

To,
Maridi BioIndustries Pvt Ltd,
Sy No-63/1, Kagaz, Maddur (V),
Narsapur (M), Medak (D).

November 08th, 2022

We are here with enclosing the Comprehensive analysis report of Solid Waste Sample- **Incineration Ash** received on **Date: 04.11.2022**. The disposal method for the above sample is **Landfill after treatment with 5% Lime & 5% Cement**. We are also enclosing the invoice for analysis.


The disposal method purely based on the characteristics of the sample sent to us. When the waste is sent to us it is again analyzed and if the characteristics change the disposal method may change.

Please send your suggestions for improving laboratory services by filling customer feedback form attached herewith.

Thanking you for your business. Please Contact us again if we can be of service in the future. Our fullest Co-Operation and best service assured always.

Yours faithfully

**For Hyderabad Waste Management Project
(A division of Re Sustainability Ltd)**


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

Certificate REG No : 44 100 20392865 [ISO 9001 : 2015]
Certificate REG No : 44 104 20392865 [ISO 14001 : 2015]
Certificate REG No : 44 126 20392865 [ISO 45001 : 2018]

MOEF Approved Laboratory
Ref.No: Q-15018/49/2018-CPW

NABL Accredited Laboratory
[ISO/IEC 17025] Certificate No. TC-5067

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HYDERABAD WASTE MANAGEMENT PROJECT

[A Division of Re Sustainability Limited]



Sustainability

LABORATORY



CERTIFICATE NO. TC. 5067
ANALYSIS REPORT

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Test Report No: TC 5067 22000000498 F-Section-1

Name and address of the client

To,
Maridi BioIndustries Pvt Ltd,
Sy No-63/1, Kagaz, Maddur (V),
Narsapur (M), Medak (D).

Report Date : 08.11.2022

Analysis Completion Date : 08.11.2022

Analysis Starting Date : 04.11.2022

Sampling Date : NA

Sample received Date : 04.11.2022

Sub Contracting of Tests : HWMP LAB was not given subcontracted to any party

Sample Condition : Sample received in Polythene Cover

Sampling Procedure : NA

Sample registration no : C-305/22

Sample description/Code: Incineration Ash

Sample Collected by : Client

Physical Observations:

Parameter	Result
Physical State(Liquid/Slurry/Solid/Semi Solid)	Solid
Color	Grey
Texture	Powder
Waste is Multi layered (Yes/No)	NO
Is there any violent chemical change (in air) (Normally unstable) (Yes/No)	NO
Reacts violent with water (Yes/No)	NO
Generating of toxic fumes with water/acid/basic (Yes/No)	NO
Forms potentially explosive mixture with water (Yes/No)	NO
Explosion when subjected to a strong initiating force (Yes/No)	NO
Explosion at normal temperature & pressure (Yes/No)	NO
Obnoxiously odors release (Yes/No)	NO

TEST RESULT

S.NO	PARAMETER	Unit	Method	Result	Std. for Secure Landfill Disposal
1	Paint Filter Liquid Test	-	SW-846 9095A	Pass	Pass
2	Bulk Density	gm/cc	ASTM D 5057-90	0.87	---
3	pH at 25°C	-	SW - 846 9045C	12.5	4 to 12
4	Flash Point	°C	SW - 846 1020A	>60	60°C
5	Loss on Drying at 105°C	%	APHA 2540	<1.0	---

Checked by
(D.Sanjeva Reddy)
Asst. Manager

Authorized Signatory
(Y.Swathi)
Quality Manager



Hyderabad Waste Management Project
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NABL Scope Parameters

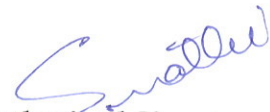
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Test Report No: TC 5067 2200000498 F-Section-1

S.NO	PARAMETER	Unit	Method	Result	Std. for Secure Landfill Disposal
6	Loss on Ignition at 550°C (Dry Basis)	%	APHA 2540	<1	<= 20% Non biodegradable<= 5%: Biodegradable
7	Calorific Value	cal/gm	IS: 1350-1970	<200	<2500
8	Extractable Organics	%	SW-846 3540 C	<1	<4
9	Water soluble inorganic	%	APHA 2540 E	<1	≤ 10% Except Salts
10	Water soluble organics	%	APHA 2540 E	<1	
11	Total Cyanide	mg/Kg	SW - 846 9014	<1	---
12	Reactive Cyanide	mg/Kg	SW - 846 9014	<1	<250
13	Total Sulfide	mg/Kg	SW - 846 9215	<1	---
14	Reactive Sulfide	mg/Kg	SW - 846 9034	<1	<500
15	Total Phenols(WLT)	mg/L	APHA-5530B&D	<1	<100
16	Ammonia as N (WLT)	mg/L	APHA-4500NH ₃ B,C	<1	<1000
17	Fluoride as F(WLT)	mg/L	APHA-4500 F-D	<1	<50
18	Nitrate Nitrogen as N(WLT)	mg/L	APHA 4500 NO ₃ -B	<1	<30
19	Arsenic as As (Total)	mg/Kg	APHA-3500 As B	1.43	---
20	Arsenic as As (TCLP)	mg/L	(USEPA1311) APHA 3120 B	<0.2	<5.0
21	Arsenic as As (WLT)	mg/L	APHA 3120B	<0.05	<1.0
22	Lead (Total)	mg/Kg	SW-846:7420	359.4	---
23	Lead (TCLP)	mg/L	(USEPA1311) APHA 3120 B	<0.1	<5.0
24	Lead (WLT)	mg/L	APHA 3120 B	<0.01	<2.0
25	Cadmium (Total)	mg/Kg	SW 846 - 7130	<0.1	---
26	Cadmium (TCLP)	mg/L	(USEPA1311) APHA 3120 B	<0.1	<1.0
27	Cadmium (WLT)	mg/L	APHA 3120 B	<0.003	<0.2

- Reports pertained only to the submitted sample.
- Test reports shall not be reproduced except in full, without written approval of the laboratory.


Checked by
(D.Sanjeeva Reddy)
Asst. Manager


Authorized Signatory
(Y.Swathi)
Quality Manager



CERTIFICATE NO.TC 5067

NABL Scope Parameters

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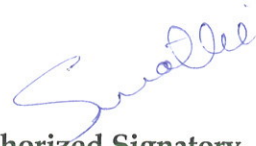
Test Report No: TC 5067 22000000498 F-Section-1

S.NO	PARAMETER	Unit	Method	Result	Std. for Secure Landfill Disposal
28	Total Chromium (Total)	mg/Kg	SW846 - 7190	170.9	---
29	Total Chromium (TCLP)	mg/L	(USEPA1311) APHA 3120 B	1.5	<5.0
30	Hexavalent Chromium(Total)	mg/Kg	SW846-7196A	<5	---
31	Hexavalent Chromium(WLT)	mg/L	APHA 3500 Cr B	<0.05	<0.5
32	Nickel (Total)	mg/Kg	SW846 - 7520	<2.0	---
33	Nickel (WLT)	mg/L	APHA 3120 B	<0.02	<3.0
34	Zinc (Total)	mg/Kg	SW846 - 7950	2134	---
35	Zinc (WLT)	mg/L	APHA 3120 B	13.9	<10
36	Copper (Total)	mg/Kg	SW846 - 7210	4399	---
37	Copper (WLT)	mg/L	APHA 3120 B	<0.05	<10
38	Mercury as Hg (Total)	µg/Kg	SW-846 7471A	<0.2	---
39	Mercury as Hg (TCLP)	µg/L	(USEPA1311) APHA 3120 B	<0.01	<0.2
40	Mercury as Hg (WLT)	µg/L	SW-846 7470A	<0.1	<0.1
41	Total Chlorides as Cl ⁻	%	SW 846 5050	NA	---
42	Total Fluoride as F ⁻	%	SW 846 5050	<0.1	---

NA-Not Applicable

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 Checked by
 (D.Sanjeeva Reddy)
 Asst.Manager


 Authorized Signatory
 (Y.Swathi)
 Quality Manager

Test Report No: TC 5067 22000000498 F-Section-2

S.NO	PARAMETER	Unit	Method	Result	Std. for Secure Landfill Disposal
1	Total Carbon as C	%	CHNS	<1	---
2	Total Hydrogen as H	%	CHNS	<1	---
3	Total Nitrogen as N	%	CHNS	<1	---
4	Total Sulfur as S	%	CHNS	<0.5	---
5	Selenium (Total)	mg/Kg	SW-846: 6010 C	<5	---
6	Selenium (TCLP)	mg/L	(USEPA1311) APHA 3120 B	<0.1	<1
7	Chloroform	mg/L	GC-MS	ND	6.0 mg/L (TCLP)
8	Carbon tetra chloride	mg/L	GC-MS	ND	0.5 mg/L (TCLP)
9	Benzene	mg/L	GC-MS	ND	0.5 mg/L (TCLP)
10	Chloro Benzene	mg/L	GC-MS	ND	100 mg/L(TCLP)
11	1,4 - Dichloro Benzene	mg/L	GC-MS	ND	7.5 mg/L (TCLP)
12	Hexachloro benzene	mg/L	GC-MS	ND	0.13 mg/L (TCLP)
13	Nitro Benzene	mg/L	GC-MS	ND	2.0 mg/L (TCLP)
14	1,2 - Dichloro Ethane	mg/L	GC-MS	ND	0.5 mg/L (TCLP)
15	Hexachloro ethane	mg/L	GC-MS	ND	3.0 mg/L (TCLP)
16	Tetrachloro Ethylene	mg/L	GC-MS	ND	0.7 mg/L (TCLP)
17	Trichloro Ethylene	mg/L	GC-MS	ND	0.5 mg/L (TCLP)
18	1,1 - Dichloroethylene	mg/L	GC-MS	ND	0.7 mg/L (TCLP)
19	Pentachlorophenol	mg/L	GC-MS	ND	100 mg/L(TCLP)
20	2,4,5 - Tri Chlorophenol	mg/L	GC-MS	ND	400 mg/L(TCLP)
21	2,4,6 - Trichlorophenol	mg/L	GC-MS	ND	2.0 mg/L (TCLP)
22	Toxaphene	mg/L	GC-MS	ND	0.5 mg/L (TCLP)
23	Ethyl Methyl Ketone	mg/L	GC-MS	ND	200 mg/L(TCLP)
24	Hexachlorobutadiene	mg/L	GC-MS	ND	0.5 mg/L (TCLP)
25	Pyridine	mg/L	GC-MS	ND	5.0 mg/L (TCLP)
26	Lindane	mg/L	GC-MS	ND	0.4 mg/L (TCLP)
27	Methoxychlor	mg/L	GC-MS	ND	10 mg/L (TCLP)
28	2,4 - Dinitrotoluene	mg/L	GC-MS	ND	0.13 mg/L (TCLP)
29	Heptachlor(and its epaoxide)	mg/L	GC-MS	ND	0.008 mg/L(TCLP)
30	Endrin	mg/L	GC-MS	ND	0.02 mg/L (TCLP)
31	2,4,5 - TP (Silvex)	mg/L	GC-MS	ND	1.0 mg/L (TCLP)
32	Vinyl Chloride	mg/L	GC-MS	ND	0.2 mg/L (TCLP)
33	2,4 - D	mg/L	GC-MS	ND	10.0 mg/L (TCLP)
34	Chlordane	mg/L	GC-MS	ND	0.03 mg/L (TCLP)
35	Cresols	mg/L	GC-MS	ND	200 mg/L(TCLP)
36	Xylene	mg/L	GC-MS	ND	0.32 mg/L(TCLP)

ND: Not Detected

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