

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI**

**O.A. NO. 199 of 2021 (SZ)**

**IN THE MATTER OF:**

Sri. Shankar Narayanan Bala Krishnan,  
Telangana and Ors

...Applicant(s)

Versus

State of Telangana and Ors  
...Respondents(s)

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Place: Hyderabad

Date:13.04.2026



COUNSEL FOR 6<sup>th</sup> RESPONDENT

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**REPORT FILED ON BEHALF OF RESPONDENT NO.6**

I, R V Karnan, IAS, S/o Veeraragavan Rajagopalan, aged about 40 years, Occ: Commissioner, Greater Hyderabad Municipal Corporation, R/o. Hyderabad, do hereby solemnly swear and state on oath as follows:

1. It is respectfully submitted that, I am working as Commissioner of Greater Hyderabad Municipal Corporation (GHMC), Hyderabad. As such, I am well acquainted with the facts of the case and I am deposing this report based on the records available with the Respondent Corporation and in view of the orders dated 10.11.2025 and 09.03.2026 of the Hon'ble National Green Tribunal, Southern Zone in OA No. 199 of 2021.

  
**Commissioner**  
Greater Hyderabad Municipal Corporation

2. Placing on record the details of all the earlier status reports filed by the 6<sup>th</sup> Respondent before the Hon'ble National Green Tribunal, Southern Zone, Chennai.

- i. Report filed by the 6<sup>th</sup> Respondent, dated 07.10.2021
- ii. Report filed by the 6<sup>th</sup> Respondent, dated 07.12.2021
- iii. Report filed by the 6<sup>th</sup> Respondent, dated 05.03.2022
- iv. Report filed by the 6<sup>th</sup> Respondent, dated 29.03.2022
- v. Additional Report filed by the 6<sup>th</sup> Respondent, dated 25.08.2022
- vi. Reply memo filed by the 6<sup>th</sup> Respondent, dated 25.08.2022
- vii. Status report filed by the 6<sup>th</sup> Respondent, dated 23.11.2022
- viii. Report filed by the 6<sup>th</sup> Respondent, dated 17.12.2022
- ix. Report filed by the 6<sup>th</sup> Respondent, dated 08.03.2023
- x. Report filed by the 6<sup>th</sup> Respondent, dated 04.08.2023
- xi. Report filed by the 6<sup>th</sup> Respondent, dated 21.11.2023
- xii. Report filed by the 6<sup>th</sup> Respondent, dated 18.04.2024
- xiii. Report filed by the 6<sup>th</sup> Respondent, dated 12.07.2024
- xiv. Report filed by the 6<sup>th</sup> Respondent, dated 28.01.2025
- xv. Report filed by the 6<sup>th</sup> Respondent, dated 12.06.2025
- xvi. Memo filed by the 6<sup>th</sup> Respondent dated 09.11.2025
- xvii. Report filed by the 6<sup>th</sup> Respondent, dated 09.11.2025

  
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3. With respect to the allegations of the learned counsel for applicant noted at para no 13 of the order dated 10.11.2025 of this Hon'ble Tribunal that –“in the process of MSW treatment and disposal, the issue of fly ash management has not been adequately addressed,” the following details are respectfully submitted:

- i. The fly ash generated at the Waste to Energy plants are captured at the Bag filters installed as part of the Flue gas cleaning system and is handled as per Hazardous & Other Wastes (Management and Transboundary Movement) Rules 2016 for disposal at secured landfill at Dundigal. The Operator of the Waste to Energy Plants submits Half yearly reports to Telangana State Pollution Control Board on compliance to all the conditions in the Consent for Operation including details pertaining to flue gas system and test reports for showcasing that the flue gas parameters are within the limits. The latest Half yearly compliance report is **enclosed as Annexure I.**
- ii. Further, the fly ash is tested at third party NABL accredited laboratory to verify its compliance with the limits prescribed under Schedule II of Hazardous & Other Wastes (Management and Transboundary Movement) Rules 2016. Test report for the month of January' 2026 for the Waste to Energy Plants at Jawaharnagar and Dundigal are **enclosed as Annexure II.**

4. It is respectfully submitted that, following is the status of work progress with regards to engaging IIT Bombay for conducting studies at Jawaharnagar MSW Processing & Disposal facility in continuation to the way forward report submitted by IIT Bombay placed before this Hon'ble NGT in the previous report filed by GHMC dated 09.11.2025:
- i. GHMC requested IIT Bombay vide letter dated 29.12.2025 **(Copy enclosed as Annexure III)** to submit a detailed proposal along with financials for conducting a comprehensive study at Jawaharnagar MSW Processing & Disposal facility in compliance to the direction of this Hon'ble Tribunal and Central Pollution Control Board.
  - ii. Subsequently, a team from IIT Bombay led by Prof D N Singh visited GHMC on 21<sup>st</sup> and 22<sup>nd</sup> of January 2026 and inspected Jawaharnagar along with other land parcels identified for setting up alternate Municipal Solid Waste (MSW) Processing & Disposal facilities and pre-sorting facilities.
  - iii. Further, a proposal dated 07.02.2026 for "Rendering technical support & advisory services on the issues prevailing at the MSW Processing & Disposal facility at Jawaharnagar including study of the capped legacy dump for feasibility of its biomining" was submitted by IIT Bombay **(Copy enclosed as**

  
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**Annexure IV).** This proposed comprehensive study to be conducted for a period of (02) years has a financial commitment of Rs 1.99 cr and includes the activities of monitoring air quality, leachate management, storm water management, leachate extraction wells, surface & ground water quality and investigations on capped dump for biomining feasibility.

- iv. GHMC issued work order dated 09.02.2026 accepting the proposal of IIT Bombay and requesting IIT Bombay to immediately start providing its services to GHMC (**Copy enclosed as Annexure V**).
- v. Subsequently, IIT Bombay has commenced Electrical Resistivity Tomography (ERT) studies on the capped legacy dump from 25<sup>th</sup> February'2026 utilizing the services of M/s Geo Wings Engineering Pvt limited. On 2<sup>nd</sup> March' 2026, a team from IIT Bombay led by Prof D N Singh visited Jawaharnagar to review the progress of ERT studies being conducted on the capped dump and recommended for including additional areas on the capped dump for conducting ERT study. Further, Multichannel Analysis of Surface Waves Studies were also conducted from 08<sup>th</sup> March'2026 to 02<sup>nd</sup> April' 2026 (**Photographs of the study being conducted is enclosed as Annexure VI**).

  
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Greater Hyderabad Municipal Corporation

As such, the studies by IIT Bombay on the capped legacy waste dump are underway for determining its feasibility to be bio-mined and the report shall be submitted by IIT Bombay as and when the comprehensive studies are finished.

5. It is respectfully submitted that, in compliance with the directions of this Hon'ble Tribunal that until the action plan proposed by IIT Bombay is implemented, no new or additional waste shall be dumped in the capped area, the access ramp of the capped legacy waste area was barricaded. Further, a 24 x 7 live feed CC-TV camera with human detection capability was installed on the top of capped dump for monitoring by Environment Protection Training and Research Institute who is the Independent Engineer monitoring the Integrated Municipal Solid Waste Management Project (**Photographs enclosed as Annexure VII**).
6. In respect of the orders of this Hon'ble NGT directing GHMC and the 9<sup>th</sup> Respondent agency to pay a sum of Rs 1,00,000 jointly & severally, it is respectfully submitted that the same was complied (**Copy enclosed as Annexure VIII**).
7. It is respectfully submitted that in respect of the progress in diverting the quantity of MSW received at the MSW Processing & Disposal facility at Jawaharnagar, pending setting up of MSW

  
**Commissioner**  
Greater Hyderabad Municipal Corporation

Processing and Disposal facilities at the identified alternate sites, a pre-sorting facility at one of the intermediate transfer station at Deepthisrinagar is under advanced stage of erection and is expected to commence operation. Upon commissioning, this facility shall have the capacity to divert 500 tons of RDF directly to Dundigal Waste to Energy Plant (**Copy of photographs enclosed as Annexure IX**).

8. In compliance to the directions dated 09.03.2026 issued by this Hon'ble Tribunal, it is respectfully submitted that the complete quantity of the MSW collected from within GHMC is Treated and Disposed by Respondent 9/10. The data pertaining to Solid Waste Management including photographs is **enclosed as Annexure X**.

**Submission:**

For the aforementioned facts and circumstances, it is therefore prayed that this Hon'ble Tribunal may be pleased to dispose of OA. No. 199 of 2021 and pass such other order or orders as this Hon'ble Tribunal deems fit and proper in the circumstances of the case and thereby render Justice.

Sworn and signed on this the

13 day of April, 2026 at Hyderabad

  
RESPONDENT 6  
Greater Hyderabad Municipal Corporation

**VERIFICATION**

I, R V Karnan, IAS, S/o Veeraragavan Rajagopalan, aged about 40, Occ: Commissioner, Greater Hyderabad Municipal Corporation, R/o Hyderabad, do hereby declare that the contents made in the above paragraphs are true and correct to the best of my knowledge and based on records available with Respondent Corporation and I believe the same to be true and correct.

Hence verified on this the 13 day of April' 2026.

  
**Respondent-6**  
**Commissioner**  
Greater Hyderabad Municipal Corporation



**HMESPL/ TSPCB/CFO/RO-Medchal/HO/2020/442/01**  
**November 24<sup>th</sup>, 2025**

**To,**  
**Telangana State Pollution Control Board,**  
 A-3, Industrial Estate, Opposite Police Station,  
 Sanathnagar, Hyderabad, Telangana 500018.

**Sub:** Submission of Half Yearly Compliance status report of Consent for Operation & HWA and SWM Authorization of Hyderabad MSW Energy Solutions Private Ltd. (by GHMC) at Sy. No. 173, Jawaharnagar Village, Kapra Mandal, Medchal-Malkajgiri Dist. in Telangana State.

Sir/Madam,

With reference to the above mentioned subject we are submitting the Compliance Report to stipulated conditions for the period of April 2025 – Sepctember-2025) vide Consent Order, HWA No.: TSPCB/CFO/RO-Medchal/HO/2020/442 Dated: 15.07.2020 and it's Amendment Consent Orders, HW No. 01/TSPCB/CFO/MDC/MSW/WtE/HO/2022 Dated: 10.03.2022 & Consent Order No.21/TSPCB/CFO/MSW/HO/2025 Dated: 05.05.2025 of M/s. Hyderabad MSW Energy Solutions Private Ltd for your kind records please.

Thanking You

Yours Faithfully

**For Hyderabad MSW Energy Solutions Private Ltd**

**Authorized Signatory**

Encl. – As above

**CC to:**

**REGIONAL OFFICE, T .S. POLLUTION CONTROL BOARD, MEDCHAL**

H.No.6-3-1219, TS No.1 part, Block-C, Ward No.91, Begumpet, Umanagar, Near Country Club, Hyderabad - 500 016.

**Hyderabad MSW Energy Solutions Private Limited**  
 (A subsidiary of Re Sustainability Limited)

CIN No:U93000TG2010PTC071850

Registered Office

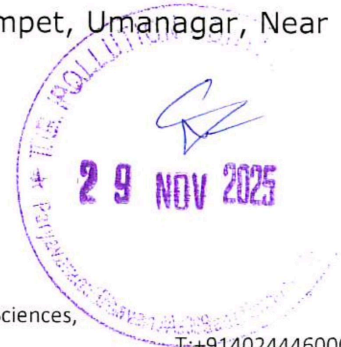
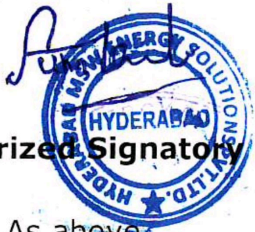
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**Subject:** Submission of Half Yearly Compliance status report of Consent for Operation & HWA and SWM Authorization of Hyderabad MSW Energy Solutions Private Ltd. (by GHMC) at Sy. No. 173, Jawaharnagar Village, Kapra Mandal, Medchal-Malkajgiri Dist. in Telangana State.

**Consent Order, HWA Authorization No.:**

1. Consent Renewal & expansion Order No.21/TSPCB/CFO/MSW/HO/2025  
Dated: 05.05.2025.

**Period:** April 2025 to September 2025.

**SCHEDULE - A**

S.no	Conditions	Compliance status
1	The applicant Shall make applications through online for renewal of Consent (under Water & Air Acts) and Authorisation under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts for obtaining Consent & HW Authorisation of the Board.	Agreed and will be followed.
2.	This order is issued in line with Board's CFE order dated 23.09.2017. Concealing the factual data or submission of false information/fabricated data and failure to comply with any of the conditions mentioned in this order may result in with drawl of this order and attract action under the provisions of relevant pollution control acts. The industry shall comply with all other conditions of CFE order dated 23.09.2017 still applicable.	Agreed.
3.	Any person aggrieved by an order made by the state Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to such authority (hereafter referred as appellate authority), constituted under Section 28 of the Water (Prevention and Control of Pollution) Act, 1974 and section 31 of the Air (Prevention and Control of Pollution) Act, 1981.	Agreed.

4.	The industry may explore the possibility of tapping solar energy for their energy requirements.	Agreed. The project itself is a renewable energy plant.
5	The board reserves its right to modify above conditions or stipulate any further conditions and to take action including revoke of this order in the interest of protection public health and environment.	Agreed

**SCHEDULE - B**

<b>S. No</b>	<b>Condition</b>	<b>Compliance Status</b>									
1.	As per GHMC letter dated 29.04.2025, the surplus quantity of RDF unutilized and stored at Jawaharnagar is 57,96,758 TPD (restricting the RDF quantity generation to 2400 TPD) is sufficient for 14.64 years @1200 TPD for the operation of Phase-II 24 MW. Hence, the industry shall utilize this existing unutilized RDF only for the Phase-II 24MW power plant.	Agreed and followed.									
2.	The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities prescribed below:	Agreed and followed.  The following initiatives are taken to reduce Water consumption:  1. All the Boiler blow down, Auxiliary Cooling Tower Blowdown and WTP process rejects are being collected in neutralisation pit, after neutralisation of this water is being used for Ash quenching and preparation of Lime slurry which is being used in Flue Gas Cleaning System. 2. Adjacent MEE (Leachate Treatment Plant) Condensate water is also being used for reduction in net water consumption. The allowed quantity of Water consumption will not be exceeded.									
	<table border="1"> <thead> <tr> <th><b>S. No.</b></th> <th><b>Purpose</b></th> <th><b>Quantity (Total after Expansion)</b></th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Boiler feed (DM Plant/ RO Plant feed permeates)</td> <td>360 KLD</td> </tr> <tr> <td>2.</td> <td>Cooling</td> <td>120 KLD</td> </tr> </tbody> </table>	<b>S. No.</b>	<b>Purpose</b>	<b>Quantity (Total after Expansion)</b>	1.	Boiler feed (DM Plant/ RO Plant feed permeates)	360 KLD	2.	Cooling	120 KLD	
<b>S. No.</b>	<b>Purpose</b>	<b>Quantity (Total after Expansion)</b>									
1.	Boiler feed (DM Plant/ RO Plant feed permeates)	360 KLD									
2.	Cooling	120 KLD									

		tower makeup		
	3.	Domestic	40 KLD	
	4.	Gardenin g Purpose	80 KLD	
		<b>Total:</b>	<b>600 KLD</b>	
3.	The effluent discharged should not contain constituents in excess of the tolerance limits prescribed below:			Agreed and followed.  The project implemented Zero Liquid Discharge. Hence, there is no discharge of liquid.
	<b>Outlet</b>	<b>Parameter</b>	<b>Limiting Standards</b>	
	1 & 3	pH	5.5 - 9.0	
		Total Suspend ed Solids (at 103-105°C)	200 mg/L	
		Total Dissolve d Solids (TDS)	2100 mg/L	
		Oil & Grease	10 mg/L	
		Chemical Oxygen Demand (COD)	250 mg/L	
		Bio-Chemical Oxygen Demand (BOD <sub>3</sub> at 27°C)	100 mg/L	
		Ammonic al Nitrogen	<50 mg/L	
		Phenolic compound s	<1 mg/L	
4.	The emissions shall not contain constituents in excess of the prescribed limits mentioned below.			Agreed and Being complied with norms.  Air pollution control equipments like semi dry type Flue Gas Cleaning System consists of Reaction Tower by adding Lime and Activated Carbon; followed by Bag Filters.
	<b>Chimn</b>	<b>Parameter and Emission</b>		

Sey No.	Standards	
1 & 4	Particulate Matter - 50mg/Nm <sup>3</sup> , HCl - 50mg/Nm <sup>3</sup> , SO <sub>2</sub> - 200mg/Nm <sup>3</sup> , CO - 100mg/Nm <sup>3</sup> , Total organic carbon - 20mg/Nm <sup>3</sup> , HF- 4mg/Nm <sup>3</sup> , NO <sub>x</sub> - 400mg/Nm <sup>3</sup> , Total Dioxins and Furans- 0.1ngTEQ/Nm <sup>3</sup> , Cd + Th + their compounds - 0.05mg/Nm <sup>3</sup> , Hg and its compounds- 0.05mg/Nm <sup>3</sup> , and Sb+As+ Pb+Cr+Co+Cu+Mn+ Ni+V+ their compounds- 0.05 mg/Nm <sup>3</sup> as prescribed in Schedule-II (C) of the Solid Waste Management Rules, 2016	<p>The above pollution control equipment are capable to control the PM within 50 mg/Nm<sup>3</sup>.</p> <p>Stack Emission Monitoring Reports are enclosed as <b>Annexure -1.</b></p>
2,3, 5&6	Particulate Matter - 115mg/Nm <sup>3</sup>	
5	<p>The industry shall comply with ambient air quality standards of PM<sub>10</sub>(Particulate matter size less than 10µm)-100µg/m<sup>3</sup>, PM<sub>2.5</sub>(Particulate Matter size less than 2.5µm)-60µg/m<sup>3</sup>, SO<sub>2</sub>- 80µm/m<sup>3</sup> NO<sub>x</sub>- 80µm/m<sup>3</sup>, outside the industry premises at the periphery of the industry.</p> <p>Standards for Ambient Air quality at the MSW landfill site and at the vicinity shall be complied. SO<sub>2</sub>-80 µm/m<sup>3</sup>, SPM-100 µm/m<sup>3</sup>, Methane not to Exceed 25% of explosive limit (650 mg/m<sup>3</sup>), Ammonia- 0.4 mg/m<sup>3</sup>, CO-2 mg/m<sup>3</sup> (1 hour average) &amp;</p>	<p>Being complied with the norms.</p> <p>Ambient Air and Noise Level Reports are enclosed as <b>Annexure-2 &amp; Annexure-3.</b></p>

	CO-1 mg/m <sup>3</sup> (8 hours average).  <b>Noise Levels:</b> Day time – (6 AM to 10 PM) - 75 dB(A) Night time - (10 PM to 6 AM) - 70 dB(A)	
6	The industry shall provide and maintain water flow meters for recording water consumption for various purpose and maintain the records for daily consumption.	Agreed and Being Complied.  Separate water flow meters were installed for industrial & domestic water consumption and records are being maintained.
7	The industry shall provide and operate ETP consisting of collection tank and neutralisation tank for treatment of RO rejects, boiler blow down , cooling bleed off and after neutralisation the treated water shall be used for ash quenching.	Rejects of the Water Treatment Plant, Cooling Tower Blowdown and Boiler Blowdown are being collected in Neutralisation Pit, after neutralisation the treated water is being reused for ash quenching. Hence there is no need of ETP at present.
8	The industry shall ensure that combustion process is carried out at 950°C and the flue gas shall have a residence time of 2 seconds minimum to destruct the dioxins and furans.	Combustion process is being carried out at >950°C and the flue gas will be having a residence time of 2 seconds minimum to destruct the dioxins and furans.
9	The industry shall use Hydrated Lime, Activated Carbon to remove Dioxins and Furans and Heavy Metals and finally by Bag Filter System for the treatment of flue gases.	Agreed and being complied.  Hydrated Lime and Activated Carbon using to remove Dioxins and Furans and Heavy Metals and Bag Houses are also installed on each Boiler to collect the Particulate Matter.
10	The industry shall provide Online Continuous Emissions Monitoring System (OCEMS) for stack attached to boilers for parameters SPM, SO <sub>2</sub> , NO <sub>x</sub> , HCl and CO.	Complied.  Online Continuous Emissions Monitoring System (OCEMS) to monitor stack emissions has been installed & operational and data is being transmitted to TSPCB.
11	The industry shall provide two AAQM stations within 6 months, as committed vide letter dated 26.04.2025.	Agreed, we have installed the 2 (two) numbers of AAQM system in the WTE T area.
12	The RDF shall be stored in	Complied.

	closed tanker/pit. The bunker/pit shall be operated under negative pressure so as to control odorous gases and drawn into boiler	The RDF is being stored in closed pit and it is being operated under negative pressure to control the odours gases by drawing of those gases in to boilers.
13	The industry shall explore the possibility of burning the gases generated from the integrated Municipal Solid waste legacy dumpsite in the boilers to control odour in the area.	Complied. Exploration of usage Landfill gas (LFG) generated from legacy dumpsite is being carried out. LFG to CBG plant commissioned and its being operational.
14	The industry shall develop & maintain thick green belt all along the boundary of the industry and in all the vacant places within the industry with tall growing trees with wide leaf area.	Agreed and Being complied.  Planting of the Saplings is being done for development of the thick green belt and it is being maintained with the 85% of survival rate. About 300 saplings have been procured from GHMC & planted inside the Plant Premises.
15	The industry shall collect and store the ash generated in a closed shed and shall dispose into the secured landfill. The industry shall install bottom ash processing facility within 6 months, as committed vide letter dated 26.04.2025.	Agreed & Complied. Generated Ash is being collected & stored in a closed shed called Ash pit and is being disposed into the secured landfill. The ash construction of ash recycling plant will be completed another six months.
16	The industry shall maintain good housekeeping.	Agreed and being complied.  Good House Keeping practices are adopted and being implemented for keeping the plant clean.
17	The industry shall ensure that there shall not be any change in the process technology and scope of working without prior approval from the Board.	Agreed.  We have taken prior permission from the board for enhancement of plant capacity from 24 MW to 48 MW on dated 05.05.2025.
18	The vehicle transporting municipal solid waste shall be covered with tarpaulin covers.	We are not doing the Transportation of MSW, we receive RDF from the Processing and Disposal facility.
19	The industry shall ensure to operate dust suppression system consisting of water sprinkling system, suction hoods followed by odour extraction system at	Agreed

	material, raw material handling areas and RDF storage bunkers to mitigate odour.	
20	The industry shall comply with Task Force directions issued by the Board from time to time.	Agreed
21	The industry shall comply with SWM Rules, 2016 for operation of the plant.	Agreed and followed.
22	The applicant shall submit Environment Statement in Form-V to the Regional office before 30 <sup>th</sup> September of every year as per Rule. 14 of E(P) Rules, 1986 & amendments thereof.	Complied.  Submitted Environmental Statement in Form- V to the State Pollution control Board.
23	The conditions stipulated in this order are without any prejudice to rights and contentions of this Board in any Hon'ble court of Law.	Noted and Agreed.

**SCHEDULE - C**

[see rule 6(2)]

**[CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR  
HANDLING HAZARDOUS WASTES]**

<b>S.no</b>	<b>Conditions</b>	<b>Compliance status</b>
1	The industry shall give top priority for waste minimisation and cleaner production practices.	Agreed and being complied.
2.	The industry shall not store hazardous waste for more than 90 days as per the Hazardous wastes (Management, Handling and transboundary Movement) Rules, 2008 and amendments thereof. The facility shall maintain 6 copy manifest system for transportation of waste generated and copies of receipt of Consignee shall submitted to the Concerned regional office. The facility shall maintain proper records for hazardous Wastes stated in Authorisation in	Agreed.  Hazardous Waste Manifest in Form 10 White Colour copy will be submitted to Regional office of the Board once the facility generates the hazardous waste.

	FORM-3 i.e. quantity of Incinerable waste, land disposal waste, recyclable waste etc. and file annual returns in FORM - 4 as per Rule 22(2) of Hazardous wastes((Management, Handling & transboundary Movement) Rules, 2008 and amendments thereof.	
3	The industry shall dispose /sell the Hazardous Waste to only industries /agencies authorised by the State Pollution Control Boards. The industry shall verify the authorisation of the Board given to the Party before disposing its waste to the External Party.	Agreed and complied with.  After verification of the Authorization of the Authorized Agency, the Hazardous Waste will be sent/disposed/treated in their facility.
4	The industry shall maintain proper records for Hazardous Wastes disposal and its concurrence with authorisation. In case of variation in generation, industry shall submit explanation and obtain amendment CFE/CFO in this regard.	We have noted and we are agreed to the condition given in the Consent. Hazardous Waste Generation, & Disposal Records will be maintained in Form 3.
5	The industry shall store Used / waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal. Waste oils shall be disposed to the authorised Reprocesses / Recyclers and used Lead Acid Batteries shall be disposed to the manufacturers / Dealers on buyback basis. The industry shall take necessary practical steps for prevention of oil spillages and carry over of oil from the premises. The industry shall check the Certificate /Authorisation/order of MoEF issued to the Re-user/Recycle units while disposing the waste oil.	Agreed.  Separate storage facility for hazardous Waste was demarcated, hazardous waste is not generated till now.  Generated Hazardous Waste and Used Lead Acid Batteries will be stored under covered shed at an isolated covered place; the floor will be concreted & person working at site will be provided with all required PPEs.  Hazardous Waste (Waste oil) will be collected in drums and disposed to authorized re-processors / recyclers as per Hazardous and Other Wastes (Management

		and Transboundary Movement) Rules, 2016.  Used Lead Acid Batteries will be returned to the Dealers on buyback basis.  We ensure that there will be no spillages of Hazardous waste.
6	The industry shall dispose of e-waste to authorised recyclers only.	Agreed and followed.
7	The industry shall submit the condition wise compliance report of the conditions stipulated in Schedule B & C of this Order on half yearly basis to Board Office, Hyderabad and Concerned Regional Office.	Agreed and submitted through the tenure of the facility.

3. SWM Authorisation No: 21/TGPCB/HO/MSW/2025-1550 date: 08.09.2025

S.no	Terms and Condition	Compliance Status
1	No recyclable waste having calorific value of 1500 KCal/kg or more shall not be disposed of on landfills and shall only be utilised for generating energy either or through refuse derived fuel or by giving away as feed stock for preparing refuse derived fuel.	Noted and Agreed we follow the same strictly
2	High Calorific wastes shall be used for co-processing in cement or thermal power plants.	This condition is not applicable for this plant. This plant power plant is waste to Energy based power plant.
3	The proponent shall lay internal cement concrete roads for movements of vehicle	Complied, all the internal roads made with RCC pucca roads.
4	The Proponent shall take adequate measures to control self-ignition of municipal solid waste based RDF	The RDF is being stored in the RDF storage pit which was constructed with reinforced cement concrete and this entire RDF pit is covered with the water sprinkling system to prevent the self-ignition of RDF in the storage pit. This waste sprinkler system is also connected with fire hydrant system.
5	The Emission from Inclinator/thermal technologies in solid waste Treatment/Disposal facility shall meet the following standards, namely:-	Agreed and followed the same
6	Suitable designed pollution control devices shall be installed or retrofitted with incinerator to achieve the above emission limits	Air pollution control equipments like semi dry type Flue Gas Cleaning System (FGCS) consists of Reaction Tower by adding Lime and Activated Carbon; followed by Bag Filters. The above pollution

		control equipments are capable to maintain the said emission limits. We will inform the TGPCB on retrofits of FGCS if any take place during the current consent period.
7	Waste to Be incinerated shall not be chemical treated with chlorinated disinfectants.	Noted and agreed. Same will be followed.
8	Incineration of Chlorinated plastics shall be passed out within two years.	Noted and agreed. Same will be followed.
9	If the concentration of toxic metals w.r.t TCLP incineration ash exceeds the limits specified in the Hazardous waste (management, Handling and Trans Boundary Movement) Rules 2008, as amended from time to time, the shall be sent to the hazardous waste treatment, storage, and disposal facility.	Noted and agreed. Same will be followed.
10	Only low sulphur fuel like LDO, LSHS, Diesel, bio-mass, Coal, LNG, CNG, RDF and biogas shall be used as fuel in the incinerator.	Noted and agreed. Same will be followed.
11	The CO <sub>2</sub> concentration in the shall not be more than 7%	Noted and agreed. Same will be followed.
12	All the facilities in twin chamber incinerators shall be designed to achieve a minimum temperatures of 950°C in secondary combustion chamber and with a gas residence time in secondary combustion chamber not less the 2 (two) seconds.	Noted and agreed. Same will be followed in the furnace combustion zone. As the Waste to energy is heat recovery process by producing the steam through electricity. Further this plant is similar to thermal power plants. Technically there is no secondary chamber in the boiler.
13	Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, as to achieve total Organic carbon (TOC) content in the slag bottom ash less than 3% or the loss on ignition is	Noted and agreed. Same will be followed.

	less than 5% of the dry weight.	
14	Odour from sites shall be managed guidelines of CPCB issued from time to time.	Noted and agreed. Same will be followed.
15	Boiler blow down, DM regeneration/RO rejects cooling bleed off after neutralisation, shall be utilised for ash quenching after conforming to the standards for on land for irrigation. Domestic shall be disposed by septic tank followed by soak pit.	Complied and Noted and same is being followed.
16	Leachate from RDF storage Bunker shall be disposed by pre-treatment followed by Mechanical Vapour recompression technology in the LTP of integrated facility. After treatment, the permeate / condensate shall be used for flue gas cleaning & lime dust suppression conforming to the standards for on land for irrigation	Complied and Noted and same is being followed.
17	Ambient air quality at the landfill site at and at the vicinity shall be monitored to meet the following specified standards , namely:-	Complied and Noted and same is being followed.
18	The ambient air quality monitoring shall be carried out six times in year and reports shall be submitted to the board.	Complied and Noted and same is being followed. Report are being submitted along with half yearly compliance report.
19	The proponent shall maintain daily records of quantity of MSW based RDF received at the site and consumed.	Complied and Noted and same is being maintained.
20	The Proponent shall manage wastes and facilities in conformity with specifications and standards stipulated in Schedule II, III and IV of the MSW rules.	Noted and agreed. Same will be followed.

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TC-5418

# Vimta

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**ISSUED TO:**

M/S. Hyderabad MSW Energy Solutions Pvt Ltd,  
Survey No: 173, Jawaharnagar,  
CRPF Road, Near Army College of Dental Sciences,  
Kapra Mandal, Medchal District,  
Telangana State-500087.

Report Number : VLL/VLS/25/03827/001  
Issued Date : 2025.06.18  
P.O. Number : 0400124970  
P.O. Date : 06.05.2025

Page 1 of 3


**SAMPLE PARTICULARS : STACK CONNECTED TO BOILER NO-1&2**

Sampling Date : 2025.05.13 Sample Registration Date : 2025.05.22  
Analysis Starting Date : 2025.05.23 Analysis Completion Date : 2025.06.17  
Test Required : Temperature, Velocity, Flow, O<sub>2</sub>, CO<sub>2</sub>, CO, Moisture, HF, HCl, PM, NO<sub>x</sub>, SO<sub>2</sub>, and  
TOC.  
Sample Collected by Vimta Labs Ltd

**TEST REPORT**

Sr. No	Parameters	UoM	Method of Testing	Results	Limits as per Solid Waste Management Rules, 2016
1	Diameter of stack	m	-	3.0	-
2	Flue gas temperature	°C	USEPA method -2	164	-
3	Velocity	m/sec		13.40	-
4	Volumetric flow rate	Nm <sup>3</sup> /Sec		60.25	-
5	Oxygen as O <sub>2</sub>	%	By Combustion Gas Analyzer	13.9	-
6	Carbon Dioxide as CO <sub>2</sub>	%		12.5	-
7	Carbon Monoxide as CO	mg/Nm <sup>3</sup>		42.3	-
8	Moisture Content	%,v/v	USEPA method -4	8.8	-
9	Hydrogen Fluoride as HF	mg/Nm <sup>3</sup>	USEPA method- 26	0.82	< 4.0
10	Hydrogen Chloride as HCl	mg/Nm <sup>3</sup>		16.9	< 50.0
11	Particulate Matter as PM	mg/Nm <sup>3</sup>	USEPA method-5	33.6	< 50.0
12	Oxides of Nitrogen as NO <sub>2</sub>	mg/Nm <sup>3</sup>	USEPA method -07	328	< 400.0
13	Sulphur Dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	USEPA method -06	36.8	< 200.0
14	Total Organic Carbon	mg/Nm <sup>3</sup>	USEPA method -40 & MM5(10)	8.7	< 20.0

All the Values are represented at 11% O<sub>2</sub>

  
Dr. Subba Reddy Mallampati.  
Manager-Environment

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Page 2 of 3


**SAMPLE PARTICULARS : STACK CONNECTED TO BOILER NO-1&2**

Sampling Date	: 2025.05.13	Sample Registration Date	: 2025.05.22
Analysis Starting Date	: 2025.05.23	Analysis Completion Date	: 2025.06.17
Test Required	: Hg & its compounds, Sb+As+Pb+Co+Cr+Cu+Mn+Ni+V+Their compounds		

**TEST REPORT**

Sr. No.	Parameters	UoM	Method of Testing	Results	Limits as per Solid Waste Management Rules, 2016
15	Mercury as Hg + their Compound			0.011	<0.05
16	Cadmium + Thorium (Cd + Th) +their Compound			<0.001	<0.05
	Chromium as Cr + their Compound			0.014	
	Manganese as Mn + their Compound			0.012	
	Arsenic as As + their Compound			0.010	
	Antimony as Sb + their Compound			0.009	
	Lead as Pb + their Compound			0.004	
	Cobalt as Co + their Compound			0.009	
	Copper as Cu + their Compound			0.012	
	Nickel as Ni + their Compound			0.006	
	Vanadium as V + their Compound			0.005	
	Zinc as Zn+ their Compound			0.006	
	Tin as Sn+ their Compound			0.004	
	Selenium as Se+ their Compound			0.009	
	<b>Total Metals: Sb+ As+ Pb+ Co+ Cr+ Cu+ Mn+ Ni+ V+ Their compounds</b>	mg/Nm <sup>3</sup>	USEPA method -29	<b>0.081</b>	<b>&lt;0.5</b>

All the values are represented at 11% O<sub>2</sub>

  
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**SAMPLE PARTICULARS** : **STACK CONNECTED TO BOILER NO-1&2** Page No: 03 of 03


Sampling Date : 2025.05.13 Sample Registration Date : 2025.05.22  
Analysis Starting Date : 2025.05.23 Analysis Completion Date : 2025.06.17  
Test Required : Temperature, Velocity, Volumetric flow rate, Oxygen, Dioxin & Furans  
(PCDD & PCDF)

Sample Collected by Vimta Labs Ltd.

**TEST REPORT**

Sr. No.	Parameters	UoM	Results	
<b>Physical Parameters of stack</b>				
1	Diameter of stack	m	3.0	
2	Flue gas temperature	°C	164	
3	Velocity	m/Sec	13.40	
4	Volumetric flow rate	Nm <sup>3</sup> /Sec	60.25	
5	Oxygen as O <sub>2</sub>	%	13.9	
<b>Congeners of Dioxin &amp; Furans</b>				
		<b>Concentration (ng)</b>	<b>TEF by WHO</b>	<b>TEQ (ng)</b>
1	2,3,7,8-TCDD	0.00209	1	0.0021
2	1,2,3,7,8-PeCDD	0.00287	0.5	0.0014
3	1,2,3,4,7,8-HxCDD	0.00465	0.1	0.0005
4	1,2,3,6,7,8-HxCDD	0.00532	0.1	0.0005
5	1,2,3,7,8,9-HxCDD	0.00562	0.1	0.0006
6	1,2,3,4,6,7,8-HpCDD	0.00684	0.01	0.0001
7	OCDD	0.03154	0.001	0.0000
8	2,3,7,8-TCDF	0.00506	0.1	0.0005
9	1,2,3,7,8-PeCDF	0.00976	0.05	0.0005
10	2,3,4,7,8-PeCDF	0.00526	0.5	0.0026
11	1,2,3,4,7,8-HxCDF	0.00534	0.1	0.0005
12	1,2,3,6,7,8-HxCDF	0.00676	0.1	0.0007
13	1,2,3,7,8,9-HxCDF	0.00487	0.1	0.0005
14	2,3,4,6,7,8-HxCDF	0.00687	0.1	0.0007
15	1,2,3,4,6,7,8-HpCDF	0.00984	0.01	0.0001
16	1,2,3,4,7,8,9-HpCDF	0.00692	0.01	0.0001
17	OCDF	0.05980	0.001	0.0001
Total ng TEQ				0.0114
Total ng/nm <sup>3</sup> TEQ				0.00218
Vstd. (Nm <sup>3</sup> )				5.25
Total Furans & Dioxins (ng TEQ/Nm <sup>3</sup> at 11 % O <sub>2</sub> Correction)				0.00308
Limits as per S.O. 1357(E) ng TEQ/Nm <sup>3</sup>				< 0.1

Method of Testing: USEPA 23 A

  
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Report Number : VLL/VLS/25/04977/001  
Issued Date : 2025.06.30  
P.O. Number : 0400124970  
P.O. Date : 06.05.2025

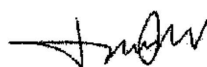
Page 1 of 3

<b>SAMPLE PARTICULARS</b>	: <b>STACK CONNECTED TO BOILER NO-1&amp;2</b>		
Sampling Date	: 2025.06.03	Sample Registration Date	: 2025.06.06
Analysis Starting Date	: 2025.06.07	Analysis Completion Date	: 2025.06.30
Test Required	: Temperature, Velocity, Flow, O <sub>2</sub> , CO <sub>2</sub> , CO, Moisture, HF, HCl, PM, NO <sub>x</sub> , SO <sub>2</sub> , and TOC.		
Sample Collected by Vimta Labs Ltd			

**TEST REPORT**

Sr. No.	Parameters	UoM	Method of Testing	Results	Limits as per Solid Waste Management Rules, 2016
1	Diameter of stack	m	-	3.0	-
2	Flue gas temperature	°C	USEPA method -2	158	-
3	Velocity	m/sec		11.66	-
4	Volumetric flow rate	Nm <sup>3</sup> /Sec		53.18	-
5	Oxygen as O <sub>2</sub>	%		By Combustion Gas Analyzer	14.6
6	Carbon Dioxide as CO <sub>2</sub>	%	10.7		-
7	Carbon Monoxide as CO	mg/Nm <sup>3</sup>	40.1		-
8	Moisture Content	%,v/v	USEPA method -4	7.9	-
9	Hydrogen Fluoride as HF	mg/Nm <sup>3</sup>	USEPA method- 26	0.72	< 4.0
10	Hydrogen Chloride as HCl	mg/Nm <sup>3</sup>		14.1	< 50.0
11	Particulate Matter as PM	mg/Nm <sup>3</sup>	USEPA method-5	30.1	< 50.0
12	Oxides of Nitrogen as NO <sub>2</sub>	mg/Nm <sup>3</sup>	USEPA method -07	306	< 400.0
13	Sulphur Dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	USEPA method -06	32.3	< 200.0
14	Total Organic Carbon	mg/Nm <sup>3</sup>	USEPA method -40 & MM5(10)	8.1	< 20.0

All the Values are represented at 11% O<sub>2</sub>

  
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Manager-Environment

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TC-5419

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Telangana State-500087.

Report Number : VLL/VLS/25/04977/001  
Issued Date : 2025.06.18  
P.O. Number : 0400124970  
P.O. Date : 06.05.2025

Page 2 of 3

**SAMPLE PARTICULARS : STACK CONNECTED TO BOILER NO-1&2**

Sampling Date	: 2025.06.03	Sample Registration Date	: 2025.06.06
Analysis Starting Date	: 2025.06.07	Analysis Completion Date	: 2025.06.30
Test Required	: Hg & its compounds, Sb+As+Pb+Co+Cr+Cu+Mn+Ni+V+Their compounds		

**TEST REPORT**

Sr. No.	Parameters	UoM	Method of testing	Results	Limits as per Solid Waste Management Rules, 2016
15	Mercury as Hg + their Compound	mg/Nm <sup>3</sup>	USEPA method -29	0.008	<0.05
16	Cadmium + Thorium (Cd + Th) +their Compound			<0.001	<0.05
	Chromium as Cr + their Compound			0.011	<0.5
	Manganese as Mn + their Compound			0.007	
	Arsenic as As + their Compound			0.006	
	Antimony as Sb + their Compound			0.005	
	Lead as Pb + their Compound			0.003	
	Cobalt as Co + their Compound			0.008	
	Copper as Cu + their Compound			0.010	
	Nickel as Ni + their Compound			0.008	
	Vanadium as V + their Compound			0.004	
	Zinc as Zn+ their Compound			0.011	
	Tin as Sn+ their Compound			0.007	
	Selenium as Se+ their Compound			0.008	
	Total Metals: Sb+ As+ Pb+ Co+ Cr+ Cu+ Mn+ Ni+ V+ Their compounds			0.062	

All the values are represented at 11% O<sub>2</sub>

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P.O. Date : 06.05.2025

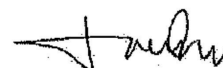
**SAMPLE PARTICULARS** : **STACK CONNECTED TO BOILER NO-1&2** **Page No: 03 of 03**

Sampling Date : 2025.06.03 Sample Registration Date : 2025.06.06  
Analysis Starting Date : 2025.06.07 Analysis Completion Date : 2025.06.30  
Test Required : Temperature, Velocity, Volumetric flow rate, Oxygen, Dioxin & Furans  
(PCDD& PCDF)  
Sample Collected by Vimta Labs Ltd.

**TEST REPORT**

Sr.No.	Parameters	UoM	Results	
<b>Physical Parameters of stack</b>				
1	Diameter of stack	m	3.0	
2	Flue gas temperature	°C	158	
3	Velocity	m/Sec	11.66	
4	Volumetric flow rate	Nm <sup>3</sup> /Sec	53.18	
5	Oxygen as O <sub>2</sub>	%	14.6	
<b>Congeners of Dioxin &amp; Furans</b>				
		<b>Concentration</b>	<b>Concentration</b>	
		<b>Concentration(ng)</b>	<b>TEF by WHO</b>	
			<b>TEQ(ng)</b>	
1	2,3,7,8-TCDD	0.00187	1	0.0019
2	1,2,3,7,8-PeCDD	0.00211	0.5	0.0011
3	1,2,3,4,7,8-HxCDD	0.00403	0.1	0.0004
4	1,2,3,6,7,8-HxCDD	0.00512	0.1	0.0005
5	1,2,3,7,8,9-HxCDD	0.00525	0.1	0.0005
6	1,2,3,4,6,7,8-HpCDD	0.00656	0.01	0.0001
7	OCDD	0.03123	0.001	0.0000
8	2,3,7,8-TCDF	0.00422	0.1	0.0004
9	1,2,3,7,8-PeCDF	0.00765	0.05	0.0004
10	2,3,4,7,8-PeCDF	0.00489	0.5	0.0024
11	1,2,3,4,7,8-HxCDF	0.00514	0.1	0.0005
12	1,2,3,6,7,8-HxCDF	0.00621	0.1	0.0006
13	1,2,3,7,8,9-HxCDF	0.00455	0.1	0.0005
14	2,3,4,6,7,8-HxCDF	0.00656	0.1	0.0007
15	1,2,3,4,6,7,8-HpCDF	0.00965	0.01	0.0001
16	1,2,3,4,7,8,9-HpCDF	0.00611	0.01	0.0001
17	OCDF	0.05650	0.001	0.0001
			Total ng TEQ	0.0102
			Total ng/nm <sup>3</sup> TEQ	0.00194
			Vstd. (Nm <sup>3</sup> )	5.25
			Total Furans & Dioxins (ng TEQ/Nm <sup>3</sup> at 11 % O <sub>2</sub> Correction)	<b>0.00304</b>
			limits as per S.O. 1357(E) ng TEQ/Nm <sup>3</sup>	<0.1

Method of Testing: USEPA 23 A

  
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TC-5410

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 Telangana State -500087.

Report Number : VLL/VLS/25/07537/001  
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 P.O. Date : 06.05.2025

Page 1 of 3

**SAMPLE PARTICULARS : STACK CONNECTED TO BOILER NO-1&2**

Sampling Date	: 2025.07.07	Sample Registration Date	: 2025.07.09
Analysis Starting Date	: 2025.07.10	Analysis Completion Date	: 2025.07.30
Test Required	: Temperature, Velocity, Flow, O <sub>2</sub> , CO <sub>2</sub> , CO, Moisture, HF, HCl, PM, NO <sub>x</sub> , SO <sub>2</sub> , and TOC.		
Sample Collected by Vimta Labs Ltd			

**TEST REPORT**

Sr. No.	Parameters	UoM	Method of Testing	Results	Limits as per Solid Waste Management Rules, 2016
1	Diameter of stack	m	-	3.0	-
2	Flue gas temperature	<sup>o</sup> C	USEPA method -2	146	-
3	Velocity	m/sec		12.69	-
4	Volumetric flow rate	Nm <sup>3</sup> /Sec		59.51	-
5	Oxygen as O <sub>2</sub>	%		By Combustion Gas Analyzer	13.9
6	Carbon Dioxide as CO <sub>2</sub>	%	11.8		-
7	Carbon Monoxide as CO	mg/Nm <sup>3</sup>	36.2		-
8	Moisture Content	%,v/v	USEPA method -4	8.6	-
9	Hydrogen Fluoride as HF	mg/Nm <sup>3</sup>	USEPA method- 26	0.89	< 4.0
10	Hydrogen Chloride as HCl	mg/Nm <sup>3</sup>		17.6	< 50.0
11	Particulate Matter as PM	mg/Nm <sup>3</sup>	USEPA method-5	26.9	< 50.0
12	Oxides of Nitrogen as NO <sub>2</sub>	mg/Nm <sup>3</sup>	USEPA method -07	316	< 400.0
13	Sulphur Dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	USEPA method -06	38.4	< 200.0
14	Total Organic Carbon	mg/Nm <sup>3</sup>	USEPA method -40 & MM5(10)	6.9	< 20.0

All the Values are represented at 11% O<sub>2</sub>

Dr. Subba Reddy Mallampati.  
 Manager-Environment

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P.O. Date : 06.05.2025

Page 2 of 3

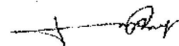
**SAMPLE PARTICULARS : STACK CONNECTED TO BOILER NO-1&2**

Sampling Date	: 2025.07.07	Sample Registration Date	: 2025.07.09
Analysis Starting Date	: 2025.07.10	Analysis Completion Date	: 2025.07.30
Test Required	: Hg & its compounds, Sb+As+Pb+Co+Cr+Cu+Mn+Ni+V+Their compounds		

**TEST REPORT**

Sr. No.	Parameters	UoM	Method of Testing	Results	Limits as per Solid Waste Management Rules, 2016
15	Mercury as Hg + their Compound	mg/Nm <sup>3</sup>	USEPA method -29	0.006	<0.05
16	Cadmium + Thorium (Cd + Th) +their Compound			<0.001	<0.05
	Chromium as Cr + their Compound			0.013	<0.5
	Manganese as Mn + their Compound			0.009	
	Arsenic as As + their Compound			0.008	
	Antimony as Sb + their Compound			0.009	
	Lead as Pb + their Compound			0.007	
	Cobalt as Co + their Compound			0.011	
	Copper as Cu + their Compound			0.013	
	Nickel as Ni + their Compound			0.012	
	Vanadium as V + their Compound			0.007	
	Zinc as Zn+ their Compound			0.015	
	Tin as Sn+ their Compound			0.007	
	Selenium as Se+ their Compound			0.012	
	<b>Total Metals: Sb+ As+ Pb+ Co+ Cr+ Cu+ Mn+ Ni+ V+ Their compounds</b>			<b>0.089</b>	

All the values are represented at 11% O<sub>2</sub>

  
Dr. Subba Reddy Mallampati.  
Manager-Environment

**Vimta Labs Limited**  
Registered Office  
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# Vimta

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**ISSUED TO:**

M/S. Hyderabad MSW Energy Solutions Pvt Ltd,  
Survey No: 173, Jawaharnagar,  
CRPF Road, Near Army College of Dental Sciences,  
Kapra Mandal, Medchal District,  
Telangana State-500087.

Report Number : VLL/VLS/25/07537/001  
Issued Date : 2025.07.31  
P.O. Number : 0400124970  
P.O. Date : 06.05.2025

**SAMPLE PARTICULARS** : **STACK CONNECTED TO BOILER NO-1&2** **Page No: 03 of 03**


Sampling Date : 2025.07.07 Sample Registration Date : 2025.07.09  
Analysis Starting Date : 2025.07.10 Analysis Completion Date : 2025.07.30  
Test Required : Temperature, Velocity, Volumetric flow rate, Oxygen, Dioxin & Furans  
(PCDD & PCDF)

Sample Collected by Vimta Labs Ltd.

**TEST REPORT**

Sr.No.	Parameters	UoM	Results	
<b>Physical Parameters of stack</b>				
1	Diameter of stack	m	3.0	
2	Flue gas temperature	°C	146	
3	Velocity	m/Sec	12.69	
4	Volumetric flow rate	Nm <sup>3</sup> /Sec	59.51	
5	Oxygen as O <sub>2</sub>	%	13.9	
<b>Congeners of Dioxin &amp; Furans</b>				
		<b>Concentration (ng)</b>	<b>TEF by WHO</b>	<b>TEQ (ng)</b>
1	2,3,7,8-TCDD	0.0212	1	0.0212
2	1,2,3,7,8-PeCDD	0.0029	0.5	0.0014
3	1,2,3,4,7,8-HxCDD	0.0047	0.1	0.0005
4	1,2,3,6,7,8-HxCDD	0.0057	0.1	0.0006
5	1,2,3,7,8,9-HxCDD	0.0054	0.1	0.0005
6	1,2,3,4,6,7,8-HpCDD	0.0068	0.01	0.0001
7	OCDD	0.0388	0.001	0.0000
8	2,3,7,8-TCDF	0.0049	0.1	0.0005
9	1,2,3,7,8-PeCDF	0.0080	0.05	0.0004
10	2,3,4,7,8-PeCDF	0.0049	0.5	0.0025
11	1,2,3,4,7,8-HxCDF	0.0055	0.1	0.0006
12	1,2,3,6,7,8-HxCDF	0.0067	0.1	0.0007
13	1,2,3,7,8,9-HxCDF	0.0049	0.1	0.0005
14	2,3,4,6,7,8-HxCDF	0.0070	0.1	0.0007
15	1,2,3,4,6,7,8-HpCDF	0.0100	0.01	0.0001
16	1,2,3,4,7,8,9-HpCDF	0.0068	0.01	0.0001
17	OCDF	0.0598	0.001	0.0001
Total ng TEQ				0.0303
Total ng/nm <sup>3</sup> TEQ				0.0058
Vstd. (Nm <sup>3</sup> )				5.25
Total Furans & Dioxins (ng TEQ/Nm <sup>3</sup> at 11 % O <sub>2</sub> Correction)				0.0082
imits as per S.O. 1357(E) ng TEQ/Nm <sup>3</sup>				< 0.1

Method of Testing: USEPA 23 A

  
Dr. Subba Reddy Mallampati  
Manager-Environment

**Vimta Labs Limited**

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TC-5418

# Vimta

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**ISSUED TO:**

M/S. Hyderabad MSW Energy Solutions Pvt Ltd,  
Survey No: 173, Jawaharnagar,  
CRPF Road, Near Army College of Dental Sciences,  
Kapra Mandal, Medchal District,  
Telangana State-500087.

Report Number : VLL/VLS/25/11674/001  
Issued Date : 2025.09.10  
P.O. Number : 0400124970  
P.O. Date : 06.05.2025

Page 1 of 3


**SAMPLE PARTICULARS : STACK CONNECTED TO BOILER NO-1&2**

Sampling Date	: 2025.08.29	Sample Registration Date	: 2025.08.30
Analysis Starting Date	: 2025.09.01	Analysis Completion Date	: 2025.09.10
Test Required	: Temperature, Velocity, Flow, O <sub>2</sub> , CO <sub>2</sub> , CO, Moisture, HF, HCl, PM, NO <sub>x</sub> , SO <sub>2</sub> , and TOC.		
Sample Collected by Vimta Labs Ltd			

**TEST REPORT**

Sr. No.	Parameters	UoM	Method of Testing	Results	Limits as per Solid Waste Management Rules, 2016
1	Diameter of stack	m	-	3.0	-
2	Flue gas temperature	°C	USEPA method -2	142	-
3	Velocity	m/sec		10.78	-
4	Volumetric flow rate	Nm <sup>3</sup> /Sec		51.03	-
5	Oxygen as O <sub>2</sub>	%		By Combustion Gas Analyzer	11.8
6	Carbon Dioxide as CO <sub>2</sub>	%	14.9		-
7	Carbon Monoxide as CO	mg/Nm <sup>3</sup>	31.8		-
8	Moisture Content	%,v/v	USEPA method -4	10.0	-
9	Hydrogen Fluoride as HF	mg/Nm <sup>3</sup>	USEPA method- 26	0.74	< 4.0
10	Hydrogen Chloride as HCl	mg/Nm <sup>3</sup>		14.2	< 50.0
11	Particulate Matter as PM	mg/Nm <sup>3</sup>	USEPA method-5	20.5	< 50.0
12	Oxides of Nitrogen as NO <sub>2</sub>	mg/Nm <sup>3</sup>	USEPA method -07	329	< 400.0
13	Sulphur Dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	USEPA method -06	42.8	< 200.0
14	Total Organic Carbon	mg/Nm <sup>3</sup>	USEPA method -40 & MM5[10]	8.2	< 20.0

All the Values are represented at 11% O<sub>2</sub>

  
Dr. Subba Reddy Mallampati.  
Manager-Environment

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Driven by Quality. Inspired by Science.

**ISSUED TO:**

**M/S. Hyderabad MSW Energy Solutions Pvt Ltd,**  
**Survey No: 173, Jawaharnagar,**  
**CRPF Road, Near Army College of Dental**  
**Sciences, Kapra Mandal, Medchal District,**  
**Telangana State-500087.**

Report Number : VLL/VLS/25/11674/001  
Issued Date : 2025.09.10  
P.O. Number : 0400124970  
P.O. Date : 06.05.2025

Page 2 of 3


**SAMPLE PARTICULARS : STACK CONNECTED TO BOILER NO-1&2**

Sampling Date	: 2025.08.29	Sample Registration Date	: 2025.08.30
Analysis Starting Date	: 2025.09.01	Analysis Completion Date	: 2025.09.10
Test Required	: Hg & its compounds, Sb+As+Pb+Co+Cr+Cu+Mn+Ni+V+Their compounds		

**TEST REPORT**

Sr. No.	Parameters	UoM	Method of Testing	Results	Limits as per Solid Waste Management Rules, 2016
15	Mercury as Hg + their Compound	mg/Nm <sup>3</sup>	USEPA method -29	0.004	<0.05
16	Cadmium + Thorium (Cd + Th) +their Compound			<0.001	<0.05
	Chromium as Cr + their Compound			0.011	<0.5
	Manganese as Mn + their Compound			0.014	
	Arsenic as As + their Compound			0.012	
	Antimony as Sb + their Compound			0.011	
	Lead as Pb + their Compound			0.009	
	Cobalt as Co + their Compound			0.015	
	Copper as Cu + their Compound			0.016	
	Nickel as Ni + their Compound			0.014	
	Vanadium as V + their Compound			0.013	
	Zinc as Zn+ their Compound			0.011	
	Tin as Sn+ their Compound			0.008	
	Selenium as Se+ their Compound			0.014	
	<b>Total Metals: Sb+ As+ Pb+ Co+ Cr+ Cu+ Mn+ Ni+ V+ Their compounds</b>			<b>0.115</b>	

All the values are represented at 11% O<sub>2</sub>

  
**Dr. Subba Reddy Mallampati,**  
**Manager-Environment**

**Vimta Labs Limited**

Registered Office  
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# Vimta

Driven by Quality. Inspired by Science.

**ISSUED TO:**

M/S. Hyderabad MSW Energy Solutions Pvt Ltd,  
Survey No: 173, Jawaharnagar,  
CRPF Road, Near Army College of Dental Sciences,  
Kapra Mandal, Medchal District,  
Telangana State-500087.

Report Number : VLL/VLS/25/11674/001  
Issued Date : 2025.09.10  
P.O. Number : 0400124970  
P.O. Date : 06.05.2025


**SAMPLE PARTICULARS** : **STACK CONNECTED TO BOILER NO-1&2** Page No: 03 of 03

Sampling Date	: 2025.08.29	Sample Registration Date	: 2025.08.30
Analysis Starting Date	: 2025.09.01	Analysis Completion Date	: 2025.09.10
Test Required	: Temperature, Velocity, Volumetric flow rate, Oxygen, Dioxin & Furans (PCDD& PCDF)		
Sample Collected by Vimta Labs Ltd.			

**TEST REPORT**

Sr.No.	Parameters	UoM	Results	
<b>Physical Parameters of stack</b>				
1	Diameter of stack	m	3.0	
2	Flue gas temperature	°C	142	
3	Velocity	m/Sec	10.78	
4	Volumetric flow rate	Nm <sup>3</sup> /Sec	51.03	
5	Oxygen as O <sub>2</sub>	%	11.8	
<b>Concentration</b>				
<b>Congeners of Dioxin &amp; Furans</b>		<b>Concentration(ng)</b>	<b>TEF by WHO</b>	<b>TEQ(ng)</b>
1	2,3,7,8-TCDD	0.0245	1	0.0245
2	1,2,3,7,8-PeCDD	0.0031	0.5	0.0016
3	1,2,3,4,7,8-HxCDD	0.0052	0.1	0.0005
4	1,2,3,6,7,8-HxCDD	0.0043	0.1	0.0004
5	1,2,3,7,8,9-HxCDD	0.0048	0.1	0.0005
6	1,2,3,4,6,7,8-HpCDD	0.0077	0.01	0.0001
7	OCDD	0.0399	0.001	0.0000
8	2,3,7,8-TCDF	0.0053	0.1	0.0005
9	1,2,3,7,8-PeCDF	0.0084	0.05	0.0004
10	2,3,4,7,8-PeCDF	0.0058	0.5	0.0029
11	1,2,3,4,7,8-HxCDF	0.0062	0.1	0.0006
12	1,2,3,6,7,8-HxCDF	0.0072	0.1	0.0007
13	1,2,3,7,8,9-HxCDF	0.0059	0.1	0.0006
14	2,3,4,6,7,8-HxCDF	0.0072	0.1	0.0007
15	1,2,3,4,6,7,8-HpCDF	0.0011	0.01	0.0000
16	1,2,3,4,7,8,9-HpCDF	0.0075	0.01	0.0001
17	OCDF	0.0698	0.001	0.0001
Total ng TEQ				0.0342
Total ng/nm <sup>3</sup> TEQ				0.0065
Vstd. (Nm <sup>3</sup> )				5.25
Total Furans & Dioxins (ng TEQ/Nm <sup>3</sup> at 11 % O <sub>2</sub> Correction)				0.0071
imits as per S.O. 1357(E) ng TEQ/Nm <sup>3</sup>				< 0.1

Method of Testing: USEPA 23 A

  
**Dr. Subba Reddy Mallampati**  
Manager-Environment

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TC-5418

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M/S. Hyderabad MSW Energy Solutions Pvt Ltd,  
Survey No: 173, Jawaharnagar,  
CRPF Road, Near Army College of Dental Sciences,  
Kapra Mandal, Medchal District,  
Telangana State-500087.

Report Number : VLL/VLS/25/13115/001  
Issued Date : 2025.10.05  
P.O. Number : 0400124970  
P.O. Date : 06.05.2025

Page 1 of 3

**SAMPLE PARTICULARS : STACK CONNECTED TO BOILER NO-1&2**


Sampling Date : 2025.09.16 Sample Registration Date : 2025.09.18  
Analysis Starting Date : 2025.09.19 Analysis Completion Date : 2025.10.05  
Test Required : Temperature, Velocity, Flow, O<sub>2</sub>, CO<sub>2</sub>, CO, Moisture, HF, HCl, PM, NO<sub>x</sub>, SO<sub>2</sub>, and TOC.

Sample Collected by Vimta Labs Ltd

**TEST REPORT**

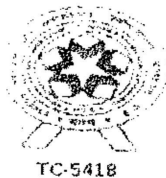
Sr. No.	Parameters	UoM	Method of Testing	Results	Limits as per Solid Waste Management Rules, 2016
1	Diameter of stack	m		3.0	-
2	Flue gas temperature	°C		137	-
3	Velocity	m/sec	USEPA method -2	12.63	-
4	Volumetric flow rate	Nm <sup>3</sup> /Sec		60.52	-
5	Oxygen as O <sub>2</sub>	%	By Combustion Gas Analyzer	13.3	-
6	Carbon Dioxide as CO <sub>2</sub>	%		16.7	-
7	Carbon Monoxide as CO	mg/Nm <sup>3</sup>		38.9	-
8	Moisture Content	%,v/v	USEPA method -4	9.5	-
9	Hydrogen Fluoride as HF	mg/Nm <sup>3</sup>	USEPA method- 26	0.88	< 4.0
10	Hydrogen Chloride as HCl	mg/Nm <sup>3</sup>		17.6	< 50.0
11	Particulate Matter as PM	mg/Nm <sup>3</sup>	USEPA method-5	17.3	< 50.0
12	Oxides of Nitrogen as NO <sub>2</sub>	mg/Nm <sup>3</sup>	USEPA method -07	348	< 400.0
13	Sulphur Dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	USEPA method -06	48.9	< 200.0
14	Total Organic Carbon	mg/Nm <sup>3</sup>	USEPA method -40 & MM5(10)	9.6	< 20.0

All the Values are represented at 11% O<sub>2</sub>

  
Dr. Subba Reddy Mallampati,  
Manager-Environment

**Vimta Labs Limited**

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TC-5418

# Vimta

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**ISSUED TO:**

M/S. Dundigal Waste 2 Energy Private Limited.  
Svy No: 684/1, Dundigal Village,  
Qutbullapur (Mndl), Medchal (Dist)  
Telangana State.

Report Number : VLL/VLS/25/13117/001  
Issued Date : 2025.10.05  
P.O. Number : 0400124806  
P.O. Date : 02.05.2025

Page 02 of 03


**Sample Particulars : Source Emission Monitoring for Boiler at Chimney.**

Sampling Date	: 2025.09.17	Sample Registration Date	: 2025.09.18
Analysis Starting Date	: 2025.09.19	Analysis Completion Date	: 2025.10.05
Test Required	: Hg & its compounds, Sb+As+Pb+Co+Cr+Cu+Mn+Ni+V+Their compounds		
Sample Collected by	Vimta Labs Ltd		

**TEST REPORT**

Sr. No.	Parameters	UoM	Method of Testing	Results	Limits as per Solid Waste Management Rules, 2016
17	Mercury as Hg + their Compound			0.014	<0.05
18	Cadmium + Thorium (Cd + Th) + their Compound	mg/Nm <sup>3</sup>	USEPA method -29	<0.0001	<0.05
	Chromium as Cr + their Compound			0.011	< 0.5
	Manganese as Mn + their Compound			0.018	
	Arsenic as As + their Compound			0.011	
	Antimony as Sb + their Compound			0.010	
	Lead as Pb + their Compound			0.019	
	Cobalt as Co + their Compound			0.022	
	Copper as Cu + their Compound			0.021	
	Nickel as Ni + their Compound			0.016	
	Vanadium as V + their Compound			0.013	
	Zinc as Zn+ their Compound			0.012	
	Tin as Sn+ their Compound			0.018	
	Selenium as Se+ their Compound			0.026	
	<b>Total Metals: Sb+ As+ Pb+ Co+ Cr+ Cu+ Mn+ Ni+ V+ Their compounds</b>				

All the values are represented at 11% O<sub>2</sub>

  
Dr. Subba Reddy Mallampati  
Manager -Environment.

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Survey No: 173, Jawaharnagar,  
CRPF Road, Near Army College of Dental Sciences,  
Kapra Mandal, Medchal District,  
Telangana State-500087.

Report Number : VLL/VLS/25/13115/001  
Issued Date : 2025.10.05  
P.O. Number : 0400124970  
P.O. Date : 06.05.2025


**SAMPLE PARTICULARS** : **STACK CONNECTED TO BOILER NO-1&2** **Page No: 03 of 03**

Sampling Date	: 2025.09.16	Sample Registration Date	: 2025.09.18
Analysis Starting Date	: 2025.09.19	Analysis Completion Date	: 2025.10.05
Test Required	: Temperature, Velocity, Volumetric flow rate, Oxygen, Dioxin & Furans (PCDD & PCDF)		
Sample Collected by Vimta Labs Ltd.			

**TEST REPORT**

Sr.No.	Parameters	UoM	Results	
<b>Physical Parameters of stack</b>				
1	Diameter of stack	m	3.0	
2	Flue gas temperature	°C	137	
3	Velocity	m/Sec	12.63	
4	Volumetric flow rate	Nm <sup>3</sup> /Sec	60.52	
5	Oxygen as O <sub>2</sub>	%	13.3	
<b>Congeners of Dioxin &amp; Furans</b>		<b>Concentration</b>		
		<b>Concentration(ng)</b>	<b>TEF by WHO</b>	<b>TEQ(ng)</b>
1	2,3,7,8-TCDD	0.0298	1	0.0298
2	1,2,3,7,8-PeCDD	0.0038	0.5	0.0019
3	1,2,3,4,7,8-HxCDD	0.0043	0.1	0.0004
4	1,2,3,6,7,8-HxCDD	0.0052	0.1	0.0005
5	1,2,3,7,8,9-HxCDD	0.0065	0.1	0.0007
6	1,2,3,4,6,7,8-HpCDD	0.0062	0.01	0.0001
7	OCDD	0.0423	0.001	0.0000
8	2,3,7,8-TCDF	0.0070	0.1	0.0007
9	1,2,3,7,8-PeCDF	0.0074	0.05	0.0004
10	2,3,4,7,8-PeCDF	0.0062	0.5	0.0031
11	1,2,3,4,7,8-HxCDF	0.0052	0.1	0.0005
12	1,2,3,6,7,8-HxCDF	0.0062	0.1	0.0006
13	1,2,3,7,8,9-HxCDF	0.0041	0.1	0.0004
14	2,3,4,6,7,8-HxCDF	0.0068	0.1	0.0007
15	1,2,3,4,6,7,8-HpCDF	0.0013	0.01	0.0000
16	1,2,3,4,7,8,9-HpCDF	0.0062	0.01	0.0001
17	OCDF	0.0698	0.001	0.0001
Total ng TEQ				0.0400
Total ng/nm <sup>3</sup> TEQ				0.0076
Vstd. (Nm <sup>3</sup> )				5.25
Total Furans & Dioxins (ng TEQ/Nm <sup>3</sup> at 11 % O <sub>2</sub> Correction)				0.0099
Limits as per S.O. 1357(E) ng TEQ/Nm <sup>3</sup>				< 0.1

Method of Testing: USEPA 23 A

  
Dr. Subba Reddy Mallampati  
Manager-Environment



## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC14799250000583F

Page No's.1 of 2

Report No: HWMP/ LAB /ENV/2500909

Name and Address of the Client:

M/s. HI-MSW Division,  
Jawahar Nagar Site,  
Hyderabad,Telangana

Date of Report : 02.05.2025  
 Analysis Starting Date : 26.04.2025  
 Analysis Completion Date : 28.04.2025  
 Sample Collected by : HWMP-Laboratory  
 Date of Sampling on : 25.04.2025  
 Sample Description : Ambient Air Quality Samples (Core Zone)

Sample Registration No /Locations:

Sl. No's.	Reg. No's.	Locations	Parameters
1	AAQ-251545	Near MSW Pit	SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> , NH <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , Pb, As, Ni, BaP.
2	AAQ-251546	Near Air Cooling Condenser	SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> , NH <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , Pb, As, Ni, BaP.

*For D. Sanjeeva Reddy*  
 Verified by  
 D.SanjeevaReddy  
 Asst. Manager

*K. Ravi Kumar*  
 Authorized Signatory  
 K.Ravi Kumar  
 Technical Manager

Hyderabad Waste Management Project  
 (A Division of Re Sustainability Limited)

Site Address:

TSDF at: Survey No. 684/1,  
 Dundigai - Gandimaisamma Municipality  
 Medchal - Malkajgiri Dist. - 500 043,  
 Telangana, India.

Re Sustainability Limited

(Formerly known as Ranky Enviro Services Limited)

Registered Office:

Level 11B, Aurobindo Galaxy,  
 Hyderabad Knowledge City,  
 Hitech City Road, Hyderabad-500 081, India.  
 CIN No. U7414DTG1994PLC018833

T: +91 93936 44222

E: mbd\_hwmp@resustainability.com  
 laboratoryhwmp@resustainability.com  
 resustainability.com



Sustainability

## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC147992500000583F

Page No's.2 of 2

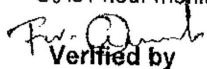
Report No: HWMP/ LAB /ENV/2500909

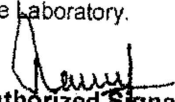
## TEST RESULTS FOR AMBIENT AIR QUALITY MONITORING SAMPLES

Samples are analyzed "as is where basis is"

Sl. No's.	Parameters	Units	Methods	Results		CPCB NAAQM Standards
				AAQ-251545	AAQ-251546	
				Near MSW Pit	Near Air Cooling Condenser	
1.	Sulfur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 2):2012	16.6	14.8	80
2.	Oxides of Nitrogen (NO <sub>2</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 6):2012	32	34	80
3.	Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 23):2012	76	68	100
4.	Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	HWMP/SOP/LAB-339	36.2	34.8	60
5.	Lead (Pb)	µg/m <sup>3</sup>	HWMP/SOP/LAB-343	<1.0	<1.0	1.0
6.	Arsenic (As)	ng/m <sup>3</sup>	HWMP/SOP/LAB-343	<1.0	<1.0	6.0
7.	Nickel (Ni)	ng/m <sup>3</sup>	HWMP/SOP/LAB-343	<0.5	<0.5	20.0
8.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	IS 5182:(Part IX):1974	1.2	3.5	180
9.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	IS 5152 (part 25):2018	6.42	6.84	400
10	Benzo(a)Pyrene (BaP)	ng/m <sup>3</sup>	IS:5182:(Part-12) 2014	BDL	BDL	1.0

- SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and NH<sub>3</sub> are 24 hourly monitored values.
- Reports pertained only to the collected sample.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- O<sub>3</sub> is 1 hour monitored values.

  
 Verified by  
 D.SanjeevaReddy  
 Asst. Manager

  
 Authorized Signatory  
 K.Ravi Kumar  
 Technical Manager

End of Report



Sustainability

## TEST REPORT

Report No: HWMP/ LAB /ENV/2500910

Page No's. 1 of 1

Name and Address of the Client

Date of Report : 02.05.2025  
 Analysis Starting Date : 26.04.2025  
 Analysis Completion Date : 28.04.2025  
 Sample Collected by : HWMP-Laboratory  
 Date of Sampling on : 25.04.2025  
 Sample Description : Ambient Air Quality Samples (Core Zone)

M/s. HI-MSW Division,  
 Jawahar Nagar Site,  
 Hyderabad. Telangana

### TEST RESULTS FOR AMBIENT AIR QUALITY MONITORING SAMPLE

Samples are analyzed "as is where basis is"

Sl. No's.	Parameters	Units	Methods	Results		CPCB NAAQM Standards
				AAQ-251545	AAQ-251546	
				Near MSW Pit	Near Air Cooling Condenser	
1	Methane (CH <sub>4</sub> )	%	Multi Gas Analyzer	1.1	2.1	Should not exceed 25% of LEL (650mg/l)
2	Carbon Monoxide (CO)	mg/m <sup>3</sup>	IS 5182 (part 10):1999	1.2	1.1	4.0
3	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	IS:5182 (Part-11) 2012	BDL	BDL	5.0

Note: BDL limits for Benzene

- CO is 1 hour monitored values
- Reports pertained only to the collected sample.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory

*For D. Sanjeeva Reddy*  
 Verified by  
**D.Sanjeeva Reddy**  
 Asst. Manager

*K. Ravi Kumar*  
 Authorized Signatory  
**K.Ravi Kumar**  
 Technical Manager

End of Report



Sustainability

## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC147992500000742F

Page No's.1 of 2

Report No: HWMP/ LAB /ENV/2501204

Name and Address of the Client:

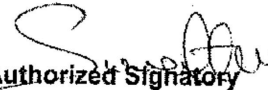
M/s. HI-MSW Division,  
Jawahar Nagar Site,  
Hyderabad,Telangana

Date of Report : 02.06.2025  
 Analysis Starting Date : 27.05.2025  
 Analysis Completion Date : 28.05.2025  
 Sample Collected by : HWMP-Laboratory  
 Date of Sampling on : 26.05.2025  
 Sample Description : Ambient Air Quality Samples (Core Zone)

Sample Registration No /Locations:

Sl. No's.	Reg. No's.	Locations	Parameters
1	AAQ-251994	Near MSW Pit	SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> , NH <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , Pb, As, Ni, BaP.
2	AAQ-251995	Near Air Cooling Condenser	SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> , NH <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , Pb, As, Ni, BaP.

  
 Verified by  
 K.Ravi Kumar  
 Technical Manager

  
 Authorized Signatory  
 Y. Swathi  
 Quality Manager

Hyderabad Waste Management Project  
 (A Division of Re Sustainability Limited)

Site Address:

TSDF at: Survey No. 684/1,  
 Dundigal - Gandimaisamma Municipality  
 Medchal - Malkajgiri Dist. - 500 043,  
 Telangana, India.

Re Sustainability Limited

(Formerly known as Ranky Enviro)

Registered Office:

Level 11B, Aurobindo Galaxy,  
 Hyderabad Knowledge City,  
 Hitech City Road, Hyderabad-500 081, India.  
 CIN No. U74140TG1994PLC018833

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 laboratoryhwmp@resustainability.com  
 resustainability.com



## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC14799250000742F

Page No's.2 of 2

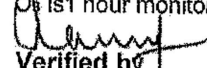
Report No: HWMP/ LAB /ENV/25012034

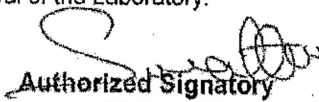
### TEST RESULTS FOR AMBIENT AIR QUALITY MONITORING SAMPLES

Samples are analyzed "as is where basis is"

Sl. No's.	Parameters	Units	Methods	Results		CPCB NAAQM Standards
				AAQ-251994	AAQ-251945	
				Near MSW Pit	Near Air Cooling Condenser	
1.	Sulfur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 2):2012	18.2	16.8	80
2.	Oxides of Nitrogen (NO <sub>2</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 6):2012	34	30	80
3.	Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 23):2012	72	66	100
4.	Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	HWMP/SOP/LAB-339	34.5	32.2	60
5.	Lead (Pb)	µg/m <sup>3</sup>	HWMP/SOP/LAB-343	<1.0	<1.0	1.0
6.	Arsenic (As)	ng/m <sup>3</sup>	HWMP/SOP/LAB-343	<1.0	<1.0	6.0
7.	Nickel (Ni)	ng/m <sup>3</sup>	HWMP/SOP/LAB-343	<0.5	<0.5	20.0
8.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	IS 5182:(Part IX):1974	1.2	3.2	180
9.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	IS 5152 (part 25):2018	5.42	6.25	400
10	Benzo(a)Pyrene (BaP)	ng/m <sup>3</sup>	IS:5182:(Part-12) 2014	BDL	BDL	1.0

- SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and NH<sub>3</sub> are 24 hourly monitored values.
- Reports pertained only to the collected sample.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- O<sub>3</sub> is 1 hour monitored values

  
 Verified by  
 K.Ravikumar  
 Technical Manager

  
 Authorized Signatory  
 Y. Swathi  
 Quality Manager

End of the Report



Sustainability

## TEST REPORT

Report No: HWMP/ LAB /ENV/2501205

Page No's.1 of 1

Name and Address of the Client :

<b>M/s. HI-MSW Division, Jawahar Nagar Site, Hyderabad Telangana</b>
--

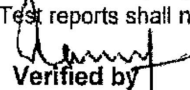
Date of Report : 02.06.2025  
 Analysis Starting Date : 27.05.2025  
 Analysis Completion Date : 28.05.2025  
 Sample Collected by : HWMP-Laboratory  
 Date of Sampling on : 26.05.2025  
 Sample Description : Ambient Air Quality Samples (Core Zone)

## TEST RESULTS FOR AMBIENT AIR QUALITY MONITORING SAMPLES

Samples are analyzed "as is where basis is"

Sl. No's.	Parameters	Units	Methods	Results		CPCB NAAQM Standards
				AAQ-251994	AAQ-25995	
				Near MSW Pit	Near Air Cooling Condenser	
1	Carbon Monoxide (CO)	mg/m <sup>3</sup>	IS:5182:(Part-10) 1999	1.0	2.1	4.0
2	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	IS:5182:(Part-11) 2012	BDL	BDL	5.0
3	Methane (CH <sub>4</sub> )	%	Multi Gas Analyzer	1.1	1.0	Should not exceed 25% of LEL (650mg/l)

- The Parameter (CH<sub>4</sub>) was given to as per CFO..
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.

  
 Verified by  
**K.Ravi Kumar**  
 Technical Manager

  
 Authorized Signatory  
**Y. Swathi**  
 Quality Manager

End of the Report



## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC14799250000846F  
Report No: HWMP/ LAB /ENV/2501462

Page No's.1 of 2

Name and Address of the Client:

M/s. HI-MSW Division,  
Jawahar Nagar Site,  
Hyderabad, Telangana

Date of Report : 04.07.2025  
Analysis Starting Date : 28.06.2025  
Analysis Completion Date : 04.07.2025  
Sample Collected by : HWMP-Laboratory  
Date of Sampling on : 28.06.2025  
Sample Description : Ambient Air Quality Samples (Core Zone)

Sample Registration No /Locations:

Sl. No's.	Reg. No's.	Locations	Parameters
1	AAQ- 252352	Near MSW Pit	SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> , NH <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , Pb, As, Ni, BaP.
2	AAQ- 252353	Near Air Cooling Condenser	SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> , NH <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , Pb, As, Ni, BaP.

  
Verified by  
K.Ravi Kumar  
Technical Manager

  
Authorized Signatory  
Y. Swathi  
Quality Manager

Hyderabad Waste Management Project  
(A Division of Re Sustainability Limited)  
Site Address:  
TSDF at: Survey No. 684/1,  
Dundigal - Gandimamsamma Municipality,  
Medchal - Malkajgiri Dist. - 500 043,  
Telangana, India.

Re Sustainability Limited  
(Formerly known as Ramky Enviro Engineers Limited)  
Registered Office:  
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Hyderabad Knowledge City,  
HITECH City Road, Hyderabad-500 081, India.  
CIN No. U74140TG1994PLC018833

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laboratoryhwmp@resustainability.com  
resustainability.com



Sustainability

## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC147992500000846F

Report No: HWMP/ LAB /ENV/2501462


Page No's.2 of 2

## TEST RESULTS FOR AMBIENT AIR QUALITY MONITORING SAMPLES


Samples are analyzed "as is where basis is"

Sl. No's.	Parameters	Units	Methods	Results		CPCB NAAQM Standards
				AAQ-252352	AAQ-252353	
				Near MSW Pit	Near Air Cooling Condenser	
1.	Sulfur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001	17.2	19.6	80
2.	Oxides of Nitrogen (NO <sub>2</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006	32.5	30.1	80
3.	Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006	61.3	59.6	100
4.	Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	HWMP/SOP/LAB- 339	22.1	28.5	60
5.	Lead (Pb)	µg/m <sup>3</sup>	HWMP/SOP/LAB- 343	<1.0	<1.0	1.0
6.	Arsenic (As)	ng/m <sup>3</sup>	HWMP/SOP/LAB- 343	<1.0	<1.0	6.0
7.	Nickel (Ni)	ng/m <sup>3</sup>	HWMP/SOP/LAB- 343	<0.5	<0.5	20.0
8.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 9): 1974	4.3	5.9	180
9.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 25): 2018	12.4	18.1	400
10.	Benzo (a) Pyrene (BaP)	ng/m <sup>3</sup>	IS 5182 (Part 12): 2014	BDL	BDL	1.0

- SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and NH<sub>3</sub> are 24 hourly monitored values.
- Reports pertained only to the collected sample.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- Note: Calibrated On: 16.02.2025 & Due Date: 15.02.2026, For FPS: and Calibrated On 17.02.2025 & Due Date: 16.02.2026 For RDS  
Calibrated by -LATA ENVIROTECH SERVICES

  
 Verified by  
 K. Ravikumar  
 Technical Manager

End of Report

  
 Authorized Signatory  
 Y. Swathi  
 Quality Manager



Sustainability

## TEST REPORT

Report No: HWMP/ LAB /ENV/2501445

Page No's.1 of 1

Name and Address of the Client:

M/s. HI-MSW Division, Jawahar Nagar Site, Hyderabad Telangana
---

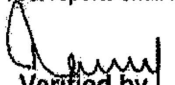
Date of Report : 04.07.2025  
 Analysis Starting Date : 29.06.2025  
 Analysis Completion Date : 04.07.2025  
 Sample Collected by : HWMP-Laboratory  
 Date of Sampling on : 28.06.2025  
 Sample Description : Ambient Air Quality Samples (Core Zone)


## TEST RESULTS FOR AMBIENT AIR QUALITY MONITORING SAMPLES

Samples are analyzed "as is where basis is"

Sl. No's.	Parameters	Units	Methods	Results		CPCB NAAQM Standards
				AAQ-252352	AAQ-252353	
				Near MSW Pit	Near Air Cooling Condenser	
1.	Carbon Monoxide (CO)	mg/m <sup>3</sup>	IS 5182 (Part 10): 1999	1.9	1.1	4.0
2.	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/ m <sup>3</sup>	IS 5182 (Part 11): 2006	BDL	BDL	5.0
3.	Methane (CH <sub>4</sub> )	%	Multi Gas Analyzer	1.8	2.1	Should not exceed 25% of LEL (650 mg/l)

- Note: BDL limits for Benzene. 1.0 µg/ m<sup>3</sup>
- Opinion and Interpretation: Nil
- CO is 1 hourly monitored value.
- Reports pertained only to the collected samples while monitoring.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- The Parameter (CH<sub>4</sub>) was given to as per CFO.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.

  
 Verified by  
 K.Ravi Kumar  
 Technical Manager

  
 Authorized Signatory  
 Y. Swathi  
 Quality Manager

End of Report



Sustainability

## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC147992500001017F  
Report No: HWMP/ LAB /ENV/2501756

Page No's.1 of 2

Name and Address of the Client:

M/s. HI-MSW Division,  
Jawahar Nagar Site,  
Hyderabad, Telangana

Date of Report : 30.07.2025  
Analysis Starting Date : 26.07.2025  
Analysis Completion Date : 28.07.2025  
Sample Collected by : HWMP-Laboratory  
Date of Sampling on : 24.07.2025 & 25.07.2025  
Sample Description : Ambient Air Quality Samples (Core Zone)

**Sample Registration No /Locations:**

Sl. No's.	Reg. No's.	Locations	Parameters
1	AAQ- 252601	Near MSW Pit	SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> , NH <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , Pb, As, Ni, BaP.
2	AAQ- 2523602	Near Air Cooling Condenser	SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> , NH <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , Pb, As, Ni, BaP.

  
Verified by  
K.Ravi Kumar  
Technical Manager

  
Authorized Signatory  
Y. Swathi  
Quality Manager

Hyderabad Waste Management Project  
(A Division of Re Sustainability Limited)  
Site Address:  
TSDF at: Survey No. 684/1,  
Dundigal - Gandimaisamma Municipality,  
Medchal - Malkajgiri Dist. - 500 043,  
Telangana, India.

Re Sustainability Limited  
(formerly known as Ramky Enviro Engineers Limited)  
Registered Office:  
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Hyderabad Knowledge City,  
HITECH City Road, Hyderabad-500 081, India.  
CIN No. U74140TG1994PLC018833

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laboratoryhwmp@resustainability.com  
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## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC147992500001017F  
Report No: HWMP/ LAB /ENV/2501756

Page No's.2 of 2

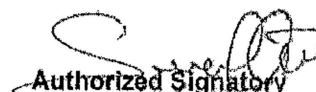
## TEST RESULTS FOR AMBIENT AIR QUALITY MONITORING SAMPLES

Samples are analyzed "as is where basis is"

Sl. No's.	Parameters	Units	Methods	Results		CPCB NAAQM Standards
				AAQ-252601	AAQ-252602	
				Near MSW Pit	Near Air Cooling Condenser	
1.	Sulfur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001	17.8	20.2	80
2.	Oxides of Nitrogen (NO <sub>2</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006	28.5	24.2	80
3.	Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006	58.2	52.5	100
4.	Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	HWMP/SOP/LAB- 339	20.2	26.4	60
5.	Lead (Pb)	µg/m <sup>3</sup>	HWMP/SOP/LAB- 343	<1.0	<1.0	1.0
6.	Arsenic (As)	ng/m <sup>3</sup>	HWMP/SOP/LAB- 343	<1.0	<1.0	6.0
7.	Nickel (Ni)	ng/m <sup>3</sup>	HWMP/SOP/LAB- 343	<0.5	<0.5	20.0
8.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 9): 1974	4.0	4.2	180
9.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 25): 2018	10.2	16.8	400
10.	Benzo (a) Pyrene (BaP)	ng/m <sup>3</sup>	IS 5182 (Part 12): 2014	BDL	BDL	1.0

- SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and NH<sub>3</sub> are 24 hourly monitored values.
- Reports pertained only to the collected sample.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- Note: Calibrated On: 16.02.2025 & Due Date: 15.02.2026, For FPS: and Calibrated On: 17.02.2025 & Due Date: 16.02.2026 For RDS Calibrated by -LATA ENVIROTECH SERVICES

  
 Verified by  
 K.Ravikumar  
 Technical Manager

  
 Authorized Signatory  
 Y. Swathi  
 Quality Manager

End of Report



Sustainability

## TEST REPORT

Report No: HWMP/ LAB /ENV/2501757

Page No's.1 of 1

Name and Address of the Client:

<b>M/s. HI-MSW Division, Jawahar Nagar Site, Hyderabad Telangana</b>
--

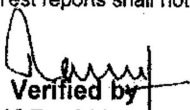
Date of Report : 30.07.2025  
 Analysis Starting Date : 26.07.2025  
 Analysis Completion Date : 28.07.2025  
 Sample Collected by : HWMP-Laboratory  
 Date of Sampling on : 24.07.2025 & 25.07.2025  
 Sample Description : Ambient Air Quality Samples (Core Zone)


## TEST RESULTS FOR AMBIENT AIR QUALITY MONITORING SAMPLES

Samples are analyzed "as is where basis is"

Sl. No's.	Parameters	Units	Methods	Results		CPCB NAAQM Standards
				AAQ-25601	AAQ-252602	
				Near MSW Pit	Near Air Cooling Condenser	
1.	Carbon Monoxide (CO)	mg/m <sup>3</sup>	IS 5182 (Part 10): 1999	1.5	1.0	4.0
2.	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/ m <sup>3</sup>	IS 5182 (Part 11): 2006	BDL	BDL	5.0
3.	Methane (CH <sub>4</sub> )	%	Multi Gas Analyzer	1.2	2.5	Should not exceed 25% of LEL (650 mg/l)

- Note: BDL limits for Benzene. 1.0 µg/ m<sup>3</sup>
- Opinion and Interpretation: Nil
- CO is 1 hourly monitored value.
- Reports pertained only to the collected samples while monitoring.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- The Parameter (CH<sub>4</sub>) was given to as per CFO.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.

  
 Verified by  
**K.Ravi Kumar**  
 Technical Manager

  
 Authorized Signatory  
**Y. Swathi**  
 Quality Manager

End of Report



## TEST REPORT



CERTIFICATE NO.TC-14799

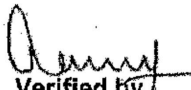
ULR.No:TC147992500001186F  
 Report No: HWMP/ LAB /ENV/2502105  
 Name and Address of the Client:

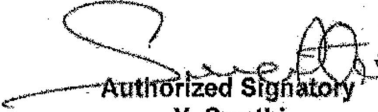
Page No's.1 of 2

M/s. HI-MSW Division,  
 Jawahar Nagar Site,  
 Hyderabad, Telangana

Date of Report : 03.09.2025  
 Analysis Starting Date : 27.08.2025  
 Analysis Completion Date : 30.09.2025  
 Sample Collected by : HWMP-Laboratory  
 Date of Sampling on : 26.08.2025  
 Sample Description : Ambient Air Quality Samples (Core Zone)  
Sample Registration No /Locations:

Sl. No's.	Reg. No's.	Locations	Parameters
1	AAQ- 253032	Near MSW Pit	SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> , NH <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , Pb, As, Ni, BaP.
2	AAQ- 253033	Near Air Cooling Condenser	SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> , NH <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , Pb, As, Ni, BaP.

  
 Verified by  
 K.Ravi Kumar  
 Technical Manager

  
 Authorized Signatory  
 Y. Swathi  
 Quality Manager

Hyderabad Waste Management Project  
 (A Division of Re Sustainability Limited)  
 Site Address:  
 TSDF at: Survey No. 684/1,  
 Dundigal - Gandimaisamma Municipality,  
 Medchal - Malkajgiri Dist. - 500 043,  
 Telangana, India.

Re Sustainability Limited  
 (Formerly known as Ramty Enviro Engineers Limited)  
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 laboratoryhwmp@resustainability.com  
 resustainability.com



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## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC147992500001186F  
Report No: HWMP/ LAB /ENV/2502105

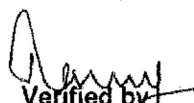
Page No's.2 of 2

## TEST RESULTS FOR AMBIENT AIR QUALITY MONITORING SAMPLES

Samples are analyzed "as is where basis is"

Sl. No's.	Parameters	Units	Methods	RESULTS		CPCB NAAQM Standards
				AAQ- 253032	AAQ- 253033	
				Near MSW Pit	Near Air Cooling Condenser	
1.	Sulfur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001	18.6	21.6	80
2.	Oxides of Nitrogen (NO <sub>2</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006	29.2	25.4	80
3.	Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006	56.8	50.6	100
4.	Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	HWMP/SOP/LAB- 339	21.5	28.4	60
5.	Lead (Pb)	µg/m <sup>3</sup>	HWMP/SOP/LAB- 343	<1.0	<1.0	1.0
6.	Arsenic (As)	ng/m <sup>3</sup>	HWMP/SOP/LAB- 343	<1.0	<1.0	6.0
7.	Nickel (Ni)	ng/m <sup>3</sup>	HWMP/SOP/LAB- 343	<0.5	<0.5	20.0
8.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 9): 1974	4.2	4.5	180
9.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 25): 2018	11.2	15.8	400
10.	Benzo (a) Pyrene (BaP)	ng/m <sup>3</sup>	IS 5182 (Part 12): 2014	BDL	BDL	1.0

- SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and NH<sub>3</sub> are 24 hourly monitored values.
- Reports pertained only to the collected sample.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- Note: Calibrated On: 16.02.2025 & Due Date: 15.02.2026, For FPS: and Calibrated On: 17.02.2025 & Due Date: 16.02.2026 For RDS Calibrated by -LATA ENVIROTECH SERVICES

  
 Verified by  
**K. Ravikumar**  
 Technical Manager

  
 Authorized Signatory  
**Y. Swathi**  
 Quality Manager

End of the Report



Sustainability

## TEST REPORT

Report No: HWMP/ LAB /ENV/2502105

Page No's.1 of 1

Name and Address of the Client:

M/s. HI-MSW Division, Jawahar Nagar Site, Hyderabad Telangana
---

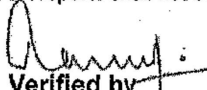
Date of Report : 03.09.2025  
 Analysis Starting Date : 27.08.2025  
 Analysis Completion Date : 30.09.2025  
 Sample Collected by : HWMP-Laboratory  
 Date of Sampling on : 26.08.2025  
 Sample Description : Ambient Air Quality Samples (Core Zone)

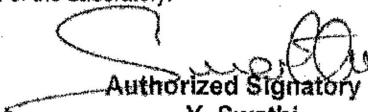
## TEST RESULTS FOR AMBIENT AIR QUALITY MONITORING SAMPLES

Samples are analyzed "as is where basis is"

Sl. No's.	Parameters	Units	Methods	Results		CPCB NAAQM Standards
				AAQ-253032	AAQ-253033	
				Near MSW Pit	Near Air Cooling Condenser	
1.	Carbon Monoxide (CO)	mg/m <sup>3</sup>	IS 5182 (Part 10): 1999	1.5	1.0	4.0
2.	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/ m <sup>3</sup>	IS 5182 (Part 11): 2006	BDL	BDL	5.0
3.	Methane (CH <sub>4</sub> )	%	Multi Gas Analyzer	1.2	2.5	Should not exceed 25% of LEL (650 mg/l)

- Note: BDL limits for Benzene. 1.0 µg/ m<sup>3</sup>
- Opinion and Interpretation: Nil
- CO is 1 hourly monitored value.
- Reports pertained only to the collected samples while monitoring.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- The Parameter (CH<sub>4</sub>) was given to as per CFO.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.

  
 Verified by  
 K.Ravi Kumar  
 Technical Manager

  
 Authorized Signatory  
 Y. Swathi  
 Quality Manager

End of Report



## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC147992500001375F  
 Report No: HWMP/ LAB /ENV/2502428  
 Name and Address of the Client:

Page No's.1 of 2

M/s. HI-MSW Division,  
 Jawahar Nagar Site,  
 Hyderabad, Telangana

Date of Report : 01.10.2025  
 Analysis Starting Date : 27.09.2025  
 Analysis Completion Date : 30.09.2025  
 Sample Collected by : HWMP-Laboratory  
 Date of Sampling on : 25.09.2025 & 26.09.2025  
 Sample Description : Ambient Air Quality Samples (Core Zone)  
Sample Registration No /Locations:

Sl. No's.	Reg. No's.	Locations	Parameters
1	AAQ- 253417	Near MSW Pit	SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> , NH <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , Pb, As, Ni, BaP.
2	AAQ- 253418	Near Air Cooling Condenser	SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> , NH <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , Pb, As, Ni, BaP.

  
 Verified by  
 K.Ravi Kumar  
 Technical Manager

  
 Authorized Signatory  
 Y. Swathi  
 Quality Manager

## Hyderabad Waste Management Project

(A Division of Re Sustainability Limited)

Site Address:

TSDF at: Survey No. 684/1,  
 Dundigal - Gandimaisamma Municipality,  
 Medchal - Malkajgiri Dist. - 500 043,  
 Telangana, India.

## Re Sustainability Limited

(Formerly known as Garaki Enviro Engineers Limited)

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 laboratoryhwmp@resustainability.com  
 resustainability.com



## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC147992500001375F  
Report No: HWMP/ LAB /ENV/2502428

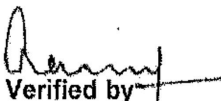
Page No's.2 of 2


## TEST RESULTS FOR AMBIENT AIR QUALITY MONITORING SAMPLES

Samples are analyzed "as is where basis is"

Sl. No's.	Parameters	Units	Methods	RESULTS		CPCB NAAQM Standards
				AAQ-253417	AAQ-253418	
				Near MSW Pit	Near Air Cooling Condenser	
1.	Sulfur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 2): 2001	18.6	22.2	80
2.	Oxides of Nitrogen (NO <sub>2</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 6): 2006	26.5	24.8	80
3.	Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 23): 2006	52.2	48.6	100
4.	Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	HWMP/SOP/LAB- 339	20.4	26.8	60
5.	Lead (Pb)	µg/m <sup>3</sup>	HWMP/SOP/LAB- 343	<1.0	<1.0	1.0
6.	Arsenic (As)	ng/m <sup>3</sup>	HWMP/SOP/LAB- 343	<1.0	<1.0	6.0
7.	Nickel (Ni)	ng/m <sup>3</sup>	HWMP/SOP/LAB- 343	<0.5	<0.5	20.0
8.	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 9): 1974	4.0	4.2	180
9.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	IS 5182 (Part 25): 2018	9.8	14.4	400
10.	Benzo (a) Pyrene (BaP)	ng/m <sup>3</sup>	IS 5182 (Part 12): 2014	BDL	BDL	1.0

- SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and NH<sub>3</sub> are 24 hourly monitored values.
- Reports pertained only to the collected sample.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- Note: Calibrated On: 16.02.2025 & Due Date: 15.02.2026, For FPS: and Calibrated On 17.02.2025 & Due Date: 16.02.2026 For RDS  
Calibrated by -LATA ENVIROTECH SERVICES

  
Verified by  
K. Ravikumar  
Technical Manager

  
Authorized Signatory  
Y. Swathi  
Quality Manager

End of the Report



Sustainability

## TEST REPORT

Report No: HWMP/ LAB /ENV/2502429

Name and Address of the Client:

Page No's.1 of 1

Date of Report : 01.10.2025  
 Analysis Starting Date : 27.09.2025  
 Analysis Completion Date : 30.09.2025  
 Sample Collected by : HWMP-Laboratory  
 Date of Sampling on : 25.09.2025 & 26.09.2025  
 Sample Description : Ambient Air Quality Samples (Core Zone)

M/s. HI-MSW Division,  
 Jawahar Nagar Site,  
 Hyderabad Telangana

### TEST RESULTS FOR AMBIENT AIR QUALITY MONITORING SAMPLES

Samples are analyzed "as is where basis is"

Sl. No's.	Parameters	Units	Methods	RESULTS		CPCB NAAQM Standards
				AAQ-253417	AAQ-53418	
				Near MSW Pit	Near Air Cooling Condenser	
1.	Carbon Monoxide (CO)	mg/m <sup>3</sup>	IS 5182 (Part 10): 1999	1.3	1.1	4.0
2.	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/ m <sup>3</sup>	IS 5182 (Part 11): 2008	BDL	BDL	5.0
3.	Methane (CH <sub>4</sub> )	%	Multi Gas Analyzer	1.1	2.0	Should not exceed 25% of LEL (650 mg/l)

- Note: BDL limits for Benzene. 1.0 µg/ m<sup>3</sup>
- Opinion and Interpretation: Nil
- CO is 1 hourly monitored value.
- Reports pertained only to the collected samples while monitoring.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- The Parameter (CH<sub>4</sub>) was given to as per CFO.
- Test reports shall not be reproduced except in full, without written approval of the Laboratory.

Verified by  
 K.Ravi Kumar  
 Technical Manager

Authorized Signatory  
 Y.Swathi  
 Quality Manage

End of the Report



## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC-147992500000584F

Report No: HWMP/ LAB /ENV/2500912

Name and Address of the Client :

Page No's.1 of 2

M/s. HI-MSW Division,  
Jawahar Nagar Site,  
Hyderabad, Telangana

Date of Report : 02.05.2025  
Analysis Starting Date : 26.04.2025  
Analysis Completion Date : 26.04.2025  
Sample Collected by : HWMP-Laboratory  
Date of Sampling on : 25.04.2025

Sample Description : Noise Level Measurement

## TEST RESULTS FOR NOISE LEVEL MEASUREMENT

Sr. No's.	Reg. No's.	Units	Noise Level in dB(A)	
			Day Time	Night Time
1.	NM-251548/1 (Near MSW Pit)	dB(A)	68.5	56.8
2.	NM-251548/2 (Near Air Cooling Condenser)	dB(A)	71.5	60.5

## Standards

Zone	Day Time	Night Time
Industrial and mixed use	75 dB(A)	70 dB(A)

- Opinion and interpretation: Nil
  - Reports pertained only to the collected samples when monitoring.
  - Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- Noise Meter: SI. No:1012918, HTC, Model No:1350.Calibration Date:06.02.2025 Due Date:05.02.2026

For Verified by  
D.SanjeevaReddy  
Asst.Manager

Authorized Signatory  
K.Ravi Kumar  
Technical Manager

Hyderabad Waste Management Project  
IA Division of Re Sustainability Limited  
Site Address:  
TSDF at: Survey No. 684/1,  
Dundigai - Gandimaisamma Municipality,  
Medchal - Malkajgiri Dist. - 500 043,  
Telangana, India.

Re Sustainability Limited  
(Formerly known as Rank & Emro Engineers Limited)  
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## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC147992500000743F

Page No's.1 of 2

Report No: HWMP/ LAB /ENV/2501207

Name and Address of the Client :

M/s. HI-MSW Division,  
Jawahar Nagar Site,  
Hyderabad, Telangana

Date of Report : 02.06.2025

Analysis Starting Date : 27.05.2025

Analysis Completion Date : 28.05.2025

Sample Collected by : HWMP-Laboratory

Date of Sampling on : 26.05.2025

Sample Description : Noise Level Measurement

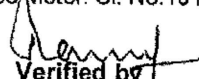
## TEST RESULTS FOR NOISE LEVEL MEASUREMENT


Sr. No's.	Reg. No's.	Units	Noise Level in dB(A)	
			Day Time	Night Time
1.	NM-251997/1 (Near MSW Pit)	dB(A)	69.1	58.5
2.	NM-251997/2 (Near Air Cooling Condenser)	dB(A)	72.6	60.3

## Standards

Zone	Day Time	Night Time
Industrial and mixed use	75 dB(A)	70 dB(A)

- Opinion and interpretation: Nil
  - Reports pertained only to the collected samples when monitoring.
  - Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- Noise Meter: Sl. No:1012918, HTC, Model No: 1350. Calibration Date:06.02.2025, Due Date:05.02.2026.

  
Verified by  
K.Ravi Kumar  
Technical Manager

  
Authorized Signatory  
Y. Swathi  
Quality Manager

End of the Report

Hyderabad Waste Management Project  
A Division of Re Sustainability Limited,  
Site Address:  
TSDF at: Survey No. 684/1,  
Dundigal - Gandimaisamma Municipality,  
Medchal - Malkajgiri Dist. - 500 043,  
Telangana, India.

Re Sustainability Limited  
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laboratoryhwmp@resustainability.com  
resustainability.com



## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC14799250000743F

Report No: HWMP/ LAB /ENV/2501207

Name and Address of the Client:

Page No's.1 of 2

M/s. HI-MSW Division,  
Jawahar Nagar Site,  
Hyderabad, Telangana

Date of Report : 04.07.2025  
Analysis Starting Date : 28.06.2025  
Analysis Completion Date : 03.07.2025  
Sample Collected by : HWMP-Laboratory  
Date of Sampling on : 28.06.2025  
Sample Description : Noise Level Measurement

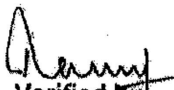
## TEST RESULTS FOR NOISE LEVEL MEASUREMENT


Sr. No's.	Reg. No's.	Units	Noise Level in dB(A)	
			Day Time	Night Time
1.	NM-252361/1 (Near MSW Pit)	dB(A)	66.1	54.9
2.	NM-252362/2 (Near Air Cooling Condenser)	dB(A)	71.9	66.8

## Standards

Zone	Day Time	Night Time
Industrial and mixed use	75 dB(A)	70 dB(A)

- Opinion and Interpretation: Nil
  - Reports pertained only to the collected samples when monitoring.
  - Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- Noise Meter: Sl. No:1012918, HTC, Model No: 1350.Calibration Date:06.02.2025, Due Date:05.02.2026.

  
Verified by  
K.Ravi Kumar  
Technical Manager

  
Authorized Signatory  
Y. Swathi  
Quality Manager

End of the Report

Hyderabad Waste Management Project  
(A Division of Re Sustainability Limited)  
Site Address:  
TSDF at: Survey No. 684/1,  
Dundigal - Gandimaisamma Municipality,  
Medchal - Malkajgiri Dist. - 500 043,  
Telangana, India.

Re Sustainability Limited  
(Formerly known as Ramky Enviro Engineers Limited)  
Registered Office:  
Level 11B, Aurobindo Galaxy,  
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HITECH City Road, Hyderabad-500 081, India.  
CIN No. U74140TG1994PLC018833

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laboratoryhwmp@resustainability.com  
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Sustainability

## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC147992500001019F

Page No's.1 of 1

Report No: HWMP/ LAB /ENV/2501759

Name and Address of the Client:

M/s. HI-MSW Division,  
Jawahar Nagar Site,  
Hyderabad, Telangana

Date of Report : 30.07.2025  
Analysis Starting Date : 26.07.2025  
Analysis Completion Date : 28.07.2025  
Sample Collected by : HWMP-Laboratory  
Date of Sampling on : 24.07.2025  
Sample Description : Noise Level Measurement

## TEST RESULTS FOR NOISE LEVEL MEASUREMENT

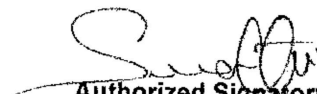
Sr. No's.	Reg. No's.	Units	Noise Level in dB(A)	
			Day Time	Night Time
1.	NM-252604/1 (Near MSW Pit)	dB(A)	68.2	56.8
2.	NM-2523604/2 (Near Air Cooling Condenser)	dB(A)	70.4	65.6

## Standards

Zone	Day Time	Night Time
Industrial and mixed use	75 dB(A)	70 dB(A)

- Opinion and interpretation: Nil
  - Reports pertained only to the collected samples when monitoring.
  - Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- Noise Meter: SI. No:1012918, HTC, Model No: 1350.Calibration Date:06.02.2025, Due Date:05.02.2026.

  
Verified by  
K.Ravi Kumar  
Technical Manager

  
Authorized Signatory  
Y. Swathi  
Quality Manager

End of the Report

Hyderabad Waste Management Project

[A Division of Re Sustainability Limited]

Site Address:

TSDF at: Survey No. 684/1,

Dundigal - Gandimaisamma Municipality,

Medchal - Malkajgiri Dist. - 500 043,

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## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC147992500001188F

Page No's.1 of 1

Report No: HWMP/ LAB /ENV/2502107

Name and Address of the Client:

M/s. HI-MSW Division,  
Jawahar Nagar Site,  
Hyderabad, Telangana

Date of Report : 03.09.2025  
Analysis Starting Date : 27.08.2025  
Analysis Completion Date : 27.09.2025  
Sample Collected by : HWMP-Laboratory  
Date of Sampling on : 26.08.2025  
Sample Description : Noise Level Measurement

## TEST RESULTS FOR NOISE LEVEL MEASUREMENT


Sr. No's.	Reg. No's.	Units	Noise Level in dB(A)	
			Day Time	Night Time
1.	NM-253035/1 (Near MSW Pit)	dB(A)	69.8	55.2
2.	NM-253035/2 (Near Air Cooling Condenser)	dB(A)	71.3	67.5

## Standards

Zone	Day Time	Night Time
Industrial and mixed use	75 dB(A)	70 dB(A)

- Opinion and interpretation: Nil
  - Reports pertained only to the collected samples when monitoring.
  - Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- Noise Meter: Sl. No:1012918, HTC, Model No: 1350. Calibration Date:06.02.2025, Due Date:05.02.2026.

  
Verified by  
K.Ravi Kumar  
Technical Manager

  
Authorized Signatory  
Y. Swathi  
Quality Manager

End of the Report

Hyderabad Waste Management Project  
(A Division of Re Sustainability Limited,  
Site Address:

TSDf at: Survey No. 684/1,  
Dundigal - Gandimaisamma Municipality,  
Medchal - Malkajgiri Dist. - 500 043,  
Telangana, India.

Re Sustainability Limited  
(Formerly known as Ramky Enviro Engineers Limited),  
Registered Office:

Level 11B, Aurobindo Galaxy,  
Hyderabad Knowledge City,  
HITECH City Road, Hyderabad-500 081, India.  
CIN No. U74140TG1994PLC018833

T: +91 93936 44222  
E: mbd\_hwmp@resustainability.com  
laboratoryhwmp@resustainability.com  
resustainability.com



## TEST REPORT



CERTIFICATE NO.TC-14799

ULR.No:TC147992500001376F

Report No: HWMP/ LAB /ENV/2502430

Name and Address of the Client:

Page No's.1 of 1

M/s. HI-MSW Division,  
Jawahar Nagar Site,  
Hyderabad, Telangana

Date of Report : 01.10.2025  
Analysis Starting Date : 27.09.2025  
Analysis Completion Date : 27.09.2025  
Sample Collected by : HWMP-Laboratory  
Date of Sampling on : 26.09.2025  
Sample Description : Noise Level Measurement

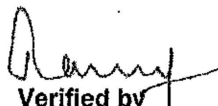
## TEST RESULTS FOR NOISE LEVEL MEASUREMENT

Sr. No's.	Reg. No's.	Units	Noise Level in dB(A)	
			Day Time	Night Time
1.	NM-253035/1 (Near MSW Pit)	dB(A)	67.2	56.8
2.	NM-253035/2 (Near Air Cooling Condenser)	dB(A)	70.5	65.4

## Standards

Zone	Day Time	Night Time
Industrial and mixed use	75 dB(A)	70 dB(A)

- Opinion and interpretation: Nil
  - Reports pertained only to the collected samples when monitoring.
  - Test reports shall not be reproduced except in full, without written approval of the Laboratory.
- Noise Meter: SI. No:1012918, HTC, Model No: 1350.Calibration Date:06.02.2025, Due Date:05.02.2026.

  
Verified by  
K.Ravi Kumar  
Technical Manager

  
Authorized Signatory  
Y. Swathi  
Quality Manager

End of the Report

Hyderabad Waste Management Project  
(A Division of Re Sustainability Limited)

Site Address:

TSDF at: Survey No. 684/1,  
Dundigal - Gandimalsamma Municipality,  
Medchal - Malkajgiri Dist. - 500 043,  
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CIN No. U74140TG1994PLC018833

T: +91 93936 44222  
E: mbd\_hwmp@resustainability.com  
laboratoryhwmp@resustainability.com  
resustainability.com

**Vimta Labs Limited**

Registered Office  
142, IDA Phase II, Cherlapally  
Hyderabad-500 051, Telangana, India  
T : +91 40 2726 4141  
F : +91 40 2726 3657

**ISSUED TO:**

M/s. Hyderabad MSW Energy Solution Pvt. Ltd.  
Survey No. 173, Jawahar Nagar,  
CRPF Road, Near Army Collage of Dental Sciences,  
Kapra Mandal, Medchal Dist  
Telangana State-500087

Report Number : VLL/VLS/25/23219/001  
Issued Date : 2026-02-10  
P. O. No. : 0400124970  
P.O. Date : 2025-05-06

Page 3 of 3

**SAMPLE NAME : Fly Ash Sample**

Sample Received Date	: 2026-01-30	Sample Registration Date	: 2026-01-30
Analysis Starting Date	: 2026-01-31	Analysis Completion Date	: 2026-02-09
Test Required	Proximate, Ultimate, Ash analysis, Metals, Calorific Value		
Received Quantity:	1 Kg packet X 1 no.		
Method of Testing	As Per ASTM D3173,ASTM D3174,ASTM D3175,ASTM E711,ASTM D6349,ASTM D6357,ASTM E 776,ASTM D7348,SOP.NO.26/22 and instrument used vario ELcube CHNS analyzer, UV visible spectrophotometer, ICP-OES & ICP-MS		
Sampling Details	Sampling done by Md. A. Waheed ,Sample Collection Date: 2026.01.28		

**TEST REPORT**

Sr. No.	Parameters Test	MOU	Results	Haz waste 2016-Schedule-II
1	pH	---	9.64	8-12
2	Copper as Cu	mg/l	0.21	--
3	Cadmium as Cd	mg/l	0.08	1.0
4	Chromium as Cr	mg/l	3.24	5
5	Manganese	mg/l	6.87	10
6	Zinc as Zn	mg/l	2.93	250
7	Lead as Pb	mg/l	0.17	5
8	Nickel as Ni	mg/l	5.36	20
9	Mercury as Hg	mg/l	<0.01	0.2
10	Arsenic as As	mg/l	0.03	5
11	Selenium as Se	mg/l	<0.01	1
12	Thallium as Tl	mg/l	0.75	7
13	Vanadium	mg/l	3.18	24
14	Barium	mg/l	7.85	100
15	Nitrate	mg/l	19.36	1000.

Results relate only to the sample tested

Remark:-Proximate tested as received, Ultimate, Calorific value, Ash analysis, Metals tested on dry basis

**Name and Designation of Authorized Signatory**

**Dr. Subba Reddy Mallampati**  
Manager - Environment

**ISSUED TO:**

M/s.Dundigal Waste2 Energy Private Limited,  
Survey No. 684/1, Dundigal Village,  
Qutbullapur Mandal,  
Medchal Dist  
Telangana

Report Number : VLL/VLS/25/23529/002  
Issued Date : 2026-02-11  
P. O. No. : 0400124806  
P.O. Date : 2025-05-02

Page 3 of 3

<b>SAMPLE NAME</b>	: Fly Ash
Sample Received Date	: 2026-02-02
Analysis Starting Date	: 2026-02-03
Test Required	: Proximate, Ultimate, Ash analysis, Metals, Calorific Value
Received Quantity:	: 1 Kg packet X 1 no.
Method of Testing	: As Per ASTM D3173,ASTM D3174,ASTM D3175,ASTM E711,ASTM D6349,ASTM D6357,ASTM E 776,ASTM D7348,SOP.NO.26/22 and instrument used vario ELcube CHNS analyser,UV visible spectrophotometer, ICP-OES & ICP-MS
Sampling Details	: Sampling done by Md. A. Waheed and Narayana ,Sample Collection Date: 2026.01.31

**TEST REPORT**

Sr. No.	Parameters Test	MOU	Results	Haz waste 2016-Schedule-II
1	pH	---	9.94	8-12
2	Copper as Cu	mg/l	0.46	--
3	Cadmium as Cd	mg/l	0.09	1.0
4	Chromium as Cr	mg/l	3.18	5
5	Manganese	mg/l	7.78	10
6	Zinc as Zn	mg/l	56.74	250
7	Lead as Pb	mg/l	0.82	5
8	Nickel as Ni	mg/l	8.34	20
9	Mercury as Hg	mg/l	0.01	0.2
10	Arsenic as As	mg/l	0.19	5
11	Selenium as Se	mg/l	<0.01	1
12	Thallium as Tl	mg/l	1.56	7
13	Vanadium	mg/l	3.98	24
14	Barium	mg/l	12.17	100
15	Nitrate	mg/l	27.5	1000.

Results relate only to the sample tested

Remark:-Proximate tested as received, Ultimate, Calorific value, Ash analysis, Metals tested on dry basis

**Name and Designation of Authorized Signatory**



**Dr. Subba Reddy Mallampati**  
Manager - Environment



From,  
The Commissioner,  
Greater Hyderabad Municipal Corporation,  
1<sup>st</sup> Floor, CC Complex,  
Lower Tankbund Road,  
Hyderabad,  
Telangana -500063.

To,  
Dr. D. N Singh,  
Institute Chair Professor,  
Department of Civil Engineering,  
India Institute of Technology Bombay,  
Mumbai- 400076  
Cell: 9820758508  
Email: dns@civil.iitb.ac.in

**Lr.No. SWM /0195/2021/AE-1(SWM)HO**

**dated 29 .12 .2025**

Sir,

Sub : GHMC - SWM - Way forward to the issues prevailing at MSW Processing & Disposal facility at Jawaharnagar submitted by IIT Bombay on 27.10.2025 - Request for submitting a proposal.- Reg.

Ref : 1. Way forward communicated by IIT Bombay dated 27.10.2025  
2. Order of the Hon'ble NGT (SZ) dated 10.11.2025 in OA 199/2021

\*\*\*\*\*

In compliance to the minutes of the meeting dated 14.10.2025 of the Central Pollution Control Board, you have visited the capped legacy dumpsite of GHMC on 23.10.2025 and communicated a way forward to the issues prevailing at the MSW Processing & Disposal facility adjacent to the capped legacy dumpsite of GHMC at Jawaharnagar vide reference 1<sup>st</sup> cited proposing certain possible solutions through short, medium and long term studies.

Accordingly, the Tribunal in it's order dated 10.11.2025 directed that GHMC and the agency to ensure that until the action plan proposed by IIT Bombay is implemented, no new or additional waste shall be dumped in the capped area and GHMC is directed to comply with the directions issued earlier regarding leachate collection and related monsoon measures, as well as the recommendations made by IIT Bombay.

In view of the above, IIT Bombay is herewith requested to kindly submit a detailed proposal for conducting a comprehensive study as deemed appropriate,

including the budgetary proposal for rendering IIT Bombay's services in conducting the studies as proposed at reference 1<sup>st</sup> cited and monitoring the implementation of said proposal by GHMC. Quick response is appreciated in view of the critical nature of the subject and pressing timelines.

Further, Executive Engineer, Solid Waste Management Wing, GHMC may be contacted in case of additional details/ clarification.

Yours faithfully,

  
for Commissioner, GHMC

Copy to the Chairman, CPCB for kind favour of information

Copy to the Member Secretary, TGPCB for kind favour of information



भारतीय प्रौद्योगिकी संस्थान मुंबई

पवई, मुंबई-400 076, भारत

Indian Institute of Technology Bombay

Powai, Mumbai-400 076, India

दूरभाष/Phone : (+91-22) 2572 2545

फैक्स/Fax : (+91-22) 2572 3480

वेबसाईट/Website : www.iitb.ac.in



February 07, 2026

To:

**The Commissioner**  
**Greater Hyderabad Municipal Corporation (GHMC)**  
Hyderabad  
Telangana.

**Subject:** Proposal for rendering technical support & advisory services on the issues prevailing at the MSW processing & disposal facility at Jawahar Nagar, including study of the capped legacy dump for feasibility of its biomining.

**Reference:**

1. Minutes of the Meeting dated 14.10.2025 held between CPCB, TGPCB, GHMC & IIT Bombay
2. Way forward report dated 27.10.2025 of IIT Bombay
3. Letter from the Commissioner, GHMC, dated 29.12.2025

**Dear Sir,**

Greetings from IIT Bombay!

As desired, kindly find the detailed proposal for conducting a comprehensive study in consonance with the probable solutions proposed by IIT Bombay in the way-forward report dated 27.10.2025. It would be my utmost pleasure to be associated with GHMC in this context.

### **1. Background and Regulatory Context**

Pursuant to the directions of the Hon'ble National Green Tribunal (NGT), the Greater Hyderabad Municipal Corporation (GHMC) initiated actions for biomining of the capped Jawahar Nagar dumpsite and invited tenders for the same. Considering that the dumpsite was capped only recently (in 2019), GHMC sought expert technical opinion from the Indian Institute of Technology (IIT) Bombay, under the supervision of Prof. D. N. Singh, to assess its readiness for biomining and associated environmental risks.

Based on detailed scientific and technical investigations, IIT Bombay, in its final report dated 05.07.2023, concluded that the Jawahar Nagar capped landfill is presently not technically suitable for biomining, and undertaking biomining without fulfilling the prerequisite conditions may lead to adverse environmental and geotechnical consequences.

Subsequently, in compliance with the directions of the Hon'ble NGT (Southern Zone) dated 06.08.2025 in OA No. 199 of 2021, the Central Pollution Control Board (CPCB) convened a meeting on 14.10.2025 with GHMC, Telangana Pollution Control Board (TGPCB), and IIT Bombay to deliberate on scientifically defensible and regulatorily compliant approaches for management of both legacy waste and fresh municipal solid waste (MSW) at Jawahar Nagar.

As recorded in the Minutes of Meeting communicated on 22.10.2025, a joint site visit was undertaken on 23.10.2025, followed by submission of a "Way Forward" report, addressing the prevailing environmental and operational issues at the MSW Processing and Disposal (P&D) Facility, Jawahar Nagar, which emphasised:

- Stabilisation of the capped dumpsite,
- Progressive delinking and decentralisation of MSW from Jawahar Nagar, and
- Undertaking studies to assess biomining feasibility only after the fulfilment of specified preconditions.

GHMC has thereafter requested IIT Bombay to provide and submit a **detailed proposal** for undertaking comprehensive technical studies and for monitoring the implementation of the recommended measures, including independent technical advisory, oversight, and monitoring support, strictly aligned with the directions of the Hon'ble NGT and the applicable regulatory framework.

A team from IIT Bombay, led by Prof. D. N. Singh, visited GHMC on 21<sup>st</sup> & 22<sup>nd</sup> of January 2026 and inspected Jawahar Nagar along with other land parcels identified for setting up alternate MSW P & D facilities and pre-sorting facilities.

## **2. Governing Principles of the Engagement**

This engagement shall be governed by the following principles:

- I. Jawahar Nagar shall be progressively delinked and decentralised, such that the site does not receive more than 50% or 5,000 TPD (whichever is lower) of MSW generated within GHMC limits.
- II. GHMC shall develop additional MSW processing, disposal, and pre-sorting facilities in a time-bound manner, independent of Jawahar Nagar, with immediate effect. GHMC shall identify locations, as presented during the meeting held on 21<sup>st</sup> & 22<sup>nd</sup> of January 2026, for decentralized processing to

minimize land requirements and ensure that only segregated fractions are directed to processing sites. GHMC and the Government of Telangana shall ensure that additional lands are allocated, and corresponding projects are developed to reduce the quantity of waste reaching Jawahar Nagar, and that P & D is decentralized to limit the quantity of waste processed at Jawahar Nagar to 50%. No indiscriminate dumping of any category of waste shall be permitted at the Jawahar Nagar capped area.

- III. Biomining shall not be undertaken or recommended unless scientific studies conducted by IIT Bombay explicitly establish its technical feasibility and environmental safety, and all requisite regulatory approvals are obtained.
- IV. IIT Bombay shall function solely as an Independent Technical Advisor, Oversight, and Verification Authority, with no execution or operational responsibility.

### 3. Objectives

The objectives of the proposed study are to provide **technical advisory support services and assessment of the monitoring mechanism of GHMC and Environmental Protection Training & Research Institute (EPTRI)** in relation to:

- Ensure strict compliance with the directions of the Hon'ble NGT;
- Provide independent technical oversight on delinking and decentralisation of MSW;
- Assess environmental and operational issues and risks at Jawahar Nagar at the MSW P&D Facility, Jawahar Nagar, such as air quality, leachate management, in-site storm water management, runoff water/dry weather (sullage) flow from upstream catchment areas;
- Feasibility of the capped legacy dumpsite at Jawahar Nagar for biomining by verifying site stabilisation before any consideration of bio-mining;
- Strengthen monitoring of air, water, leachate, and storm water systems; and
- Support CPCB in the development and review of guidelines for uncapping and pollution control, if required.

#### **4. Preconditions for Biomining Related Studies**

No studies intended to assess or recommend the suitability of biomining shall commence unless the following preconditions are fulfilled by GHMC and verified by the IIT Bombay:

- a) Identification and provision of land for additional MSW facilities;
- b) Demonstrable delinking and decentralization of MSW;
- c) Reduction of MSW inflow to Jawahar Nagar to  $\leq 50\%$  or 5,000 TPD, whichever is lower;
- d) Cessation of unauthorized dumping; and
- e) Completion of a high-resolution, geo-referenced drone survey capturing:
  - Areal extent and spatial footprint;
  - Height profiles, contours, and slopes of the capped dump;
  - Active and legacy waste areas; and
  - A minimum 10-metre buffer zone around the site.

The drone survey shall be submitted within fifteen (15) days and shall serve as the baseline reference for subsequent assessments.

The technical scope, timelines, and financial aspects of the proposed study are detailed below.

#### **5. Scope of the Work**

The overall scope of the work includes providing expert technical assistance to GHMC and establishing a robust, scientifically defensible monitoring framework, in line with the “Way-Forward” report submitted by IIT Bombay. The study shall be conducted with support from the EPTRI and/or other specialist agencies, wherever required.

The scope includes investigations on decomposed municipal solid waste (DMSW) to assess biomining feasibility, along with assessment of key environmental components such as air quality, leachate management, stormwater management, and surface and groundwater quality. The primary focus shall be on enabling the delinking and decentralization of MSW to minimize the waste reaching Jawahar Nagar.

### **5.1 Phase I-Independent Oversight and Verification**

- a) Review MSW generation and diversion plans. GHMC shall share the proposed options and action plan with IIT Bombay for comments/inputs within seven (7) days, as discussed. GHMC may also involve the Government of Telangana, as new areas have been incorporated recently within GHMC limits.
- b) Recommend measures for delinking and decentralization of MSW to prevent waste from reaching Jawahar Nagar, including the establishment of alternate MSW Processing and Disposal (P&D) facilities and pre-sorting facilities at transfer stations.
- c) Verify progress on the development of alternate MSW facilities.
- d) Oversee waste inflow reduction measures and track progress against agreed actions.
- e) Advise on strengthening environmental monitoring systems, including reviewing the adequacy of existing air-quality management measures and recommending improvements, where required.
- f) Assess leachate management systems, including the integrity and adequacy of the leachate collection network and liner systems; quantification of leachate; treatment and disposal mechanisms; and development of inspection, review, and compliance protocols. Evaluate the efficiency and performance of leachate extraction wells.
- g) Assess the design and adequacy of stormwater management systems, including first-flush capture and treatment provisions.
- h) Conduct surface and groundwater quality assessments, identify potential contamination sources (if any), recommend remedial measures, and develop monitoring protocols.
- i) Develop technical guidelines for safe biomining of capped legacy dumps.
- j) No recommendation on the feasibility of biomining shall be made during this phase.

### **5.2 Phase II (A&B) -Scientific Assessment**

- i. **Phase II A** - Initiation shall be subject to fulfilment of the preconditions, including a **non-destructive integrity assessment** of the capped system, MSW sampling

and characterization, and assessment of landfill gas and leachate behaviour during the first two (02) years of the engagement. The outcome may conclude that biomining is not feasible, or is feasible only under specified conditions, subject to applicable regulatory approvals.

**ii. Phase II B** – Subject to outcome during Phase II A above, further non-destructive integrity assessment of the capped system, MSW sampling and characterization, and assessment of landfill gas and leachate behavior shall be carried out by IIT Bombay **on completion of Phase II A**. The outcome may conclude that biomining is not feasible, or is feasible only under specified conditions, subject to applicable regulatory approvals. ***There will be a separate proposal including financials.***

***5.3 Phase III-Advisory Support (If Applicable):***

To provide technical advisory and a witnessing role **during implementation, if approved and no execution responsibility. There will be a separate proposal including financials.**

**6. Environmental Monitoring and Advisory**

IIT Bombay shall review, advise, and oversee monitoring related to the following:

- a. *Air quality*: Assess the adequacy of existing air quality control measures; periodically review available monitoring data with EPTRI; evaluate operational practices; and recommend and/or develop suitable control mechanisms.
- b. *Leachate generation, collection, treatment, and disposal*: Assess the integrity of the existing leachate collection network for leaks/seepage; quantify leachate generation (including rainfall contribution); and review treatment systems for both legacy and fresh leachate to improve efficiency.
- c. *Stormwater management*: Review the integrity and adequacy of stormwater infrastructure at the MSW P&D facility and recommend diversion and treatment measures, as required.
- d. *Leachate extraction wells and groundwater parameters*: Assess the suitability of existing borewells for leachate/subsurface water extraction and review groundwater quality within a 1 km radius of the MSW P&D facility, in Jawahar Nagar.

- e. *Surface water and groundwater quality (within 1 km radius):* Review water quality data for surface water bodies; identify likely sources; and assess contamination, if any.
- f. *Investigations on the capped dump for biomining feasibility:* Assess the integrity of the capped system; undertake non-destructive testing; support borehole drilling; review DMSW sampling and characterization; assess landfill gas (LFG) generation/trajectory; and review leachate extraction activities.

GHMC may engage independent third-party monitoring agencies, in addition to TGPCB and EPTRI. IIT Bombay shall review and interpret monitoring data for advisory purposes. IIT Bombay will oversee the outcomes and reporting, with support from the Environmental Protection Training & Research Institute (EPTRI). This will be carried out using the relevant data, information, and other details available from the sources mentioned above, as well as information available with IIT Bombay in its capacity as the Independent Engineer for GHMC's Integrated Municipal Solid Waste Management Project. Where required, inputs from specialist agencies will also be engaged.

### **7. Role of CPCB**

GHMC may request CPCB to develop guidelines and methodologies covering: (i) safe uncapping of legacy dumps, (ii) phased biomining, and (iii) pollution prevention and control measures, as discussed during the NGT hearing. If required, IIT Bombay shall provide technical inputs and review from geotechnical and environmental perspectives.

### **8. Duration of Engagement**

The engagement shall be milestone-linked and not binding in calendar terms; however, it shall have an outer limit of two (2) years. IIT Bombay's role is advisory and indicative in nature, and this two-year period represents the maximum advisory window.

### **9. Financials and Payment Terms**

- INR 1.99 Cr., which includes 30% Institute overheads (GST shall be applicable extra as per prevailing norms/tariff).
- 50% payment along with the work order.
- 20% after 12 months from the commencement of work.
- 20% after 18 months from the commencement of work.

- 10% subsequent for submission of final reports and recommendations to various components under the scope of work.
- Project commencement date starts from the day of the first payment receipt.

#### 10. Other Terms & Conditions


- 1) GHMC should instruct the facility operator (M/s Hyderabad Integrated MSW Ltd) and/or EPTRI to provide relevant information on the ground/field.
- 2) GHMC to direct M/s Hyderabad Integrated MSW Ltd to provide an adequate number of helpers (unskilled force) at the site during survey and sampling.
- 3) Permissions required for accessing the site during the entire course of study will be provided by GHMC.
- 4) Temporary on-site accommodation for the site workers (most likely from Mumbai/elsewhere) to be provided to accelerate work and avoid unnecessary commuting.
- 5) Local transportation/logistics to be provided by M/s Hyderabad Integrated MSW Ltd. during the execution of the project.

#### 11. Concluding Statement

This proposal is intended to ensure that Jawahar Nagar is managed strictly in accordance with the directions of the Hon'ble NGT, with progressive decentralisation of MSW, no premature or unsafe biomining, and independent scientific oversight to safeguard environmental and public health interests.

Please feel free to revert with your suggestions/ queries, if any.

Yours sincerely,



**Dr. D. N. Singh** FNAE, FASCE, FICE (UK)

**Editor-in-Chief, Environmental Geotechnics, ICE, UK**

***D.L. Shah Chair Professor for Innovation***

Department of Civil Engineering

Indian Institute of Technology Bombay

Powai, Mumbai- 400 076

[dns@civil.iitb.ac.in](mailto:dns@civil.iitb.ac.in)

Cell: 9820758508

[www.civil.iitb.ac.in/~dns](http://www.civil.iitb.ac.in/~dns).



**LETTER OF ACCEPTANCE CUM WORK ORDER**

From:  
The Commissioner,  
Greater Hyderabad Municipal Corporation,  
4<sup>th</sup> floor, CC complex,  
Lower Tank bund road,  
Hyderabad.  
Telangana-5000 63.

To:  
Dr. D N Singh,  
D.L. Shah Chair Professor for  
Innovation, Dept. of Civil Engineering,  
Indian Institute of Technology, Bombay,  
Powai, Mumbai-400076.  
Mail: dns@civil.iitb.acin

Lr No. SWM /0195/2021/AE-1(SWM)HO/1

Dated: 09.02.2026

Gentleman,

Sub : GHMC - Proposal submitted by you for rendering technical support & advisory services on the issues prevailing at the MSW processing and disposal facility at Jawaharnagar including study of the capped legacy dump for feasibility of bio-mining - Accepted by GHMC -LoA/ Work order issued - Reg.

Ref : 1. T/o Lr No SWM /0195/2021/AE-1(SWM)HO dated 29.12.2025  
2. Proposal of IIT Bombay dated 07.02.2026

\*\*\*\*\*

It is to inform that proposal submitted by you in response to the letter at reference 1<sup>st</sup> cited for rendering technical support & advisory services on the issues prevailing at the MSW processing and disposal facility at Jawaharnagar including study of the capped legacy dump for feasibility of bio-mining with consultancy charges of Rs. 1,99,00,000/- (Rupees One Crore and Ninety Lakhs only) for a duration of (02) years is approved and therefore this Letter of Award (LoA) is issued.

In this regard, you are requested to accept and acknowledge this LoA within (03) days from date of this letter and furnish in the O/o the Superintending Engineer (SWM), GHMC. Further, you are also requested to attend the O/o Superintending Engineer (SWM), GHMC within (07) days for entering into MoU for the consultancy work and immediately start providing services to GHMC and also provide invoice for release of 50% of consultancy charge as part payment

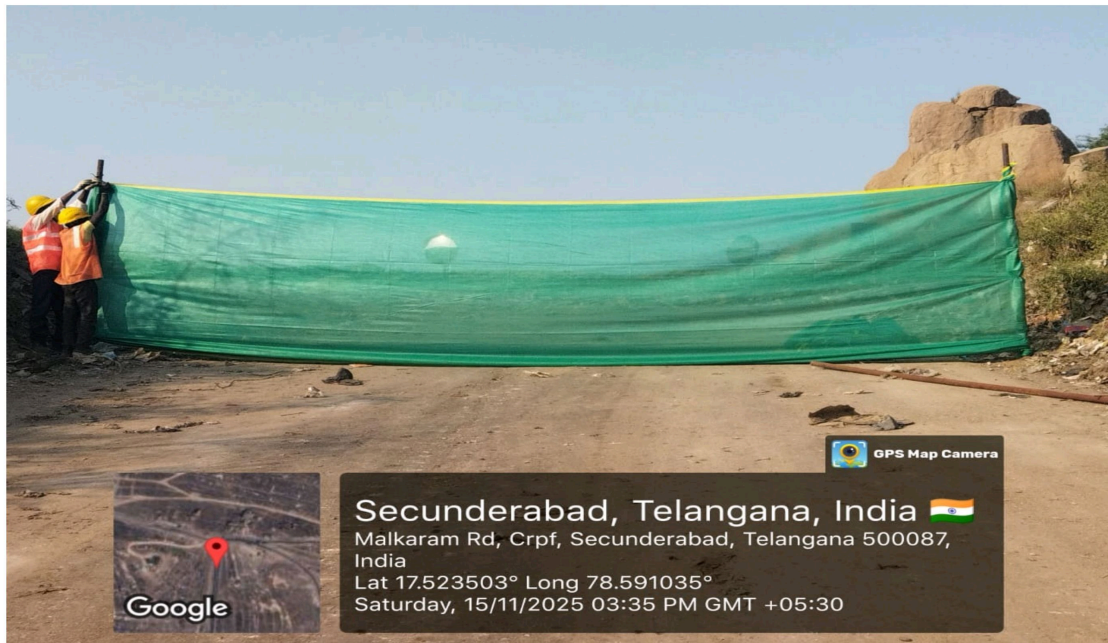
Commissioner, GHMC

*[Handwritten signature]*

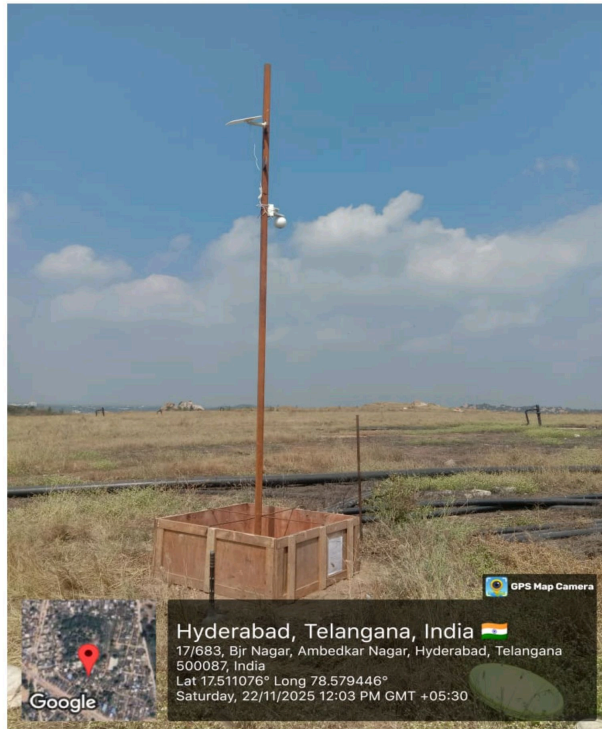
### Annexure VI

Photograph of the Electrical Resistivity Tomography Studies being carried out by IIT Bombay at Jawaharnagar



**Annexure VII****A. Photographs -Barricading the ramp of capped legacy dump to prevent movement of vehicles**

B. Photographs -CCTV installed on top of capped legacy dump for 24 x 7 monitoring







Date: 05/01/2026

To,  
The Registrar,  
National Green Tribunal,  
Southern Zone,  
Chennai – 600 005

**Subject:** Compliance of Order dated 10.11.2025 passed in matter titled Sri. Sankar Narayanan Bala Krishnan & Ors. v. State of Telangana & Ors. bearing O.A. No.199/2021 - Reg.

Dear Sir,

The Hon'ble Bench vide Order dated 10.11.2025, directed Respondent No.9 i.e., the undersigned, to pay a sum of Rs.1,00,000/- (Rupees One Lakh only) in favour of the *National Green Tribunal (Southern Zone) Regular Practitioners' Association* within four weeks.

Therefore, in compliance of the Order dated 10.11.2025, the undersigned is hereby submitting the payment of Rs.1,00,000/- (Rupees One Lakh only) through Demand Draft bearing No.853605, dated 31.12.2025 in favour of National Green Tribunal (Southern Zone) Regular Practitioners' Association.

The Demand Draft is enclosed with this letter.

Kindly acknowledge the receipt of the same and place this compliance on the record of O.A. No. 199/2021.

Thanking You,

Yours Faithfully,  
For Hyderabad Integrated MSW Ltd.,

  
Mahoj Agarwal  
Regional Director, Hyderabad



President  
NGT(SZ) Regular Practitioner s  
Association, Chennai



Hyderabad Integrated MSW Ltd.,  
(Wholly owned subsidiary of Re Sustainability Limited)

Registered Office:  
Level 11B, Aurobindo Galaxy,  
Hyderabad Knowledge City,  
HITECH City Road, Hyderabad-500 081, India.

Site Address:

Survey No. 173, Jawahar Nagar Village, CRPF Road,  
Near Army Dental College, Kapra Mandal,  
Medchal-Malkajgiri District, Hyderabad - 500087, Telangana.  
CIN : U90001TG2009PLC063407

Certificate Registration No. 4410020392797 [ISO 9001 : 2015]  
Certificate Registration No. 4410420392797 [ISO 14001 : 2015]  
Certificate Registration No. 4412620392797 [ISO 45001 : 2018]

T: +91 40 2444 6000  
E: info@resustainability.com

NGT(SZ) Regular Practitioners Association, Chennai President

*Handwritten signature and notes in blue ink.*

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State Bank of India

जारी करने वाली शाखा  
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Key: ROGFIZ

Sr No: 154032

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Tel No.

मांगे जाने पर NATIONAL GREEN TRIBUNAL (SOUTHERN ZONE) REGULAR PRACTITIONERS\*

~~DRAWEEES~~

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मूल्य प्राप्त / VALUE RECEIVED

Name of Applicant

HYDERABAD INTEGRATED MSW LTD



भारतीय स्टेट बैंक

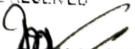
STATE BANK OF INDIA

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कम से कम 3 महीने के लिए वैध  
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जारी करने वाली शाखा / DRAWEE BRANCH: CHENNAI MAIN BR  
का कोड / CODE No. 00800

प्रधिकृत हस्ताक्षरकर्ता  
AUTHORISED SIGNATORY

  
MANU BAJPAI  
PIN No. 7094620  
SE No. 58-422

₹ 1,00,000/- एवं अधिक के निम्न दो अधिकारियों द्वारा जारी किए गए ड्राफ्टों के लिए  
INSTRUCTIONS FOR ₹ 1,00,000/- & ABOVE ARE NOT VALID UNLESS SIGNED BY TWO OFFICERS.

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**Annexure IX**

Photographs of installation of machinery pertaining to presorting facility at Deepthisrinagar intermediate transfer station





5 Mar 2026 4:11:31 pm  
Hyderabad  
Telangana

### Statistics (Calender Year 2025- GHMC)

#### A. Awareness campaigns

Population	:	1,05,28,224 (Estimated projecting with annual growth rate @ 3.5% from 2011 census)
Area in sq. kms	:	625 km <sup>2</sup>
i. Number of households in the city ii. Number of administrative circles in the city iii. Number of administrative wards in the city	:	i. 26,32,056 (estimated)  ii. 30 no's  iii.150 no's
Estimated Quantity of Solid Waste generated	:	The MSW generated at source gets channelized informally viz., home composting, recyclables are segregated by primary collectors, sent to Dry Resource Centers/ Kabadi walas etc, decentralized management by bulk waste, green waste through pit composting in parks etc. Hence the exact quantity of MSW generated is not available and only the quantity reaching the Processing plant is weighed in view of availability of weighbridges at Processing facility. It is assured that the quantity of MSW collected from the sources is completely transported to the Processing & Disposal facility as there are no dumping yards in GHMC.

GHMC has been conducting continuous awareness campaigns since the start of Swachh Bharat Mission to encourage citizen in taking up source segregation, waste reduction, home composting, decentralized waste management, etc.

#### B. Primary and Secondary Collection & Transportation

Quantity of Solid Waste Collected	:	8209 TPD
<b>Vehicles &amp; Equipment:</b>		
Swachh Auto Tippers for D2D collection	:	5014 nos
Mini Tippers		231 nos
RCVs		53 nos.
Loading Equipment (JCBs and Bobcats)		109 nos.

### C. Transfer Station Management & Tertiary Transportation

<b>Vehicles &amp; Equipment:</b>		
Hook End Loaders	:	118
Tipper vehicles ( 25 Ton capacity)	:	26
Loading Equipment (JCBs and Bobcats)	:	6
<b>Hermetically sealed containers</b>		
24 cum capacity	:	260
20 cum capacity	:	54
16 cum capacity	:	25
Transfer Stations / Secondary Collection & Transfer Points	:	48

### D. Processing & Disposal

<b>Jawaharnagar &amp; Dundigal WTE</b>			
Area extent	361 acres (339 acres at Jawaharnagar + 22 acres at Dundigal) Jawaharnagar area utilization:		
	<b>S. No.</b>	<b>Description</b>	<b>Area (in acres)</b>
	1	Legacy Capping	123.86
	2	Sanitary Land Fill	27.53
	3	Compost plant	18.77
	4	Compost plant (CP3)	3.75
	5	Compost plant (CP4)	3.65
	6	RDF storage area	61.08
	7	Leachate ponds, CBG, Boulders area	42.10
	8	Waste Treatment Facility	17.10
	9	Leachate Treatment Plant	3.43
	10	Auxiliary units	19.74
	11	Greenery & Plantation	58.98
		<b>Total</b>	<b>339</b>
			<b>100</b>
Solid waste processing facilities in operation	<p>1) One Integrated Municipal Solid Waste Management plant at Jawaharnagar – 10,000 TPD Processing &amp; Disposal capacity and completely treats the MSW collected from GHMC area and received at site.</p> <p>2) WTE plant at Dundigal</p>		
Activities at Jawaharnagr	<p>1) weighbridge – 3 for MSW vehicles</p> <ul style="list-style-type: none"> <li>- 1 for internal material movement</li> <li>- 1 for weighing RDF and Landfill quantities</li> </ul> <p>2) Trommels - 21 trommels for presorting</p> <ul style="list-style-type: none"> <li>- 8 trommels monsoon shed</li> <li>- 5 Finishing (compost)</li> </ul> <p>4) RDF Manufacturing unit of 1000 TPD capacity for production of higher grade RDF for utilization in cement plants</p> <p>5) Waste to Energy Plant of 48 MW capacity</p> <p>6) 600 KLD capacity leachate treatment plant to</p>		

	<p>completely dispose the leachate generated. The rejects in the form of salts is mixed with RDF and disposed in waste to energy.</p> <p>7) 5 TPD Landfill gas based compressed biogas plant 8) scientific landfill 9) 1 MW roof top solar energy plant 10) NABL accredited laboratory for testing MSW composition, RDF composition, compost composition, leachate parameters, treated water parameters etc.</p> <p>Ongoing capacity enhancement construction works: 1) 300 TPD capacity bio-methanation plant (ready for commissioning) 2) 1MLD leachate treatment plant</p>
Composting	334 TPD
Refuse Derived Fuel	<p>RDF produced: 4302 TPD Qty utilized in WtEs: 2108 TPD Qty sent to cement plants: 124 TPD Qty stored: 2070 TPD</p> <p>Presently, as additional 24 MW Waste to Energy Plant is operational since Nov'2025, total average RDF consumption per day is 3479 TPD and 823 TPD is being stored temporarily.</p> <p>This excess RDF shall also consumed once the WTEs shall be set up at other alternate sites identified for setting up Processing &amp; Disposal Facilities. As per the SWM Rules 2026, GHMC will also push the co-processing and utilization of RDF in cement industries and other authorized end-users to ensure environmentally sound and sustainable disposal.</p>
Waste to Energy (62.5 MW)	<p>No of Units generated : 43.3 MU No of Units exported : 38.4 MU Auxiliary consumption : 4.9 MU</p>
Quantity of waste land filled each day	1256 TPD

#### E. Status of IIT Bombay Research:

Date	Description
29.12.2025	In compliance with Hon'ble NGT orders – GHMC requested IIT Bombay to submit proposal

Date	Description
21 .01.2026 & 22.01.2026	Visit by a team from IIT Bombay led by Prof D N Singh - inspected Jawaharnagar along with other land parcels identified for setting up alternate Municipal Solid Waste (MSW) Processing & Disposal facilities and pre-sorting facilities
07.02.2026	<p>IIT Bombay submitted detailed proposal for “Rendering technical support &amp; advisory services on the issues prevailing at the MSW Processing &amp; Disposal facility at Jawaharnagar including study of the capped legacy dump for feasibility of its biomining”</p> <p>This proposed comprehensive study to be conducted <b>for a period of (02) years has a financial commitment of Rs 1.99 cr</b> and includes the activities of monitoring air quality, leachate management, storm water management, leachate extraction wells, surface &amp; ground water quality and investigations on capped dump for bio-mining feasibility.</p>
09.02.2026	GHMC accepted the proposal and requested IIT Bombay to commence its services
25.02.2026 to 03.03.2026	<p>IIT Bombay conducted Electrical Resistivity Tomography (ERT) studies.</p> <p>A team from IIT Bombay led by Prof D N Singh visited Hyderabad on 02.03.2026 to review the progress of the study being conducted and included additional locations for conducting the tests.</p>
08.03.2026 to 02.04.2026	<p>IIT Bombay conducted Multichannel Analysis of Surface Waves.</p> <p>Further, GHMC has been providing IIT Bombay with the required details such as Auto CAD contour files, leachate extraction data, air quality data, surface and ground water quality data etc.</p> <p>Report from IIT Bombay is awaited.</p>

#### F. Alternate Site identified:

Location	Extent of Area	Status
<b>A. Lands identified and taken over by GHMC</b>		
Siddapur, Ranga Reddy (D)	86 acres	Advanced Possession of Land was taken over by GHMC and the same was handed over to M/s HiMSW on 30.03.2026 for setting up MSW processing plant.
Pyaranagar, Sangareddy (D)	117 acres	<p>Advanced possession of land was taken over by GHMC and the work for setting up the MSW P&amp;D facility started viz., laying approach Road in diverted forest land, boundary wall to the allotted revenue land.</p> <p>However, progress of work is halted in compliance</p>

Location	Extent of Area	Status
		with the orders of the Hon'ble High Court and Hon'ble NGT (SZ).
Dundigal, Medchal Malkajgiri (D)	85 acres 03 guntas	Under review of Government for granting exemption for setting up the facility as it falls under (01) km buffer zone an outer Ring Road
<b>B. Other identified land under pursuance by GHMC with the Authorities concerned</b>		
Khanapur (V), Ranga Reddy (D)	42 acres 22 guntas	Could not be processed due to local protest.
Lakdaram (V), Sangareddy (D)	100 acres	-
Malkapur (V), Yadadri Bhuvanagiri (D)	200 acres	Revenue department has orally informed that the land is not feasible for SWM so a letter was addressed to the District Collector to identify other suitable lands.

Photographs

**A. Sample Photographs of IEC and capacity Building Activities taken up by GHMC towards efficient SWM including waste reduction,:**



a. Unique campaign of Unite the family divides the waste



b. To reduce plastic usage



c. Encouraging in-situ green waste management at Parks.

## B. Primary Collection & Transportation- Door to Door collection



a. Swachh Auto Tippers for Door to Door collection of MSW



b. Monitoring of SATs attendance through QR code attendance GPS



- c. Dry Waste Collection Centers to encourage SAT operators in segregation of MSW at Source.

### C. Secondary Collection & Transportation- From streets bins and GVPs



### D. Transfer Station Management & Tertiary Transportation





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#### E. Activities at Processing and Disposal Facility



Weighbridge



Closed Tipping floor & Pre-sorting facility



Pre-sorting trommels



Windrows for wet waste



## Compost production and packing



RDF Manufacturing plant



Waste to Energy Plant



Waste Water Treatment plant (leachate treatment)



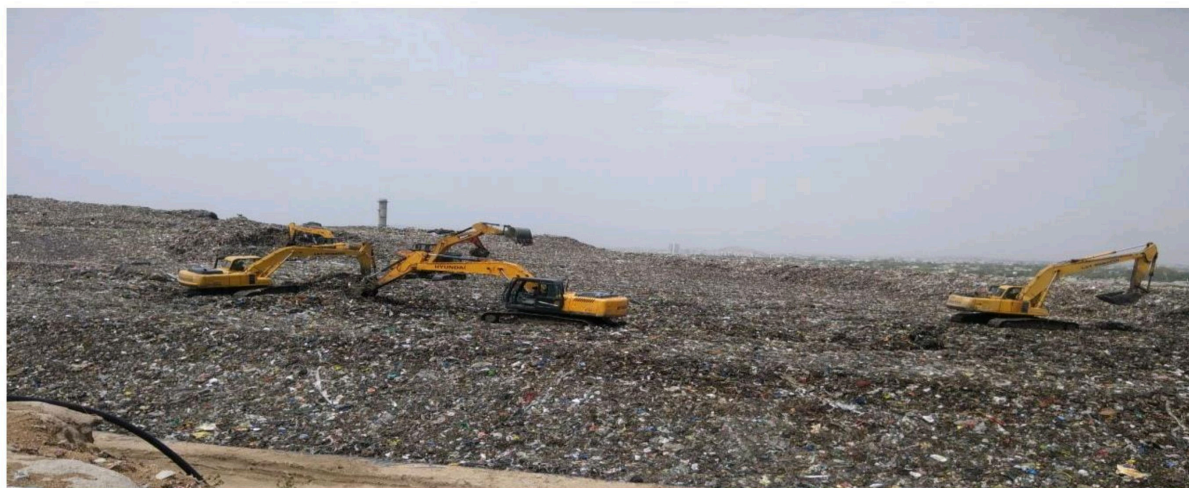
Treated water used for gardening



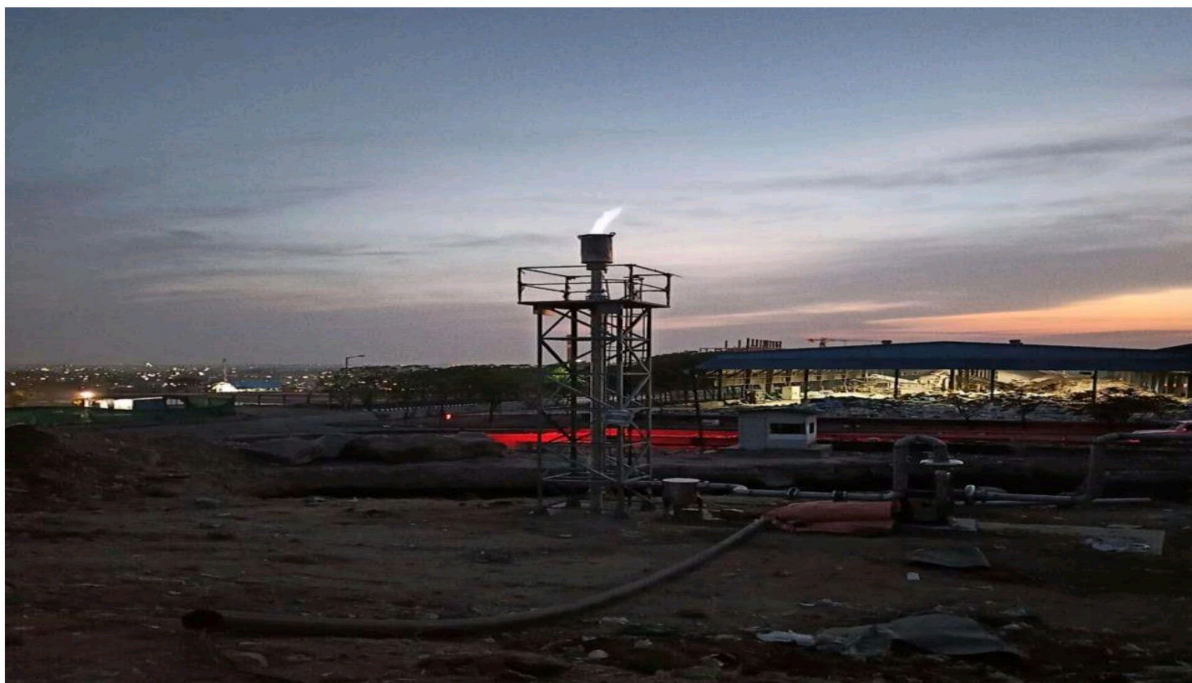
## Landfill gas based bio-methanation plant



Bio-methanation plant (ready to commence operations)



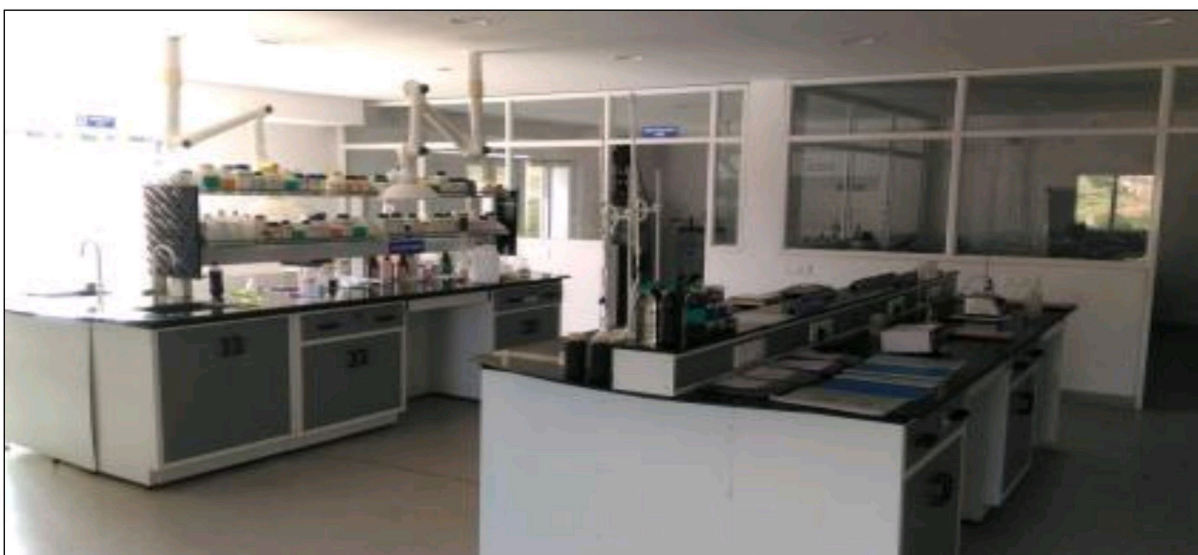
## Scientific landfilling



Flaring of excess landfill gas



1 MW Roof top solar energy plant



## Laboratory

## F. Measures for odor control at Processing &amp; Disposal facility



Spraying through drones



Spraying through fixed misting lines near presorting, composing areas, leachate storage etc



Tarpaulin sheet cover in open areas during monsoon and winter



Temporary cover of operating areas of landfill or RDF storage



Spraying through Fog cannons



Closed shed operations



Hand spraying at accessible areas

**BEFORE THE HON'BLE NATIONAL  
GREEN TRIBUNAL SOUTHERN  
ZONE, CHENNAI**

**O.A. NO. 199 of 2021 (SZ)**

**IN THE MATTER OF:**

Sri. Shankar Narayanan Bala  
Krishnan,  
Telangana and Ors

...Applicants

-vs-

State of Telangana and Ors

...Respondents

**REPORT FILED BY 6<sup>TH</sup> RESPONDENT**

**M/s. D. SREENIVASAN,** E.No. 158/1994

**V. JAIHARISUDHAN,** E.No. 3245/2016

**COUNSEL FOR 6<sup>TH</sup> RESPONDENT**

PH: 95000 19999