.01	mg/L
11.	Hexavalent Chromium as Cr <sup>+6</sup>	APHA 3500-Cr (B) (24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/L
12.	Copper as Cu	3120-Cu- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/l

13.	Lead as Pb	3120-Pb Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/L
14.	Mercury as Hg	3120-Hg Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.0005)	0.01	mg/L
15.	Nickel as Ni	3120-Ni- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)		mg/L
16.	Iron as Ni	3500-Fe-B- Phenanphroline Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.01)	0.3	mg/L
17.	Zinc as Zn	3120-Zn Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	0.47	5.0	mg/I
18.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> 0H mg/l	IS 3025 (Part-43) Sec 1-2022	BDL (DL=0.0006)	0.001	mg/l

Notes:

1. The results relate only to the items tested.

2. The test report shall not be reproduced except in full without approval of the laboratory.

3. The results apply to the sample as received ..

4. If sample not preserved, results may vary.

Sample analyzed by:

at/Mohit Kumar Varsha Analyst / Analyst

"B' Narende

Regional Laboratory Faridabad

HSPCB/LAB/F/2024/ 17-

Dated 1-4-24.



# REGIONAL LABORATORY Haryana State Pollution Control Board Sector-16A, Opp. HEWO Apartment, Faridabad

# TEST REPORT

Test Report No.	220	2297 M (IV)
Date		01/04/2024
Issued To	525	Regional Officer, Gurgaon North/Member Secretary HSPCB
Sample Type	3	Ground Water
Sample collected on dated		21/03/2024
Sample Collected by	•	Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-'B'.
Sample received on dated Sample Location	ŧ	21/03/2024 Teen Murti Hanuman Mandir, Gurgaon Faridabad Road Near Toll Plaza Gurugram 28.409472°, 77.169097°
Sample Quantity	8	Unknown
Date of Analysis started	8	21/03/2024
Dated of analysis completed		01/04/2024

Sr. No.	Parameter	Protocol used	Result	Prescribed Limits	Unit
1.	Colour		Colorless		
2.	Odour		Odourless		
3.	рН	APHA 4500 H <sup>+</sup> B (24 <sup>th</sup> Edition 2023)	8.06	6.5-8.5	
4.	Dissolved Solids	APHA 2540-C (24 <sup>th</sup> Edition 2023)	690	500	mg/L
5.	Total Hardness as CaCO <sub>3</sub>	2340-C-Titrimetric Method (24 <sup>th</sup> Edition 2023)	248	300	mg/L
6.	Chloride as Cl	IS 3025 (Part-32):1988 (Reaffirmed 2014) Argentometric method	87.97	250	mg/L
7.	Sulphate as SO <sub>4</sub>	4500 SO4 <sup>2</sup> - E-Turbidimetric Method (APHA 24 <sup>th</sup> Edition 2023)	42	200	mg/L
8.	Nitrate as NO <sub>3</sub>	4500- NO <sub>3</sub> <sup>-</sup> B-UV Spectrophotometric Method (APHA 24 <sup>th</sup> Edition 2023)	56.8	45	mg/L
9.	Arsenic as As	3120-As- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.01	mg/L
10.	Cadmium as Cd	3120-Cd Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.001)	0.01	mg/L
11.	Hexavalent Chromium as Cr <sup>+6</sup>	APHA 3500-Cr (B) (24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/l
12.	Copper as Cu	3120-Cu- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/l

		tuinty Coupled	BDL	0.05	mg/I
13.	Lead as Pb	3120-Pb Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	(DL=0.005)		
			BDL	0.01	mg/L
14.	Mercury as Hg	3120-Hg Inductively Coupled Plasma Method (APHA 24 <sup>th</sup>	(DL=0.0005)		
		Edition 2023)	BDL		mg/L
15.	Nickel as Ni	3120-Ni- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup>	(DL=0.005)		
10.		Edition 2023)	BDL	0.3	mg/I
16.	Iron as Ni	3500-Fe-B- Phenanphroline Method (APHA 24 <sup>th</sup> Edition 2023)	(DL=0.01)		
			BDL	5.0	mg/L
17.	Zinc as Zn	3120-Zn Inductively Coupled Plasma Method (APHA 24 <sup>th</sup>	(DL=0.0005)		
		Edition 2023)	BDL	0.001	mg/L
18.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> 0H mg/l	IS 3025 (Part-43) Sec 1-2022	(DL=0.0006)		

Notes:

1. The results relate only to the items tested.

2. The test report shall not be reproduced except in full without approval of the laboratory.

3. The results apply to the sample as received ..

4. If sample not preserved, results may vary.

Sample analyzed by:

Varsha Schrawat/Mohit Kumar Analyst / Analyst

HSPCB/LAB/F/2024/ 19

Narender Hoods, Sc-'B'

**Regional Laboratory Faridabad** 

1-4-24 Dated



#### TEST REPORT

Test Report No. Date Issued To Sample Type Sample collected on dated Sample Collected by	22071 M (V) 280/3024 Regional Officer, Ourgeon North/Member Secretary HSPCB Ground Water 21/03/2024 Sh. Baing Akhows, Chief Engineer, Sh. Narvent Guila, SEE, Sh. Sandeep Singh, R.O., Ferdeback, Sh. Sanll Shoorna, Lab Incharge, Perichard, Sh. Raminives Sharma, Lab Incharga, Gorgon, Sh. Vitas Correal, So-'B'.
Sample received on dated Sample Location	: 21/03/2024 Sh. Lala Ram House Near School Village Bandhwari Gurugram 28.410065* . 77.155278*
Sample Quantity Date of Analysis started Dated of analysis completed	Unknown 21/03/2024 28/03/2024

Sr. No.	Parameter	Protocol used	Result	Prescribed Limits	Unit
			Coloriess		
1.			Odourless		
2	Odour	APHA 4500 H" B (24" Edition	7.58	6.5-8.5	
3.	pH	2023)		500	mg/L
4.	Dissolved Solids	APHA 2540-C (24 <sup>8</sup> Edition 2023)	1160	500	
5.	Total Hardness as CaCO <sub>3</sub>	2340-C-Titrimetric Method (24 <sup>th</sup> Edition 2023)	280	300	mg/L
6.	Chloride as Cl	IS 3025 (Part-32):1988 (Reaffirmed 2014) Argentometric method	149.95	250	mg/L
7.	Sulphate as SO <sub>4</sub>	4500 SO <sub>4</sub> <sup>2</sup> - E-Turbidimetric Method (APHA 24 <sup>th</sup> Edition 2023)	65	200	mg/L
Ł	Nitrate as NO <sub>2</sub>	4500- NO <sub>3</sub> ' B-UV Spectrophotometric Method (APHA 24 <sup>th</sup> Edition 2023)	212	45	mg/L
9.	Arsenic as As	3120-As- Inductively Coupled Plasma Method (APHA 24 <sup>6</sup> Edition 2023)	BDL (DL=0.005)	0.01	mg/L
10.	Cadmium as Cd	3120-Cd Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.001)	0.01	mg/L
11.	Hexavalent Chromium as Cr <sup>26</sup>	APHA 3500-Cr (B) (24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)		mg/L
12.	Copper as Cu	3120-Cu- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/L

13.	Load as Pb	1150 00 1 1 1 1 1			
14		3120-Pb Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mgʻL
14.	and y is ng	3120-Hg Inductively Coupled Plasma Method (APHA 24 <sup>®</sup> Edition 2023)	BDL (DL=0.0005)	0.01	mg/L
		3120-Ni- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	0.009	-	mg/L
16.	Iron as Ni	3500-Fo-B- Phenanphroline Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.01)	0.3	mg/L
17,	Zinc as Zn	3120-Zn Inductively Coupled Plasma Method (APEA 24 <sup>th</sup> Edition 2023)	0.007	5.0	mg/L
18.	Phenolic Compounds as C <sub>4</sub> H <sub>2</sub> 0H mg/l	15 3025 (Part-43) Sec 1-2022	BDL (DL-0.0006)	0.001	mg/L

Notes:

1. The results relate only to the items tested.

2. The test report shall not be reproduced except in full without approval of the laboratory.

3. The results apply to the sample as received.

4. If sample not preserved, results may vary.

Sample analyzed by

Varsha Sebrawat/Mohit Kuma Analyst / Analyst

HSPCB/LAB/F/2024/ 21

ratory Faridabad I Lab

Dated 1-4-24



#### TEST REPORT

Test Report No.	1	2297 M (VI)
Date Issued To		01/04/2024
Sample Type		Regional Officer, Gurgaon North/Member Secretary HSPCB
Sample collected on dated	÷.	Ground Water
Sample Collected by		21/03/2024
Southern and the states	1	Sh. Balraj Ahlavest, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O., Faridabad, Sh. Sunil Shooran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vilkas Grewal, SoB'.
Sample received on dated Sample Location	÷	Govi. School, Baliawas 28,424508°, 77.144700°
Sample Quantity	2	Unknown
Date of Analyzis started	2	21/03/2024
Dated of analysis completed	+	01/04/2024

Sr. No.	Parameter	Protocol used	Result	Prescribed Limits	Unit
1.	Colour		Coloriesa	Limits	
2	Odour		Odourless		-
Y	pH	APHA 4500 H" B (24" Edition 2023)	7.84	6.5-8.5	
4,	Dissolved Solids	APHA 2540-C (24 <sup>th</sup> Edition 2023)	610	500	mg/L
5.	Total Hardness as CaCO <sub>3</sub>	2340-C-Titrimetric Method (24 <sup>th</sup> Edition 2023)	222	300	mg/L
6.	Chloride as Cl	1S 3025 (Part-32):1988 (Reaffirmed 2014) Argentometric method	25.99	250	mg/L
7.	Sulphate as SO4	4500 SO4 <sup>2</sup> - E-Turbidimetric Method (APHA 24 <sup>th</sup> Edition 2023)	96	200	mg/L
8.	Nitrate as NO <sub>3</sub>	4500- NO <sub>3</sub> " B-UV Spectrophotometric Method (APHA 24 <sup>th</sup> Edition 2023)	118	45	mg/L
9.	Arsenic as As	3120-As- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL-0.005)	0.01	mg/L
10.	Cadmium as Cd	3120-Cd Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.001)	0.01	mg/L
11.	Hexavalent Chromium as Cr <sup>16</sup>	APHA 3500-Cr (B) (24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/L
12.	Copper as Cu	3120-Cu- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/L
13.	Lead as Pb	3120-Pb Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	0.05	mg/l

14.	Mercury as Hg	3120-Hg inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.0005)	0.01	mgʻL
15.	Nickel as Ni	3120-Ni- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	BDL (DL=0.005)	-	mg/L
16.	Iron as Ni	3500-Fe-B- Pheramphroline Method (APHA 24 <sup>®</sup> Edition 2023)	BDL (DL=0.01)	0.3	mgil
17.	Zinc ıs Zn	3120-Zn Inductively Coupled Plasma Method (APHA 24 <sup>®</sup> Edition 2023)	BDL (DL=0.0005)	5.0	mgi
18.	Phenolic Compounds as CaHe0H	15 3025 (Part-43) Sec 1-2022	BDL (DL=0.0006)	0.001	my.

#### Notes:

- 1. The results relate only to the items tested.
- 2. The test report shall not be reproduced except in full without approval of the laboratory.
- 3. The results apply to the sample as received.
- 4. If sample not preserved, results may vary.

Sample analyzed by:

Varsha Sel rawat/Mohit Kumar Analyst / Analyst

HSPCB/LAB/F/2024 2.3

Laboratory Faridabed

Dated 1-4-24



FORM j (See Rule 20)

Report No.:-190 Dated - May 29, 2023

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 20<sup>th</sup> day of May, 2023 from Sh. Kuldeep (RO), Sh. Manish Yadav AEE, a sample of liquid effluent of M/s Pond near Bandhwari, Municipal Solid Waste Site, Bandhwari, collected on 19.05.2023 from the Pond near Bandhwari, Municipal Solid Waste Site, Bandhwari for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 20/05/2023 to 29/05/2023 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	From Pond	Method of Testing
1.	Colour	Blackish	As per relevan parts of IS:3025
2.	Odour	Foul	(Part-I) 1987 8
3.	pH Value	7.4	relevant parts and Standard Methods
4.	Conductivity µS/cm	3310	for the
5.	Total Suspended Solids mg/l	1250	water and waste
6.	B.O.D.(3 Days at 27 <sup>0</sup> C) mg/l	820	water APHA(23"
7.	Chemical Oxygen Demand mg/l	4738.8	edition) 2017
8.	Oil & Grease mg/l	BDL	
9.	Nickel as Ni mg/l	4.9	
	Chloride as Cl	2124.1	
10.		9.3	
11.	Fluoride as F mg/l	58.8	-
12.	Total Kjeldahl Nitrogen mg/l	2.8	-
13.	Phenolic Compounds as $C_6H_50H$ mg/l	3.2	-
14.	Total Chromium as Cr mg/l	occipt was as follow:	

The condition of the seals, fastening and container on receipt was as follow: Container had its seals found intact in order; slip on the container had the signature of the

representative of the industry and the board representative. Signed this on 29th day of May, 2023

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

To

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Gurgaon North

Dated: 29/05/2023

Endst. No. HSPCB/LAB/F/2023/ 1024



FORM j (See Rule 20)

Report No.:-191 Dated - May 29, 2023

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 20<sup>th</sup> day of May, 2023 from Sh. Kuldeep Singh R.O, Gurgaon North, Sh. Manish Yadav AEE, a sample of liquid effluent of M/s Ecogreen Engineering (P) Ltd., Bandhwari, MSW Landfil Site, Bandhwari, Gurgaon, collected on 19.05.2023 from the Inlet & Outlet of DTRO for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 20/05/2023 to 29/05/2023 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	Inlet of DTRO	Outlet of DTRO	Prescribed Limits	Method of Testing
1.		Blackish	Almost, Colorless		As per relevant parts
2.		Foul	Almost Odourless		of IS:3025 (Part-I) 1987
3.	pH Value	7.8	6.4	5.5-9.0	& relevant
4.	Conductivity µS/cm	7120	2240		parts and Standard
5.	Total Suspended Solids mg/I	520	65	200	Methods for
6.	B.O.D.(3 Days at 27 <sup>°</sup> C) mg/l	185	26	30	the Examination of
7.	Chemical Oxygen Demand mg/l	947.7	136.5	250	water and
8.	Oil & Grease mg/l	7.4	BDL		waste water APHA(23 <sup>rd</sup>
9.	Ammonical Nitrogen as N mg/l	24.5	3.8	50	edition) 2017
10.	Chloride as CI mg/I	1364.4	234.9	600	
11.	Nickel as Ni mg/l	6.1	BDL	3	
12.	Fluoride as F mg/l	5.9	0.7		
13.	Phenolic Compounds as $C_6H_5OH$ mg/l	7.8	0.5	1	
14.	Total Chromium as Cr mg/l	BDL	BDL	2	

The condition of the seals, fastening and container on receipt was as follow: Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative. Signed this on **29<sup>th</sup> day of May**, **2023** 

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

То

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Gurgaon North Endst. No. HSPCB/LAB/F/2023/ 1626 Dated: 29023



Tel-2332596

Paid / Monitoring

Description to:
Pond of Leachate Outside the Landfill Site, Bandhwari, Gurugram
Report No: 145-146-147
Report No: 145-146-147

Pond Outside the Landfill Site, Bandhwari, Gurugram 28.402236, 77.16950
Pond Outside the Landfill Site, Bandhwari, Gurugram 28.402530,

77.170015

Description of the Sample: - Received on 12.07.2023 a sample of Pond from Sh. Aparnesh Kumar, Sc 'B' collected on 12.07.2023 from Various Point.

		ANALYSIS REPORT		
		RESULTS		
Sr. No.	Parameters	(1) Pond of Leachate Outside the Landfill Site	(2) Pond Outside the Landfill Site	(3) Pond Outside th Landfill Site
1.	Colour	Blackish	Greyish	Blackish
2.	Odour	Bad	Bad	Bad
3.	pH value	6.1	6.7	7.8
4.	Suspended Solids mg/l	368	282	408
5.	B.O.D. for 3 days at 27°C mg/l	910	230	500
6.	C.O.D mg /l	5080	840	3480
7.	Oil & Grease mg/l	5.0	3.0	2.0
8.	Conductivity us/cm	5620	3210	9950
9.	Total Dissolved Solid mg/l	2810	1640	5410
10.	Phosphate as P mg/l	6.3	5.2	5.9
11.	Zinc as Zn mg/l	3.6	2.8	3.2
12.	Nickel as Ni mg/l	ND	0.6	0.9
13.	Iron as Fe mg/l	1.4	0.7	1.1
14	Total Chromium as Cr mg/l	ND	ND	ND
15	Chlorides as Cl mg/l	940	480	610
16	Fluoride as F mg/l	1.4	0.9	1.0
17	Phenolic Compound as $C_6H_5OH mg/l$	ND	ND	ND
Sam	ple Collected/Not Collected by u	15		

Sample Collected/Not Collected by us Sample Consumed in testing

# HSPCB/Lab/GR/2023/ 589 - 590

Copy to M.S./R.O./Unit

LABINCHARGE

Dated 24-7-29



### Tel-2332596

### Paid / Monitoring

Description to:-

- 1. Pond of Leachate Outside the Landfill Site, Bandhwari, Gurugram Report No: 209-210-211 28.400033, 77.170167
- Pond Outside the Landfill Site, Bandhwari, Gurugram 28.402236, Dated: 04.09.2023 77.16950
- Pond Outside the Landfill Site, Bandhwari, Gurugram 28.402530, 77.170015

Description of the Sample: - Received on 25.08.2023 a sample of Pond from Sh. Aparnesh Kumar, Sc 'B' collected on 25.08.2023 from Various Point.

ANALYSIS REPORT

RESULTS

Sr. No.	Parameters	(1) Pond of Leachate Outside the Landfill Site	(2) Pond Outside the Landfill Site	(3) Pond Outside the Landfill Site
1.	Colour	Blackish	Blackish	Blackish
2.	Odour	Bad	Bad	Bad
3.	pH value	8.3	7.5	7.4
4.	Suspended Solids mg/l	462	514	418
5.	B.O.D. for 3 days at 27°C mg/l	848	640	976
6.	C.O.D mg /l	4580	3260	4580
7.	Oil & Grease mg/l	12.0	9.0	17.0
8.	Conductivity us/cm	3140	9970	4020
9.	Total Dissolved Solid mg/l	1590	5390	2140
10.	Phosphate as P mg/l	7.2	6.8	7.9
11.	Zinc as Zn mg/l	4.1	7.3	3.8
12.	Nickel as Ni mg/l	0.9	2.4	1.7
13.	Iron as Fe mg/l	1.1	2.2	2.8
14	Total Chromium as Cr mg/l	ND	ND	ND
15	Chlorides as CI mg/l	690	850	980
16	Fluoride as F mg/l	ND	ND	ND
17	Phenolic Compound as C <sub>6</sub> H <sub>5</sub> OH mg/l	ND	ND	ND
Sam	ple Collected/Not Collected by u	s		

Sample Consumed in testing

## HSPCB/Lab/GR/2023/ 831- 832

Copy to M.S./R.O./Unit

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Dated 04.09.2023

LABINCHARGE



Paid / Monitoring

Description to:-

1. 28.401175, 77.157806 Leachate Pond Outside Bandhwari Site, Gurugram Deted: 12.00.202

Dated: 13.09.2023

Description of the Sample: - Received on 05.09.2023 a sample of Leachate Pond from Sh. Aparnesh Kumar, Sc 'B' collected on 05.09.2023 from Leachate Pond Outside Bandhwari Site, Gurugram.

ANALYSIS REPORT

RESULTS

Sr. No	р.	Parameters	Leachate Pond Outside Bandhwari Site
1		Colour	Blackish
2.		Odour	Bad
3.		pH value	7.6
4.		Suspended Solids mg/l	522
5		B.O.D. for 3 days at 27°C mg/l	900 .
6		C.O.D mg /I	6480
7	÷	Oil & Grease mg/l	15.0
8		Conductivity us/cm	9970
9		Total Dissolved Solid mg/l	5125
10	<b>)</b> .	Phosphate as P mg/l	13.2
11	1.	Zinc as Zn mg/l	5.8
12	2.	Nickel as Ni mg/l	2.0
13	3.	Iron as Fe mg/l	1.6
14	4	Total Chromium as Cr mg/l	BDL
1	5	Chlorides as CI mg/I	740
1	6	Fluoride as F mg/l	BDL
1	7	Phenolic Compound as C <sub>6</sub> H <sub>5</sub> OH mg/I	BDL
Sam	nple C	ollected/Not Collected by us	

Sample Collected/Not Collected by Sample Consumed in testing

LAN INCHARGE Dated 13-9-23

HSPCB/Lab/GR/2023/ 914 - 915

Copy to M.S./R.O./Unit

ole



FORM j (See Rule 20)

Report No.:-1309 Dated - November 03, 2023

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 27<sup>th</sup> day of October, 2023 from Sh. Aparnesh Kumar, Sc-'B', a sample of liquid effluent of M/s Ecogreen (India) (P) Ltd., Bandhwari Site, Faridabad-Gurgaon Road, Gurgaon, collected on 26.10.2023 from the Inlet & Outlet of DTRO for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 27/10/2023 to 03/11/2023 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	Inlet of DTRO	Outlet of	Method of Testing
1.	Colour	Blackish	DTRO Almost	As per relevant parts
2.	Odour	De d	Colorless	of IS:3025 (Part-I)
2		Bad	Odourless	1987 & relevant
3.	pH Value	7.5	7.1	parts and Standard Methods for the
4.	Conductivity µS/cm	6310	1950	Examination of water
5.	Total Suspended Solids mg/l	276	48	and waste water APHA(24 <sup>th</sup> edition)
6.	B.O.D.(3 Days at 27° C) mg/l	125	23	2023
7.	Chemical Oxygen Demand mg/l	640	116	
8.	Oil & Grease mg/l	8.2	BDL	

The condition of the seals, fastening and container on receipt was as follow:

Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative.

Signed this on 03rd day of November, 2023

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

To

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Gurgaon North

Endst. No. HSPCB/LAB/F/2023/ 7485-7486

Dated: 03/11/2023

ofc



### Tel-2332596

### Paid / Monitoring

Description to:-1. 28.401178, 77.157808 Leachate Pond Outside Bandhwari Site, Gurugram

Report No: 315 Dated: 03.11.2023

Description of the Sample: - Received on 26.10.2023 a sample of Leachate Pond from Sh. Aparnesh Kumar, Sc 'B' collected on 26.10.2023 from Leachate Pond outside Bandhwari Site, Gurugram.

### ANALYSIS REPORT RESULTS

		La La La David Outside Readburgei
Sr. No.	Parameters	Leachate Pond Outside Bandhwari Site
1.	Colour	Bluish
2.	Odour	Bad
3.	pH value	5.7
4.	Suspended Solids mg/l	596
5.	B.O.D. for 3 days at 27°C mg/l	1100
6.	C.O.D mg /I	7200
7.	Oil & Grease mg/l	22.0
8.	Conductivity us/cm	16930
9.	Total Dissolved Solid mg/l	9312
10.	Phosphate as P mg/l	15.6
11.	Zinc as Zn mg/l	6.7
12.	Nickel as Ni mg/l	2.9
13.	Iron as Fe mg/l	3.8
14	Total Chromium as Cr mg/l	BDL
15	Chlorides as CI mg/l	890
16	Fluoride as F mg/l	BDL
17	Phenolic Compound as C <sub>6</sub> H <sub>5</sub> OH mg/l	BDL
Sample	e Collected/Not Collected by us	

Sample Collected/Not Collected by u Sample Consumed in testing

# HSPCB/Lab/GR/2023/1604-1605

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LABINCHARGE Dated 03.11.2023

OC

23/01/2024

Scanned with ACE Scanner

LABINCHARGE

Dated



### Paid / Monitoring

Description to:-

1. Leachate from the Outside of Bandhwari landfill Site, Gurugram 28.404149, 77.170688

2. Leachate from the Outside of Bandhwari landfill Site, Gurugram 28.404149, 77.170688

Description of the Sample: - Received on 11.01.2024 a sample of Leachate Pond from Sh. Aparnesh Kumar, Sc 'B' collected on 11.01.2024 from Leachate Pond outside Bandhwari Site, Gurugram.

### ANALYSIS REPORT

RESULTS

Sr	. No.	Parameters Colour	Leachate from the Outside of Bandhwari landfill Site, Gurugram 28.404149, 77.170688 Blackish	Leachate from the Outside of Bandhwari landfill Site, Gurugram 28.404149, 77.170688 Blackish
	1. 2.	Odour	Bad	Bad
	2. 3.	pH value	5.4	5.9
	3. 4.	Suspended Solids mg/l	482	614
	5.	B.O.D. for 3 days at 27°C mg/l	900	1100
	6.	C.O.D mg /l	6800	8800
	7.	Oil & Grease mg/l	26.0	28.0
	8.	Conductivity us/cm	14230	15590
	9.	Total Dissolved Solid mg/l	7642	8060
	10.	Phosphate as P mg/l	17.2	15.1
	11.	Zinc as Zn mg/l	8.1	7.4
	12.	Nickel as Ni mg/l	2.3	3.0
	13.	Iron as Fe mg/l	4.6	3.8
	14	Total Chromium as Cr mg/l	BDL	BDL
	15	Chlorides as Cl mg/l	910	1040
	16	Fluoride as F mg/l	BDL	BDL
	17	Phenolic Compound as C <sub>6</sub> H₅OH mg/l	BDL	BDL
40				

OC

Sample Collected/Not Collected by us Sample Consumed in testing

# HSPCB/Lab/GR/2024/2/07 - 2108

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Report No: 521-522

Dated: 23.01.2024





FORM J

(See Rule 36)

Report No.:-2296 (I) Dated - March 29 2024

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 21<sup>st</sup> day of March, 2024 from Sh. Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-'B', a sample of liquid effluent of M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram ( Pond outside along peripheri wall) N 28°24', 1.03061" , E 77°10'3.57601", collected on 21.03.2024 from the Municipal Solid Waste Disposal Site at Bandhwari, Gurugram ( Pond outside along peripheri wall) N 28°24', 1.03061", E 77°10'3.57601", for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 21/03/2024 to 29/03/2024 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond outside along peripheri wall) N 28°24',1.03061", E 77°10'3.57601"	Prescribed Limits	Test Method
1.	pH Value at 25°C	8.12	5.5-9.0	APHA 4500 H <sup>+</sup> B (24 <sup>th</sup> Edition 2023)
2.	Conductivity µS/cm at 25°C	43100		APHA 2510 B (24 <sup>th</sup> Edition 2023)
3.	Total Suspended Solids mg/l	280	100	APHA 2540 - D (24 <sup>th</sup> Edition 2023)
4.	B.O.D.(5 Days at 20 <sup>0</sup> C)	1750	30	APHA 5210-C (24 <sup>t</sup> Edition 2023)
8.80	mg/I Chemical Oxygen Demand	5975.2	250	APHA 5220-B (24 <sup>th</sup> Edition 2023)
5.	mg/l Total Dissolved Solids mg/l	23710	2100	APHA 2540-C (24 Edition 2023)

The condition of the seals, fastening and container on receipt was as follow:

Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative.

Signed this on 29th day of March, 2024

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

То

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Gurgaon North / M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram ( Pond outside along peripheri wall) N 28°24', 1.03061" , E 77°10'3.57601" Dated: 29/03/2024

Endst. No. HSPCB/LAB/F/2024/ //3//



Report No.:-2296 (I) Dated - March 29 2024

PREVENT POLLUTION

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 21<sup>st</sup> day of March, 2024 from Sh. Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-`B', a sample of liquid effluent of M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond outside along peripheri wall) N 28°24', 1.03061", E 77°10'3.57601", collected on 21.03.2024 from the Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond outside along peripheri wall) N 28°24', 1.03061", F 77°10'3.57601", for analysis. The Sample was in a condition fit for analysis reported below:-I further certify that I have analyzed the afore-mentioned sample on 21/03/2024 to 29/03/2024 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond outside along peripheri wall) N 28°24',1.03061", E 77°10'3.57601"	Prescribed Limits	Test Method
7.	Colour	Blackish		
8.	Odour	Bad		
9.	Nickel as Ni mg/l	0.71	3.0	3120-Ni- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
10.	Chloride as Cl mg/l	6443.5	1000	IS 3025 (Part-32) :1988 (Reaffirmed 2014) Argentometric method
11.	Fluoride mg/l	24.8	1.5	4500-F <sup>-</sup> D-SPADNS Method (APHA 24 <sup>th</sup> Edition 2023)
12.	Copper as Cu mg/l	1.24	3.0	3120-Cu- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
13.	Arsenic mg/l	0.071	0.2	3120-As- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
14.	Mercury mg/l	ND	0.01	3120-Hg Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
15.	Lead mg/l	0.08	0.1	3120-Pb Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)

16.	Cadmium mg/l	BDL* (MDL**=0.01)	2.0	3120-Cd Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
17.	Zinc as Zn mg/l	1.18	5.0	3120-Zn Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
18.	Ammonical Nitrogen as N mg/l	680.4	50	4500-NH <sub>3</sub> C- Titrimetric method
19.	Phenolic Compounds as $C_6H_50H mg/l$	0.85	1.0	IS 3025 (Part-43) Sec 1-2022
20.	Total Kjeldahl Nitrogen (TKN) mg/l	1246.8	100	4500-N Org B (APHA 24 <sup>th</sup> Edition 2023)
21.	Total Chromium as Cr <sup>+6</sup> mg/l	0.97	2.0	3120-Cr-Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)

BDL\* = Below Detection Limit

MDL\*\* = Detection Limit

The condition of the seals, fastening and container on receipt was as follow:

Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative.

Signed this on 29th day of March, 2024

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

To

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Gurgaon North / M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram ( Pond outside along peripheri wall) N 28°24', 1.03061" , E 77°10'3.57601"

Endst. No. HSPCB/LAB/F/2024/ 11311

Dated: 29/03/2024





Report No.:-2296 (II) Dated - March 29 2024

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 21<sup>st</sup> day of March, 2024 from Sh. Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-'B', a sample of liquid effluent of M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24,'4.0122", E 77°10'21.20448", collected on 21.03.2024 from the Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24,'4.0122". The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 21/03/2024 to 29/03/2024 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24,'4.0122", E 77°10'21.20448"	Prescribed Limits	Test Method
1.	pH Value at 25°C	7.13	5.5-9.0	APHA 4500 H <sup>+</sup> B (24 <sup>th</sup> Edition 2023)
2.	Conductivity µS/cm at 25°C	67900		APHA 2510 B (24 <sup>th</sup> Edition 2023)
3.	Total Suspended Solids mg/l	380	100	APHA 2540 - D (24 <sup>th</sup> Edition 2023)
4.	B.O.D.(5 Days at 20 <sup>0</sup> C) mg/l	2250	30	APHA 5210-C (24 <sup>th</sup> Edition 2023)
5.	Chemical Oxygen Demand	10786.4	250	APHA 5220-B (24 <sup>th</sup> Edition 2023)
6.	mg/l Total Dissolved Solids mg/l	35410	2100	APHA 2540-C (24 <sup>th</sup> Edition 2023)

The condition of the seals, fastening and container on receipt was as follow: Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative.

## Signed this on 29th day of March, 2024

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

То

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Gurgaon North / M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24,'4.0122" , E 77°10'21.20448"

Endst. No. HSPCB/LAB/F/2024/ 1/314

Dated: 29/03/2024



Report No.:-2296 (II) Dated - March 29 2024

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 21<sup>st</sup> day of March, 2024 from Sh. Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-'B', a sample of liquid effluent of M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24,'4.0122", E 77°10'21.20448", collected on 21.03.2024 from the Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24,'4.0122", The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 21/03/2024 to 29/03/2024 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24,'4.0122", E 77°10'21.20448"	Prescribed Limits	Test Method
7.	Colour	Blackish		
8.	Odour	Bad		
9.	Nickel as Ni	1.10	3.0	3120-Ni- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
10.	Chloride as Cl	9270.7	1000	IS 3025 (Part-32) :1988 (Reaffirmed 2014) Argentometric method
11.	Fluoride	23.54	1.5	4500-FD-SPADNS Method (APHA 24 <sup>th</sup> Edition 2023)
12.	Copper as Cu	1.78	3.0	3120-Cu- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
13.	Arsenic	0.084	0.2	3120-As- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
14.	Mercury	ND	0.01	3120-Hg Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
15.	Lead	0.09	0.1	3120-Pb Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)

16.	Cadmium	BDL* (MDL**=0.01)	2.0	3120-Cd Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
17.	Zinc as Zn	1.38	5.0	3120-Zn Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
18.	Ammonical Nitrogen as N	1394.4	50	4500-NH <sub>3</sub> C- Titrimetric method
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> 0H	0.99	1.0	IS 3025 (Part-43) Sec 1-2022
20.	mg/l Total Kjeldahl Nitrogen (TKN)	2409.72	100	4500-N Org B (APHA 24 <sup>th</sup> Edition 2023)
21.	Total Chromium as Cr <sup>+6</sup>	0.87	2.0	3120-Cr-Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)

BDL\* = Below Detection Limit

MDL\*\* = Detection Limit

The condition of the seals, fastening and container on receipt was as follow: Container had its seals found intact in order; slip on the container had the signature of the

representative of the industry and the board representative. Signed this on 29th day of March, 2024

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

То

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Gurgaon North / M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24,'4.0122" , E 77°10'21.20448"

Endst. No. HSPCB/LAB/F/2024/ 11314

and Anatyst

Dated: 29/03/2024





Report No.:-2296 (III) Dated - March 29 2024

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 21<sup>st</sup> day of March, 2024 from Sh. Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-'B', a sample of liquid effluent of M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'7.65396' , E 77°10'23.65176', collected on 21.03.2024 from the Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'7.65396' , E 77°10'23.65176', for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 21/03/2024 to 29/03/2024 and declare the result of analysis to be as follow:-Sr Parameter

No.	rarameter	Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'7.65396', E 77°10'23 65136'		Test Method
1.	pH Value at 25°C	77°10′23.65176′ 6.99		
2.	Conductivity µS/cm at 25°C	56600	5.5-9.0	APHA 4500 H <sup>+</sup> (24 <sup>th</sup> Edition 2023)
3.	Total Suspended Solids mg/l	420		APHA 2510 B (24 Edition 2023)
4.	B.O.D.(5 Days at 20° C) mg/l	1550	100	APHA 2540
5.	Chaminal 0		30	(24 <sup>th</sup> Edition 2023) APHA 5210-C (24
6	mg/l	7837.6	250	APHA 5220-B (24)
6.	Total Dissolved Solids mg/l	29130	2100	Edition 2023) APHA 2540-C (24 Edition 2023)

The condition of the seals, fastening and container on receipt was as follow:

Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative. Signed this on 29th day of March, 2024

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

To

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Gurgaon North / M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'7.65396' , E 77°10'23.65176'

Endst. No. HSPCB/LAB/F/2024/ /13/7

Dated: 29/03/2024



Report No.:-2296 (III) Dated - March 29 2024

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 21<sup>st</sup> day of March, 2024 from Sh. Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-'B', a sample of liquid effluent of M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'7.65396', E 77°10'23.65176', collected on 21.03.2024 from the Municipal Solid Waste Disposal Site at Bandhwari, Surugram the Sandhwari, E 77°10'23.65176', for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 21/03/2024 to 29/03/2024 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'7.65396' , E 77°10'23.65176'	Prescribed Limits	Test Method
7.	Colour	Blackish		
8.	Odour	Bad		
9.	Nickel as Ni	0.89	3.0	3120-Ni- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
10.	Chloride as Cl	8951.04	1000	IS 3025 (Part-32) :1988 (Reaffirmed 2014) Argentometric method
11.	Fluoride	28.72	1.5	4500-F D-SPADNS Method (APHA 24 <sup>th</sup> Edition 2023)
12.	Copper as Cu	0.82	3.0	3120-Cu- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
13.	Arsenic	0.074	0.2	3120-As- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
14.	Mercury	ND	0.01	3120-Hg Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)

15.	Lead	0.08	0.1	3120-Pb
		×		Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
16.	Cadmium	BDL* (MDL**=0.01)	2.0	3120-Cd Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
17.	Zinc as Zn	1.08	5.0	3120-Zn Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
18.	Ammonical Nitrogen as N	1178.8	50	4500-NH <sub>3</sub> C- Titrimetric method
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> 0H mg/I	0.91	1.0	IS 3025 (Part-43) Sec 1-2022
20.	Total Kjeldahl Nitrogen (TKN)	2045.4	100	4500-N Org B (APHA 24 <sup>th</sup> Edition 2023)
21.	Total Chromium as Cr <sup>+6</sup>	0.76	2.0	3120-Cr- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)

BDL\* = Below Detection Limit

MDL\*\* = Detection Limit

The condition of the seals, fastening and container on receipt was as follow:

Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative.

Signed this on 29th day of March, 2024

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad Board Analyst

Dated: 29/03/2024

То

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Gurgaon North / M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'7.65396', E 77°10'23.65176'

Endst. No. HSPCB/LAB/F/2024/ 11317





Report No.:-2296 (IV) Dated - March 29 2024

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 21<sup>st</sup> day of March, 2024 from Sh. Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-'B', a sample of liquid effluent of M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'3.47868" , E 77°10'11.18352", collected on 21.03.2024 from the Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'3.47868", E 77°10'11.18352", for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 21/03/2024 to 29/03/2024 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'3.47868", E 77°10'11.18352"	Prescribed Limits	
1.	pH Value at 25°C	8.88	5.5-9.0	APHA 4500 H <sup>+</sup> B (24 <sup>th</sup> Edition 2023)
2.	Conductivity µS/cm at 25°C	46900		APHA 2510 B (24 <sup>th</sup> Edition 2023)
3.	Total Suspended Solids	220	100	APHA 2540 - [ (24 <sup>th</sup> Edition 2023)
4.	mg/l B.O.D.(5 Days at 20° C)	1250	30	APHA 5210-C (24 Edition 2023)
5.	mg/l Chemical Oxygen Demand	5509.6	250	APHA 5220-B (24 Edition 2023)
5.	mg/l Total Dissolved Solids mg/l	24610	2100	APHA 2540-C (24 Edition 2023)

The condition of the seals, fastening and container on receipt was as follow:

Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative.

Signed this on 29th day of March, 2024

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

Dated: 29/03/2024

To

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Gurgaon North / M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'3.47868" , E 77°10'11.18352"

Endst. No. HSPCB/LAB/F/2024/ 11320



Report No.:-2296 (IV) Dated - March 29 2024

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 21<sup>st</sup> day of March, 2024 from Sh. Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-'B'., a sample of liquid effluent of M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'3.47868", E 77°10'11.18352", collected on 21.03.2024 from the Municipal Solid Waste Disposal Site at Bandhwari, Starma, Lab Bandhwari, Gurugram (Pond inside the site) N 28°24'3.47868", E 77°10'11.18352", for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 21/03/2024 to 29/03/2024 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'3.47868" , E 77°10'11.18352"	Prescribed Limits	Test Method
7.	Colour	Blackish		
8.	Odour	Bad		
9.	Nickel as Ni	0.63	3.0	3120-Ni- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
10.	Chloride as Cl	6123.3	1000	IS 3025 (Part-32) :1988 (Reaffirmed 2014) Argentometric method
11.	Fluoride	27.84	1.5	4500-F <sup>-</sup> D-SPADNS Method (APHA 24 <sup>th</sup> Edition 2023)
12.	Copper as Cu	0.57	3.0	3120-Cu- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
13.	Arsenic	0.175	0.2	3120-As- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
14.	Mercury	ND	0.01	3120-Hg Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
15.	Lead	0.032	0.1	3120-Pb Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)

.6.	Cadmium	BDL* (MDL**=0.01)	2.0	3120-Cd Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
17.	Zinc as Zn	0.61	5.0	3120-Zn Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
18.	Ammonical Nitrogen as N	688.8	50	4500-NH <sub>3</sub> C- Titrimetric method
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> 0H mg/l	0.97	1.0	IS 3025 (Part-43) Sec 1-2022
20.	Total Kjeldahl Nitrogen (TKN)	1569.1	100	4500-N Org B (APHA 24 <sup>th</sup> Edition 2023)
21.	Total Chromium as Cr <sup>+6</sup>	1.54	2.0	3120-Cr-Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)

BDL\* = Below Detection Limit

MDL\*\* = Detection Limit

The condition of the seals, fastening and container on receipt was as follow:

Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative.

Signed this on 29th day of March, 2024

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

То

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Gurgaon North / M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond inside the site) N 28°24'3.47868", E 77°10'11.18352"

Endst. No. HSPCB/LAB/F/2024/ 11320

Dated: 29/03/2024







FORM J

(See Rule 36)

Report No.:-2296 (V) Dated - March 29 2024

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 21st day of March, 2024 from Sh. Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-'B'., a sample of liquid effluent of M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram ( Pond Near Gurugram Faridabad Road) N 28°24',14.99148" , E 77°10'15.6414", collected on 21.03.2024 from the Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond Near Gurugram Faridabad Road) N 28°24',14.99148", E 77°10'15.6414", for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 21/03/2024 to 29/03/2024 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond Near Gurugram Faridabad Road) N 28°24',14.99148",E 77°10'15.6414"	Prescribed Limits	Test Method
1.	pH Value at 25°C	9.11	5.5-9.0	APHA 4500 H <sup>+</sup> B (24 <sup>th</sup> Edition 2023)
	Conductivity µS/cm at 25°C	64600		APHA 2510 B (24 <sup>th</sup> Edition 2023)
3.	Total Suspended Solids mg/I	165	100	APHA 2540 - D (24 <sup>th</sup> Edition 2023)
4.	B.O.D.(5 Days at 20 <sup>0</sup> C) mg/l	3100	30	APHA 5210-C (24 <sup>th</sup> Edition 2023)
5.	Chemical Oxygen Demand mg/l	9544.8	250	APHA 5220-B (24 <sup>th</sup> Edition 2023)
6.	Total Dissolved Solids mg/l	34270	2100	APHA 2540-C (24 <sup>th</sup> Edition 2023)

The condition of the seals, fastening and container on receipt was as follow: Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative. Signed this on 29th day of March, 2024

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

To

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Gurgaon North / M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond Near Gurugram Faridabad Road) N 28°24',14.99148",E 77°10'15.6414"

Endst. No. HSPCB/LAB/F/2024/ 11323

Dated: 29/03/2024 This test report relate only to the particular sample submitted for testing



Report No.:-2296 (V) Dated - March 29 2024

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 21<sup>st</sup> day of March, 2024 from Sh. Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-`B'., a sample of liquid effluent of M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond Near Gurugram Faridabad Road) N 28°24',14.99148", E 77°10'15.6414", collected on 21.03.2024 from the Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond Near Gurugram Faridabad Road) N 28°24',14.99148", E 77°10'15.6414", for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 21/03/2024 to 29/03/2024 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond Near Gurugram Faridabad Road) N 28°24',14.99148",E 77°10'15.6414"	Prescribed Limits	Test Method	
7.	Colour	Blackish			
8.	Odour	Bad			
9.	Nickel as Ni	0.77	3.0	3120-Ni- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	
10.	Chloride as Cl	7012.9	1000	IS 3025 (Part-32) :1988 (Reaffirmed 2014) Argentometric method	
11.	Fluoride	24.98	1.5	4500-FD-SPADNS Method (APHA 24 <sup>th</sup> Edition 2023)	
12.	Copper as Cu	0.77	3.0	3120-Cu- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	
13.	Arsenic	0.175	0.2	3120-As- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	
14.	Mercury	ND	0.01	3120-Hg Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)	



1	Lead	0.03	0.1	3120-Pb Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
16.	Cadmium	BDL* (MDL**=0.01)	2.0	3120-Cd Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
17.	Zinc as Zn	0.70	5.0	3120-Zn Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)
18.	Ammonical Nitrogen as N	1136.8	50	4500-NH <sub>3</sub> C- Titrimetric method
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> 0H mg/l	0.72	1.0	IS 3025 (Part-43) Sec 1-2022
20.	Total Kjeldahl Nitrogen (TKN)	1793.2	100	4500-N Org B (APHA 24 <sup>th</sup> Edition 2023)
21.	Total Chromium as Cr <sup>+6</sup>	2.73	2.0	3120-Cr- Inductively Coupled Plasma Method (APHA 24 <sup>th</sup> Edition 2023)

BDL\* = Below Detection Limit

MDL\*\* = Detection Limit

The condition of the seals, fastening and container on receipt was as follow:

Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative.

Signed this on 29th day of March, 2024

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

To

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Gurgaon North / M/s Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Pond Near Gurugram Faridabad Road) N 28°24',14.99148",E 77°10'15.6414"

Endst. No. HSPCB/LAB/F/2024/ //323

Analyst

Dated: 29/03/2024



		TEST REPORT
Test Report No.		2295 (I) M
Date		01/04/2024
Issued To	:	Regional Officer, Gurgaon North/Member Secretary HSPCB
Sample Type		Sludge
Sample collected on dated		21/03/2024
Sample Collected by	:	Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh,
-		R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-'B'.
Sample received on dated	:	21/03/2024
Sample Location		Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Soil from outside pond along the peripheral wall), Lat. 28.400317, Long. 77.170370
Sample Quantity	. :	Unknown
Date of Analysis started	:	21/03/2024
Dated of analysis completed		01/04/2024

Sr. No.	Parameter	Result
1.	Color	Brownish
2.	Odour	Bad
3.	pH	7.26
4.	Conductivity	4920
5.	Arsenic as As (mg/Kg)	0.334
6.	Cadmium as Cd (mg/Kg)	0.03
7.	Chromium as Cr (mg/Kg)	3.72
8.	Copper as Cu (mg/Kg)	4.60
9.	Lead as Pb (mg/Kg)	1.25
10.	Mercury as Hg (mg/Kg)	ND
11.	Nickel as Ni (mg/Kg)	3.44
12.	Zinc as Zn (mg/Kg)	11.18
13.	Moisture percent by weight (maximum)	24.508
14.	Bulk density (g/cm <sup>3</sup> )	1.0068

### Notes:

- 1. The results relate only to the items tested.
- 2. The test report shall not be reproduced except in full without approval of the laboratory.
- 3. The results apply to the sample as received..
- 4. If sample not preserved, results may vary.

Sample analyzed by:

Varsha Sehrawat/Mohit Kumar Analyst Analyst /

looda, Sc-'B' Narend **Regional Laboratory Faridabad** 

Dated: 1-4-24

HSPCB/LAB/F/2024/ 05



### TEST REPORT

Test Report No.		
Date	5	2295 (II) M
Issued To	:	01/04/2024
Sample Type	:	Regional Officer, Gurgaon North/Member Secretary HSPCB
Sample collected	:	Sludge
Sample collected on dated Sample Collected by	:	21/03/2024
Sample Collected by	:	Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vilue, C. Starting, Sh. Ramniwas
Sample received on dated Sample Location	:	21/03/2024
		Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Soil from outside pond along the peripheral wall Near ETP), N 28°24'2.84148", E 77°10'19.32744"
Sample Quantity	:	Unknown
Date of Analysis started	:	21/03/2024
Dated of analysis completed	:	01/04/2024

Sr. No.	Parameter	-
1.	Color	Result
		Greyish
2.	Odour	Bad
3.	pH	
4.		7.20
1994	Conductivity	2540
5.	Arsenic as As (mg/Kg)	0.534
6.	Cadmium as Cd (mg/Kg)	
7.	Chromium as Cr (mg/Kg)	0.217
NECOSI.		7.63
. <b>8.</b>	Copper as Cu (mg/Kg)	15.79
9.	Lead as Pb (mg/Kg)	3.84
10.	Mercury as Hg (mg/Kg)	ND
11.	Nickel as Ni (mg/Kg)	3.55
12.	Zinc as Zn (mg/Kg)	
		30.74
13.	Moisture percent by weight (maximum)	32.183
14.	Bulk density (g/cm <sup>3</sup> )	0.9598

Notes:

1. The results relate only to the items tested.

2. The test report shall not be reproduced except in full without approval of the laboratory.

3. The results apply to the sample as received..

4. If sample not preserved, results may vary.

Sample analyzed by:

Varsha Sehrawat/Mohit Kumar Analyst / Analyst

Narenge Hooda, Sc-'B' **Regional Laboratory Faridabad** 

## HSPCB/LAB/F/2024/ 67

Dated: 1-4-24



TROM

Test Report No.		TEST REPORT
Date Date	:	2205
Issued To		2295 (III) M
Sample Type	:	01/04/2024
Sample collected	:	Regional Officer, Gurgaon North/Member Secretary HSPCB
Sample Collected by	:	21/03/2024
Sample received on dated Sample Location	:	Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas Sharma, Lab Incharge, Gurgaon, Sh. Vikas Grewal, Sc-'B'.
Sample Quantity		Municipal Solid Waste Disposal Site at Bandhwari, Gurugram ( Composite Sample)
Date of Analysis started	:	Unknown
Dated of analysis completed	:	21/03/2024
, sis completed	•	01/04/2024

Sr. No.	Parameter	
1.	Color	Result
2.	Odour	Blackish
3.	pH	Mild
4.	Conductivity	8.36
5.	Arsenic as As (mg/Kg)	1025
6.	Cadmium as Cd (mg/Kg)	0.05
7.	Chromium as Cr (mg/Kg)	0.08
8.	Copper as Cu (mg/Kg)	10.45
9.	Lead as Pb (mg/Kg)	15.76
10.	Mercury as Hg (mg/Kg)	2.97
11.	Nickel as Ni (mg/Kg)	ND
12.	Zinc as Zn (mg/Kg)	3.22
13.		103.707
14.	Moisture percent by weight (maximum)	21.137
14.	Bulk density (g/cm <sup>3</sup> )	0.8665

### Notes:

1. The results relate only to the items tested.

2. The test report shall not be reproduced except in full without approval of the laboratory.

3. The results apply to the sample as received ...

4. If sample not preserved, results may vary.

Sample analyzed by:

Varsh hrawat/Mohit Kumar Analyst / Analyst

Narender Hooda, Sc-B' **Regional Laboratory Faridabad** 

HSPCB/LAB/F/2024/ 09

Dated: 1-4-24



## TEST REPORT

:	2295 (IV) M
:	01/04/2024
•	Regional Officer, Gurgaon North/Member Secretary HSPCB
•	Sludge
:	21/03/2024
:	Sh. Balraj Ahlawat, Chief Engineer, Sh. Naveen Gulia, SEE, Sh. Sandeep Singh, R.O, Faridabad, Sh. Sunil Sheoran, Lab Incharge, Faridabad, Sh. Ramniwas
2	Sharma, Lao Incharge, Gurgaon, Sh. Vikas Grewal Sc. 'B'
•	21/03/2024
	Municipal Solid Waste Disposal Site at Bandhwari, Gurugram (Inert Sample)
:	Unknown
:	21/03/2024
:	01/04/2024
	: : : : : : : : : : : : : : : : : : : :

Sr. No.	Parameter	Result	
1.	Color	Blackish	
2.	Odour	Mild	
3.	pH	8.62	
4.	Conductivity	1670	
5.	Arsenic as As (mg/Kg)	0.033	-
6.	Cadmium as Cd (mg/Kg)	0.08	
7.	Chromium as Cr (mg/Kg)	9.21	
8.	Copper as Cu (mg/Kg)	9.27	
9.	Lead as Pb (mg/Kg)	2.48	
10.	Mercury as Hg (mg/Kg)	ND	
11.	Nickel as Ni (mg/Kg)	4.19	
12.	Zinc as Zn (mg/Kg)	21.59	
13.	Moisture percent by weight (maximum)	12.1005	
14.	Bulk density (g/cm <sup>3</sup> )	0.8303	100 M

### Notes:

- 1. The results relate only to the items tested.
- 2. The test report shall not be reproduced except in full without approval of the laboratory.
- 3. The results apply to the sample as received..
- 4. If sample not preserved, results may vary.

Sample analyzed by:

Varsha Sehrawat/Mohit Kumar Analyst / Analyst

Nareneer Hooda, Sc-'B' Regional Laboratory Faridabad

HSPCB/LAB/F/2024/ 11

Dated: )-4-24

2

Type of Sample:-Monitoring Haryana State Pollution Control Board's Laboratory C-11, Sector-06, Panchkula, Haryana

THREAD SALE

Report No.M-458

Dated: 08.07.2024 Regional Officer A.E.E. Sc 'B'-1,11,111 J.E.E. Clerk

Issued to M/s Tubewell at MSW stile, Meeruth Road, Karnal.

Description: Received on <u>28.06.2024</u> sample of <u>Tubewell</u> collected by <u>Sh. Hardik, AEE</u> from <u>Surface Water</u> of the tubewell on <u>27.06.2024</u>. The sample has been analyzed from <u>28.06.2024</u> to <u>08.07.2024</u>.

	Deve exter Name		Result	Test Method	
<u>sr. No.</u>	<u>Parameter Name</u> Color		Colourless		
1.	Odour	121 L	Odourless	-	
3.	Ammonical nitrogen as N (mg/l)		BDL(DL=0.5)	APHA 4500-NH3 (F)	
4.	Nitrate nitrogen (mg/l)		BDL(DL=0.5)	APHA 4500-NO, (B)	
5.	Turbidity (NTU)		BDL(DL=01)	IS 3025 (Part-10)	
6.	Sulphate( mg/l)		64.21	APHA 4500-SO4 <sup>2</sup> (E)	
7.	Fluoride( mg/l)	Sec.	0.09	АРНА 4500-F- (D)	
8.	Total Phosphate (mg/l)	de la	BDL(DL=0.4)	APHA 4500 -P (D)	
9.	Sodium ( mg/l)		3.2	APHA 3500-Na (B)	
10	). Potassium ( mg/l)		0.7	APHA 3500-K (B)	
6		1			

Sample Not Collected by us Sample Consumed in testing CC to Member Secretary, HSPCB CC to Regional Office: <u>Karnal.</u> Th

Megha

JSA St.B Manjali Jyotika

Laboratory In-charge

Dr. Pinki Jangra

CC to Regional Office: Karnal. The test report relate only to the particular sample submitted for testing.

...End of the Report...







Dated:- 01.05.2024

Report No-112

I hereby, certify that I Neeraj Bala Board Analyst duly appointed under sub section (3) of section 53 of the Water (Prevention and Control of Pollution) Act 1974 (06 of 1974), received a sample on the 24th day of April, 2024, collected by Sh. Rohtash Dahiya, JEE dated 23th day of April, 2024 of M/s Solid Waste Management Project, VPO- Sheikhpura, Karnal for analysis.

Further certify that I have analyzed the above mentioned sample on 24<sup>th</sup>-April-2024 to 01<sup>st</sup> -May-2024 and declare the result of analysis to be as follows:

	Parameter Name	Result	Result	Limit	Test Method
Sr. No.		220	221		
1	Sample Code	Inlet of ETP	Outlet of ETP		1.22
2	Sample Collected from	8.01	7.72	5.5-9.0	АРНА 4500-Н- (В)
3.	pH value at 25°C	190.0	13.0	30	(\$ 3025 (Part-44)
Δ.	Biological Oxygen Demand (mg/l)	1104.0	68.0	250	APHA 5220 (B)
5	Chemical Oxygen Demand (mg/l)	289.0	28.0	100	スローム 2540 (D)
0	Total Suspended Solids mg/l	19.0	BDL(DL=2)	10	ar: 4,5520-B
7.	Oil and Grease (mg/l)		1815.0		(5.3025(Part-14)
8	Conductivity at 25°C (µS/cm)	13380.0	990.0	2100	APHA 2540 (C)
3.	Total Dissolved Solids mg/l	6252.0	550.2		

The Conditions of the seals, listening and container on receipt was as follows: Container had its seal found intact and in order, slip on the container had the signature of the representative of the industry and the Board.

Signed this 01st day of May,2024 Haryana State Pollution Control Board Laboratory, SCO-115, 1st& 2nd Floor, Sector-25, Panchkula, Haryana

Neeroj Bala

Board Analyst

CC to Regional Office: Karnal. This test report relate only to the particular sample submitted for testing. TO

# Form J

(See Rule 36)

HARYANA STATE

Report No-112

Type of Sample:

ole: Legal

Dated:- 01.05.2024

I hereby, certify that I <u>Neeraj Bala</u> Board Analyst duly appointed under sub section (3) of section 53 of the Water (Prevention and Control of Pollution) Act 1974 (06 of 1974), received a sample on the <u>24<sup>th</sup> day of April, 2024</u>, collected by <u>Sh. Rohtash Dahiya, JEE</u> dated <u>23<sup>th</sup> day of April, 2024</u> of <u>M/s Solid Waste Mangement Project, VPO- Sheikhpura, Karnal</u> for analysis.

Further certify that I have analyzed the above mentioned sample on 24<sup>th</sup>-April-2024 to 01<sup>st</sup> -May-2024 and declare the result of analysis to be as follows:

Sr. No	<u>Parameter</u>	Result	Result	Limit	Test Method
1.	Color	Light Brownish	V.Light Pale		-
2.	Odour	Bad	Very Mild		

The Conditions of the seals, listening and container on receipt was as follows: Container had its seal found intact and in order, slip on the container had the signature of the representative of the industry and the Board. Signed this **01<sup>st</sup> day of May,2024** Haryana State Pollution Control Board Laboratory, SCO-115, 1st& 2nd Floor, Sector-25, Panchkula, Haryana

Neetroj Bala

To

The Member Secretary, HSPCB, Panchkula CC to Regional Office: Karnal. This test report relate only to the particular sample submitted for testing.

\*\*\*End of the Report\*\*\*

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Pho	ne :	4 5	91-1	1-470	)7555	5 13	) Linesi	Fax : +	91	11.4	70755	50		

e-mail : info@delhitesthouse.com

OR-DID! Report No. Date of Issue Date of Receipt Party Pet No.

24432312111 SVGEN111 15 12 2021 11 12 2023 1.11

Page 1 of

() []

uthorlsed Signatory - Director

Sample Information: - Ambient Air Quality Monitorine

Issued to:

M/s Sugam Swachhta Pvt I td

Sheikhpura Most Plant

Karnal Haryana-132001

Karnal

#### 11.ST RLPORT

-			Test Report Test Methy	d Conc	entration
1	2. Sampling Protocol	1.00	18:5182(P-14) Test Report		
	1. Sample condition		Satisfactory		
	10. Ambient temperature	1.1			
			25°C		
	9. Sample Collected by	1.00	Mr. Ruicey Singh.		
	8. Actual Sampling Duration (Minutes)	10.00	1440 min		
aner.	7. End Date and Time of Monitoring		08.12.2023, 12.20 PM		
	and time of Monttoring		12:20 PM		
	5. Date of Monitoring	T.	07.12.2023		
	4. Samping Location	1	Near I T P Plant		
	3. Type of Unit	- 1	MSW Plant		
	2 Name of Plant Representative	1 A. I.	Mr Ruzul, Hiakur		
	1. Name & Address of Industry/Unit	1.1	M's Sugaru Swachhta Pyt Ltd, Sheikhpura, Msw Pl	ant Karnal (Haryana-1)	2001
	GENERAL INFORMATION OF SAM	IPLING			

SL Test Parameter No.		Unit	Test Result	Test Method	Concentration In Ambient Air, as per NAAQS
					Industrial, Residential, Rural and other Areas
	Particulate Matter 10 micron, as (PM 10)	µg/m	127	1S:5182(P-23) 2006 RA-2017	100
1.		µg/m	95	32.615:5182(1'-24):2019	60
2	Particulate Matter 2.5 micron, as (PM 2.5)	ug/m	30.1	APHA AIR 3'd Edition	80
3	Sulphur Dioxide, as (SO <sub>2</sub> )	pg/m		IS-5182(P-6) 2006-RA-2017	80
4	Narogen Dioxide (NO2)		912	15.5182(P-10):1999-RA-2014	2000
5	Carbon Monooxide ,as (Co)	µg/m'	280	15:5182(P-10):1999-RA-2014	The second second
, 1	Carbon oxide (as Co <sub>2</sub> )	ppm	65	Hygrometer	
7	Relative humidity	20	BLQ(LOQ 0 1)	APHA AIR 3'd Edition	1
3	Lead as Pb)	HE/m'	BLQ(LUQ 0.010)	1S:5182(P-22)	6 i.
and the second second	Tuscaic as (As)	ng/m	BLQ(LOQ 0.2)	18:5182(P-22)	203107
0	Nickel as (Ni)	ng/m	BLQ(1002.0)	15:5182(P-11):2006 RA-2017	5 - 210
ī	Benzene as (Celle)	Jig m	BLQ(LOQ 0.5)	IS:5182(P-12) 2001 RA-2014	1 1
2	Benzo (a) Pyrene-as (Bap)	ng/m	21.1	By GC	· 1843)
-	Oxygen (as O <sub>2</sub> )				Page 15, 173

Note:- Figure in bracket indicate minimum detection limit

Note- The above result only indicate the value of parameter as observed at the time of monitoring.

BLQ:-Below Limit of Quantification

LOQ -Limit of Quantification

: 11.12.2023

:15.12.2023

Date of completion of testing For report verification email to report verification a delhitesthouse.com

Date of start of testing

SCICI Renteweil

End of Report

ISO - 9001 : 2015 CERTIFIED LABORATORY Other Lab : Plot No. 50 & 65, Phase - IV, Sector-57, HSIDC Industrial Estate, Behind Hasija Hospital, Kundli, Sonipat-131028 (Haryana) : F - 402, Transport Nagar, Kanpur Road, Lucknow - 226012 (U.P.)



Type of Sample:-Monitoring Haryana State Pollution Control Board's Laboratory SCO-115, 1"& 2"d Floor, Sec-25, Panchkula, Haryana

Report No. 4851

Dated : 15.03.2024

Issued to M/s Outlet of Tubewell near dumping site at Village Binjhol, Panipat.

Description: Received on 06.03.2024 a sample of Tubewell collected by Sh. Ajay Ahlawat, AEE and Sh. Kuldeep Singh, AEE from Ground Water of the tubewell on 05.03.2024. The sample has been analyzed from 06th -March-2024 to 15th -March-2024.

Sr. No.	Parameter Name	Result	Methods
1.	Sample Code	7074	
2.	Sample Collected from	tubewell	
3.	pH value at 25°C	7.81	APHA 4500H+B(24th Edition)
4.	Total Suspended Solids mg/l	BDL(DL=05)	APHA 2540-D(24 <sup>th</sup> Edition)
5.	BOD (3 days at 27°C) mg/l	BDL(DL=01)	IS 3025(Part-44)
6	COD (mg/l)	BDL(DL=05)	APHA 5220-(B)(24 <sup>th</sup> Edition)
7.	Conductivity (u S/cm) at 25°C	309.0	IS 3025(Part-14) 2013
8.	Total Dissolved Solid (mg/l)	160,0	APHA2540-C(24th Edition
9	Chloride (mg/l)	19.99	IS 3025(part 32) 2019
10	Calcium ( mg/l)	64.0	IS 3025 (Part-40)
11.	Magnesium (mg/l)	15.552	IS:3025 (Part-46)
12.	Total Hardness (mg/l)	224.0	IS:3025 (Part-21)
13.	Total Alkalinity as CaCO3(mg/I)	276.0	15:3025 (Part-23)
14.	P-Alkalinity as OH+CO3(mg/l)	18.0	IS:3025 (Part-23)

Sample Not Collected by us Sample Consumed in testing CC to Member Secretary, HSPCB

Megha

Sc.B Jyotika

ratory In-charge

Dr. Pinki Jangra

CC to Regional Office: Panipat. The test report relate only to the particular sample submitted for testing.



Type of Sample:-Monitoring Haryana State Pollution Control Board's Laboratory SCO-115, 1"& 2<sup>nd</sup> Floor, Sec-25, Panchkula, Haryana

Report No. 4851

Dated : 15.03.2024

d to M/s Outlet of Tubewell near dumping site at Village Binjhol, Panipat.

Description Received on 06.03.2024 a sample of Tubewell collected by Sh. Ajay Ahlawat, AEE and Sh. Kuldeep Singh, AEE from Ground Water of the tubewell on 05.03.2024. The sample has been analyzed from 06<sup>th</sup> -March-2024 to 15<sup>th</sup> -March-2024.

5r. No.	Parameter Name	0	
1	Color	Result	Methods
2.	Odeur	Colourless	
		Odourless	
3.	Ammonical- N ( mg/l)	BDL(DL=0.5)	
4.	Nitrate - N (mg/l)	BDL(DL=0.5)	APHA 4500-NH3 (F)
5.	Turbidity NTU		APHA 4500-NO1 (8)
	Suighate( mg/l)	BDL(DL=01)	IS 3025. Part-10
Z.,		56 47	APHA 4500-SO42-(1
	Flubride( mg/l)	0.10	APHA 4500-F (0)
8	Total Phosphate (mg/l)	BD1(D1=0.4)	
9	Sadium ( mg/l)		АРНА 4500-P.(D)
10		39	APHA 3500-Na (8)
	Potassium ( mg/i)		ARHA 3500-K (B)

Sample Not Collected by us Sample Consumed in testing CC to Member Secretary, HSPCB

ISA Sc.B Megna Jyotika

Laboratory In-charge

Dr. Pinki Jangra

CC to Regional Office: Panipat. The test report relate only to the particular sample submitted for testing

\*\*\*End of the Report \*\*\*





FORM J

(See Rule 36)

Report No.:-2263 Dated - March 21, 2024

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 16<sup>th</sup> day of March, 2024 from Sh. Ravinder Yadav, AEE, a sample of liquid effluent of M/s Integrated Solid Waste Management Facility at Murthal, C/o M/s JBM Environment Management Pvt. Ltd., Tajpur-Murthal Road, Murthal, Sonipat, collected on 15.03.2024 from the Submersible pump at premises of unit for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 16/03/2024 to 21/03/2024 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	From the Submersible pump at premises of unit	Test Method
1.	pH Value at 25°C	7.50	APHA 4500 H <sup>+</sup> B (24 <sup>th</sup> Edition 2023)
2.	Conductivity µS/cm at 25°C	2540	APHA 2510 B (24 <sup>th</sup> Edition 2023)
3.	Total Suspended Solids mg/l	16	APHA 2540 - D (24 <sup>th</sup> Edition 2023))
4.	B.O.D.(5 Days at 20 <sup>0</sup> C) mg/l	8	APHA 5210-C (24 <sup>th</sup> Edition 2023)
5.	Chemical Oxygen Demand mg/I	44	APHA 5220-B (24 <sup>th</sup> Edition 2023)
6.	Oil & Grease mg/l	BDL* (DL**=4)	APHA 5520-B (24 <sup>th</sup> Edition 2023)
7.	Total Dissolved Solids mg/l	1390	APHA 2540-C (24 <sup>th</sup> Edition 2023)

BDL\* = Below Detection Limit

DL\*\* = Detection Limit

The condition of the seals, fastening and container on receipt was as follow:

Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative.

### Signed this on 21st day of March, 2024

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

Dated: 21-3-24

То

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Sonipat / M/s Integrated Solid Waste Management Facility at Murthal, C/o M/s JBM Environment Management Pvt. Ltd., Tajpur-Murthal Road, Murthal, Sonipat

Endst. No. HSPCB/LAB/F/2024/ 11160



Report No .: - 2263

1, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 16th day of March, 2024 from Sh. Ravinder Yadav, AEE, a sample of liquid effluent of M/s Integrated Solid Waste Management Facility at Murthal, C/o M/s JBM Environment Management Pvt. Ltd., Tajpur-Murthal Road, Murthal, Sonipat, collected on 15.03.2024 from the Submersible pump at premises of unit for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 16/03/2024 to 21/03/2024 and declare the result of analysis to be as fallow-

ollow:- Sr. No.	Parameter	From the Submersible pump at premises of unit	Test Method
1.	Colour	Colorless	
2.	Odour	Odourless	
3.	T-Alkalinity	346.3	
4.	TKN mg/l	9.34	
5.	Ammonical Nitrogen as N mg/l	3.50	
6.	Chloride as Cl	378.4	
7.	Nitrate as N	4.47	4500-N Org B APHA 24 <sup>th</sup> Edition 2023
8.	Nitrite as N	BDL (DL=0.005)	IS 3025 (Part 23) 1986 (Reaffirmed 2019)
9.	Iron as Fe	1.2	IS 3025 (Part 23) 1986 (Reaffirmed 2019)
10.	Nickel as Ni	0.8	
11.	Fluoride	1.33	APHA 4500-Cl-B 24 <sup>th</sup> Edition 2023
12.	Phosphate as P	0.8	APHA 4500 F 24 <sup>th</sup> Edition 2023
13.	Sulphate as SO <sub>4</sub>	201.4	IS 3025 (Part-31):1988 (Reaffirmed 2003)
14.	Calcium as Ca	91.78	IS 3025 (Part-24):1986 (Reaffirmed 2009)
15.	Magnesium as Mg	55.64	APHA 3500-Ca (B) 24 <sup>th</sup> Edition 2023
16.	Total Hardness	464	APHA 3500-Mg (B) 24 <sup>th</sup> Edition 2023

The condition of the seals, fastening and container on receipt was as follow:

Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative.

21st day of March, 2024 Signed this on

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

To

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Sonipat / M/s Integrated Solid Waste Management Facility at Murthal, C/o M/s JBM Environment Management Pvt. Ltd., Tajpur-Murthal Road, Murthal, Sonipat

Endst. No. HSPCB/LAB/F/2024/ 11160

Dated: 21-3-24





Report No.:-2262 Dated - March 21, 2024

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 16<sup>th</sup> day of March, 2024 from Sh. Ravinder Yadav, AEE, a sample of liquid effluent of M/s Integrated Solid Waste Management Facility at Murthal, C/o M/s JBM Environment Management Pvt. Ltd., Tajpur-Murthal Road, Murthal, Sonipat, collected on 15.03.2024 from the Inlet & Outlet of LTP for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 16/03/2024 to 21/03/2024 and declare the result of analysis to be as follow:-

Sr. No.	Parameter	Inlet of LTP	Outlet of LTP	Prescribed Limits	Test Method
1.	pH Value at 25°C	5.58	7.35	5.5-9.0	APHA 4500 H <sup>+</sup> B (24 <sup>th</sup> Edition 2023)
2.	Conductivity µS/cm at 25°C	10650	2860		APHA 2510 B (24 <sup>th</sup> Edition 2023)
3.	Total Suspended Solids mg/l	570	32	100	APHA 2540 - D (24 <sup>th</sup> Edition 2023))
4.	B.O.D.(5 Days at 20 <sup>0</sup> C) mg/l	340	13	30	APHA 5210-C (24 <sup>th</sup> Edition 2023)
5.	Chemical Oxygen Demand mg/I	1680	72	250	APHA 5220-B (24 <sup>th</sup> Edition 2023)
6.	Oil & Grease mg/l	28.2	BDL* (DL**=4)	10	APHA 5520-B (24 <sup>th</sup> Edition 2023)

BDL\* = Below Detection Limit

DL\*\* = Detection Limit

The condition of the seals, fastening and container on receipt was as follow:

Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative.

Signed this on 21st day of March, 2024

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

То

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Sonipat / M/s Integrated Solid Waste Management Facility at Murthal, C/o M/s JBM Environment Management Pvt. Ltd., Tajpur-Murthal Road, Murthal, Sonipat

Endst. No. HSPCB/LAB/F/2024/ 11157

Dated: 21-3-24



PREVENT POLLUTION

> FORM J (See Rule 36)

Report No.:-2262 Dated - March 21, 2024

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (3) of section 53 of Water (Prevention and control of Pollution) Act, 1974(6 of 1974) received on the 16<sup>th</sup> day of March, 2024 from Sh. Ravinder Yadav, AEE, a sample of liquid effluent of M/s Integrated Solid Waste Management Facility at Murthal, C/o M/s JBM Environment Management Pvt. Ltd., Tajpur-Murthal Road, Murthal, Sonipat, collected on 15.03.2024 from the Inlet & Outlet of LTP for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 16/03/2024 to 21/03/2024 and declare the result of analysis to be as follow:-

Sr.	Parameter	Inlet of LTP	Outlet of LTP	Prescribed Limits	Test Method
No. 1.	Colour	Blackish	Almost Colorless		
2.	Odour	Bad	S. Mild		

The condition of the seals, fastening and container on receipt was as follow: Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative. Signed this on **21**<sup>st</sup> **day of March**, **2024** 

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

То

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Sonipat / M/s Integrated Solid Waste Management Facility at Murthal, C/o M/s JBM Environment Management Pvt. Ltd., Tajpur-Murthal Road, Murthal, Sonipat

Endst. No. HSPCB/LAB/F/2024/ 11157

This test report relate only to the particular sample submitted for testing

Dated: 21-3-24



FORM IV (See Rule 14)

Report No.:- 760 Dated-March 19, 2024

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (2) of section 29 of Air (Prevention and control of Pollution) Act, 1981(14 of 1981) received on the 16<sup>th</sup> day of March, 2024 from Sh. Ravinder Yadav, AEE, a sample of air emission of M/s Integrated Solid Waste Management, Facility at Murthal, C/o M/s JBM Environment Management Pvt. Ltd., Tajpur Murthal Road, Murthal, Sonipat, collected on 15.03.2024 from Stack attached to Boiler Section (45 T/hr Capacity) for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 16/03/2024 to 19/03/2024 and declare the result of analysis to be as follow:-

		Boiler Section (45	T/hr Canacity)		
1.	Name of the Plant/emission source monitored	Boller Section (45	Boiler Section		
2.	Stack Identification/Type of Chimney	Stack attached to Boiler Section			
3.	Location of sampling Point	As per norms			
4.	Stack height (mt)				
	(a) From source of emission				
	(b) From the roof level	60 meter			
	© From the ground level	1.8 meter			
5.	Diameter of Stack	30 min			
6.	Sampling duration	Waste to Energy Plant 172°C			
7.	Product Manufactured				
8.	Stack Temperature	W-E			
9.	Wind condition/Direction	Domestic Waste			
10.	Type of Fuel	22.7332			
11.	Quantity of Emission m <sup>3</sup> /sec	Results	Prescribed Limits		
1000		21.9	80		
12.	Suspended Particulate Matter mg/ Nm <sup>3</sup>	6.8	50		
13.	Sulpher Dioxide mg/ Nm <sup>3</sup>	3.1	50		
14.	Oxides of Nitrogen mg/ Nm <sup>3</sup>	5.1			

The condition of the seals, fastening and container on receipt was as follow: Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative. Signed this on **19<sup>th</sup> day of March, 2024** 

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

To The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Sonipat / M/s Integrated Solid Waste Management, Facility at Murthal, C/o M/s JBM Environment Management Pvt. Ltd., Tajpur Murthal Road, Murthal, Sonipat

Endst. No. HSPCB/LAB/F/2024/ 11088

Dated: 19-3-24



FORM IV (See Rule 14)

Report No.:- 412 Dated- October 06, 2023

I, hereby, certify that I Narender Hooda as Board Analyst, duly appointed under sub section (2) of section 29 of Air (Prevention and control of Pollution) Act, 1981(14 of 1981) received on the 29<sup>th</sup> day of September, 2023 from Sh. Ravinder Yadav AEE, a sample of air emission of M/s JBM Environment Management Pvt. Ltd., Village-Tajpur, Murthal Road, Sonipat, collected on 28.09.2023 from Ambient Air Quality Monitoring for analysis. The Sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the afore-mentioned sample on 29/09/2023 to 06/10/2023 and declare the result of analysis to be as follow:-

1.	Name of the Plant/emission source monitored	AAQ PM <sub>10</sub> ug/m <sup>3</sup> (06.00 PM to 02.00 AM)		AAQ PM <sub>10</sub> ug/m <sup>3</sup> (02.00 AM to 10.00		AAQ PM <sub>10</sub> ug/m <sup>3</sup> (10:00 AM to 06:00		AAQ PM <sub>2.5</sub> ug/m <sup>3</sup> (10:00 AM to 06:00	
2.	Sampling duration	8 Hrs	36	AM) 8 Hrs		PM) 8 Hrs		PM) 24 Hrs	
3.	Product manufactured	Waste to Energy Plant		Waste to Energy Plant Waste		076 CA 28776	Energy Plant		
4.	Normal operating schedule					Waste to Energy Plant		Waste to Energy Plant	
5.	Wind condition/Direction								19
		Results	Prescribed Limits	Results	Prescribed Limits	Results	Prescribed	Results	Prescribed
6.	Sulpher Dioxide µg/ m <sup>3</sup>	13.6		15.1		14.7	Limits	7.2	Limits
7.	Oxides of Nitrogen µg/ m <sup>3</sup>	6.8		5.3		3.8		3.0	
8.	PM <sub>10</sub> μg/ m <sup>3</sup>	24.1	100	22.5	100	28.3	100	5.0	
9.	PM <sub>2.5</sub> µg/ m <sup>3</sup>							41.6	60

The condition of the seals, fastening and container on receipt was as follow: Container had its seals found intact in order; slip on the container had the signature of the representative of the industry and the board representative. Signed this on **06<sup>th</sup> day of October**, **2023** 

Haryana State Pollution Control Board Laboratory, Sector-16 A, Faridabad

То

The Member Secretary, HSPCB, Panchkula/ Regional Office, HSPCB, Sonipat

Endst. No. HSPCB/LAB/F/2023/ 70 32-7033

Dated: 06/10/2023

