

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

Principal Bench, New Delhi

Original Application No. 514/2018

In the matter of: -

Vivek Kamboj

Applicant(s)

Vs.

Union of India & Ors.

Respondent(s)

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3.	Annexure-I: Test report of compost dated 23.11.2020.	
4.	Annexure-II: Test report of segregated combustible factions dated 20.11.2020.	
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Divy.

(Divya Sinha)

Scientist-E

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

Date: 14.01.2021

Place: Delhi

CENTRAL POLLUTION CONTROL BOARD, DELHI

January 11, 2020

STATUS REPORT IN THE MATTER OF O.A NO. 514 OF 2018; TITLED VIVEK KAMBOJ & ANR. VS UNION OF INDIA & ORS

1.0 BACKGROUND: -

Vide Order dated 30.09.2020 in the matter of O.A No. 514 of 2018; titled Vivek Kamboj & Anr. Applicant(s) Versus Union of India & Ors (regarding bio mining of Bandwari dumpsite), Hon'ble National Green Tribunal directed as follows:

Para 10: --“ CPCB may also give its independent report of status as on 31.12.2020 particularly with regard to ground water contamination and proper manifest system for treatment of leachate at identified STP, quality of inert material used for filling the low-lying area and duly authorized agencies receiving the material for further processing/recycling by mail likewise.

2.0 Action taken by CPCB: -

In compliance of Hon'ble NGT's Order in the matter, CPCB officials inspected Bandhwari dumpsite on January 8,2020 along with Municipal Corporation of Gurugram (MCG) officials.

3.0 Observations:

An overview of the observations made during the inspection is as follows:

3.1 Treatment of legacy waste:

- 9 trommels of capacity 300 TPD each having screen size of 6mm, 16 mm and 35 mm are installed. At the time of inspection, all the 9 trommels were not in operation due to continuous rain last week causing wet waste.
- Total 1,17,214 Ton legacy waste has been bio remediated till 31-12-2020 out of total 33 lakh Ton dumped and only approx. 66,982 Ton bio remediated legacy waste has been processed through trommels in last more than one year.

- CPCB had earlier inspected this dumpsite on 18-9-2020 and at that time, height of dumpsite was informed 36 m and total dumped waste was 31 lakh Ton. Presently, as informed, highest point of dumpsite is 40 m and quantity of total waste dumped is increased to approx. 33 lakh Ton as fresh waste @ 2000 TPD is still being dumped at site and in its comparison less quantity of waste is being bio mined.
- In December 2020, average quantity of bio mined waste per day is approx. 900 Ton whereas installed capacity for bio mining is 2700 TPD through 9 trommels. **MCG is not able to utilize full installed capacity of trommels as disposal of screened fractions is a major issue being faced creating space constraint at site.** As informed, so far only 25,325 MT screened fractions (compost, SCF, inerts etc.) have been utilized/disposed.
- Height of one front side heap of waste has been reduced to 29 m from 36 m earlier. **(Photo 1).**

3.2 Quality of different screened fractions (Inerts, Compost & SCF) and their disposal: -

Till date, as informed, approx. 66,982 MT bio-remediated waste has been segregated into:

- Compost/good earth soil- 12713 MT
- Segregated combustible fractions (SCF)- 27283 MT
- Inerts-26986 MT

3.2.1 Compost/Good Earth soil:

- Out of 12,713 MT segregated good earth soil, 8,015 MT has been utilized by horticulture department of MCG and remaining is laying on site.
- As per the test report (**Annexure-I**) of this fraction, the fraction complies with the limits for most of the parameters including limits specified for Total Organic Carbon (TOC), pH, C/N ratio, Nitrogen, heavy metals specified for Organic Compost as specified in Schedule II of SWM Rules 2016 except limits for Chromium, P₂O₅ and K₂O. It may be utilized for purposes other than growing food crops.

3.2.2 Segregated combustible fractions (SCF):

- Out of 27,283 MT segregated SCF, 2170 MT has been utilized by four agencies duly authorised by MCG in cement plants and Waste-to-Energy plant and remaining is laying on site.
- As per the test report (**Annexure-II**) of SCF fraction , it complies with the limits for most of the parameters including limits specified for net calorific value, moisture content , ash content, Sulphur content as specified in MoHUA Guidelines on Usages of RDF under Segregated Combustible Fraction (SCF) except Chlorine content.

3.2.3 Inerts:

- Out of 26,986 MT segregated inerts, 15,140 MT inerts have been utilized on site as well as for filling low lying areas and remaining is laying on site.
- Testing of this fraction has been carried out by MCG and report is placed at **Annexure-III**. As per this report, heavy metal content in inerts are within the prescribed limit specified for Organic Compost in Schedule II of SWM Rules 2016 except for Mercury.

3.3 Manifest system for treatment of Leachate at identified STP:

- It was informed that 350 KLD leachate is generated from dumped waste and is collected in 7 ponds having total capacity of 36000KLD and presently 20,800 KL leachate is filled in these 7 ponds. During last inspection in September,2020, quantity of leachate stored in ponds was 33000 KL. Thus quantity of leachate stored in ponds has reduced.
- Treatment of leachate is being carried out @ 550 KLD in two DTRO plants and one Dissolved Air Flotation (DAF) based treatment plant which were in operation at the time of inspection.
- Online monitoring system has been provided for treated leachate through DTROs and manual testing is done in DAF based treatment plant. Test reports (**Annexure-IV**) of treated leachate are meeting the Standards for treated leachates specified in Schedule II of SWM Rules 2016.

- Treated leachate is pumped to tankers for transporting to STP at Berhampur for final disposal. Daily 10-12 trips of these tankers (8 and 24 KL) is made to the STP.
- Two copies of disposal slips (**Annexure-V**) having information on vehicle no., capacity, date, time and signatures are issued by MCG and sent with tankers. One copy is kept by STP operator and another duly signed copy acknowledged by STP operator is returned to MCG, Bandhwari.

3.4 Ground water contamination:

Steps for decontamination of Ground Water have not been taken by MCG as the dumpsite is active due to following reasons:

- Dumping of fresh waste@ 2000 TPD generating leachate.
- Dumping of 33 lakh Ton non-bio remediated waste.

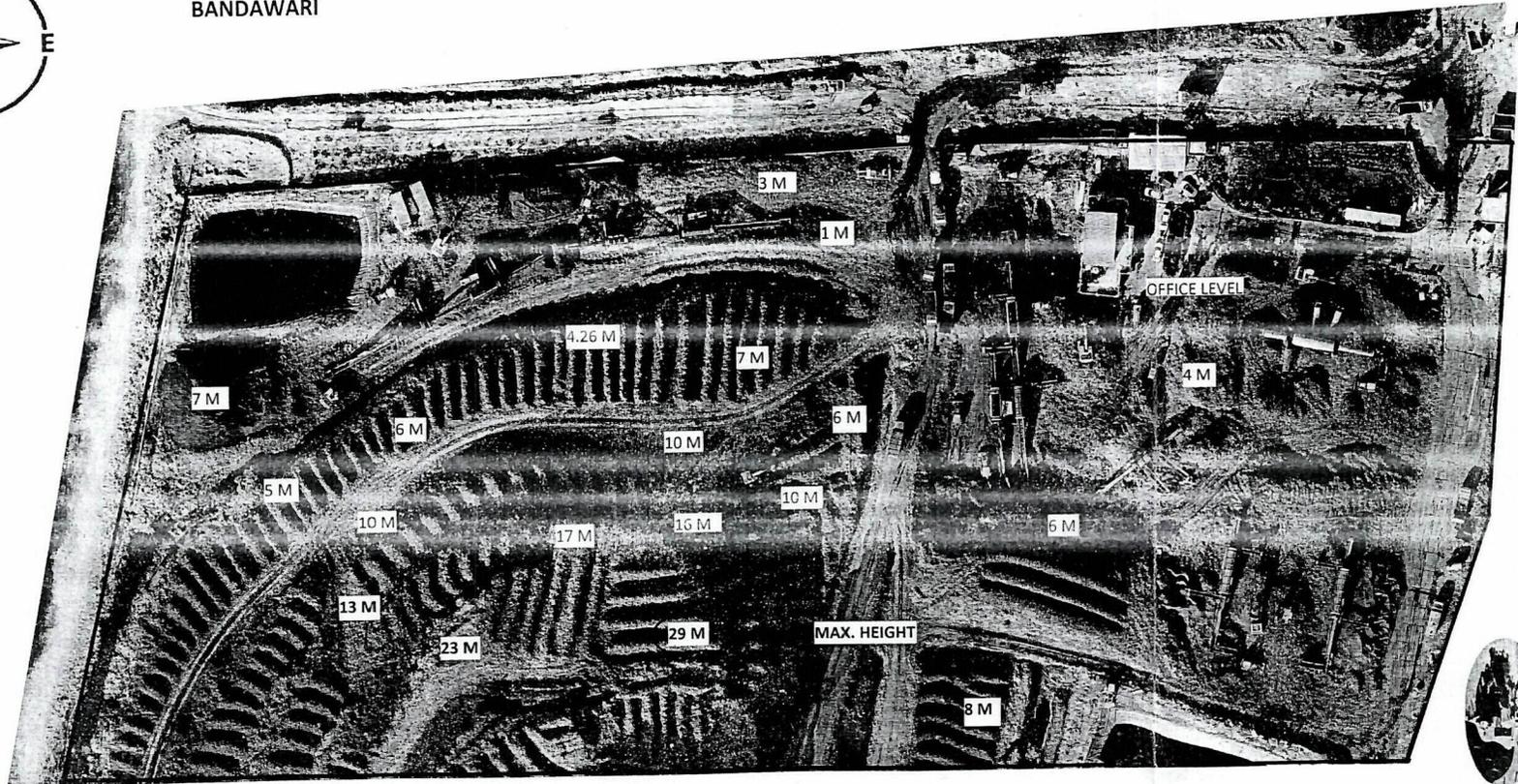
Ground water decontamination may be done after removal of contaminating sources.

3.5 New identified sites for treatment & disposal of fresh waste:

As informed, treatment & disposal of fresh MSW by Municipal Corporations of Gurugram and Faridabad at new identified sites at Farukkh Nagar and Sihi could not be undertaken due to public protest. Fresh waste@2000 TPD is still being dumped at Bandhwari site.



GURUGRAM-FARIDABAD DUMP YARD
BANDAWARI



MAX. ELEVATION = 29 METRE
REFERENCE : OFFICE LEVEL
LEVEL (0.0M)
EXPECTED ERROR : +3% TO
AREA MARKED = 4.42 HECT
= 10.92 /
BIO REMEDIATION AREA =
= 4.94 /



7th Dec 2020

Front side heap
Top View



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH: DELHI
 (A unit of Shriram Scientific and Industrial Research Foundation)
 19, University Road, Delhi-110007 Telephone: 27667267, 27667860 Fax: 91-011-27667676
ANNEXURE TO TEST CERTIFICATE NO.-C1/0000236654, DATED-23/11/2020



Job Order No. 2010-1-INC-3824

S. No.	Test Parameter	Observation	Test Results		Conformity (City Compost)	
			As per FCO 1985 amended upto 2019			
			Conformity (PROM)		Requirements	Status
1	Colour	Dark Brown	-	-	-	-
2	Odour	Absence of foul odour	-	-	-	-
3	pH of solution (1:5 Ratio)	7.3	6.7 Max.	No	6.5 - 7.5	Yes
4	Moisture Content ,(at 65 ± 1°C) % by weight	17.5	25 Max.	Yes	25 Max.	Yes
5	Particle Size ,% by weight (material passing through 4.0mm IS Sieve)	98	90 Min.	Yes	90 Min.	Yes
6	Bulk Density ,g/cm ³	0.9	1.6 Max.	Yes	<1.0	Yes
7	Conductivity,ds/m (1:5 Ratio)	3.6	8.2 Max.	Yes	4 Max.	Yes
8	Total Organic Carbon,% by weight (on dry basis)	12.2	7.9 Min.	Yes	12 Min.	Yes
9	Total Nitrogen (as N), % by weight	1.1	0.4 Min.	Yes	-	-
10	Total Phosphate (as P ₂ O ₅),% by weight	0.3	10.4 Min.	No	-	-

S. K. Singh
 23/11/20



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH: DELHI
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ANNEXURE TO TEST CERTIFICATE NO.-C1/0000236654, DATED-23/11/2020



Job Order No. 2010-1-INC-3824

11	Total Potash (as K ₂ O), % by weight	0.2	0.8 Min.	No	-	-
12	Total of Nitrogen (as N), Phosphate (as P ₂ O ₅) and Potash (as K ₂ O), % by weight	1.6	-	-	1.2 Min	Yes
13	C: N ratio	11.1	< 20	Yes	< 20	Yes
14	Heavy metal content ,mg/kg:-					
(a)	Arsenic (as As ₂ O ₃) on received basis	1.9	10 Max.	Yes	10 Max.	Yes
(b)	Mercury (as Hg), on dry basis	BDL (Detection Limit 0.1 mg/kg)	0.15 Max.	Yes	0.15 Max.	Yes
(c)	Cadmium (as Cd), on dry basis	2	5 Max.	Yes	5 Max.	Yes
(d)	Copper (as Cu), on dry basis	152	300 Max.	Yes	300 Max.	Yes
(e)	Nickel (as Ni), on dry basis	30	50 Max.	Yes	50 Max.	Yes
(f)	Zinc (as Zn), on dry basis	252	1000 Max.	Yes	1000 Max.	Yes
(g)	Lead (as Pb), on dry basis	5	100 Max.	Yes	100 Max.	Yes
(h)	Chromium (as Cr), on dry basis	113	50 Max.	No	50 Max.	No
(i)	E. Coli (Cfu/gm)	Absent	-	-	-	-

BDL denotes Below Detection Limit

Remark: The sample should be considered as city compost. However the value for chromium is exceeding the specified limit in FCO.

S. K. Singh
3712



TEST CERTIFICATE

NO : C1/0000236289

Issued To :	Date	: 20-11-2020
Client Code : (GURG01M1316)	Job No	: 2010-1-185-3836
MUNICIPAL CORPORATION	Booking No	: RG2021/1/6254
GURUGRAM	Booking Date	: 30-10-2020
EXECUTIVE / ASSISTANT	Customer Ref No.	: MEMO NO.
ENGINEER (SWM)	AE(SWM)/MCG/2020/30065	
	Customer Ref Dt.	: 08-10-2020

GURUGRAM
HARYANA-122002
Kind Attn: -A.E.

Sample particulars:

ONE SEALED SAMPLE DESCRIBED AS RDF,SAMPLING DONE BY SRI STAFF ON 29.10.2020 IN THE PRESENCE OF CUSTOMER'S REPRESENTATIVE MR. RAJESH SHARMA (J.E.),M.C.G.,SUB: TESTING OF FRACTION (RDF COMPOST) RECEIVED AFTER BIOMINING TREATMENT FROM TROMMEL MACHINE. MEMO NO. AE (SWM)/MCG/2020/30065 . DATE 08/10/2020. NAME & ADDRESS OF THE CUSTOMER :- ASSISTANT ENGINEER (SWA),MCG. LOCATION: BALLASTIC SEPARATOR, NEAR LTP, ECOGREEN , BANDHWARI PLANT. SEALED THUS **(SRI)** WAS RECEIVED.

(The sample particulars provided in the certificate are based on declaration by the sponsor.)

Job order no:-2010-1-185-3836

RESULTS

S. No.	Name of Parameters	Observed Value	Protocol Used
1.	*Ultimate Analysis,% by mass (Sun Dried Basis)		
	a) Ash Content	18.07	IS: 1350 (Pt-I) 1984,RA-2019 Guidelines
	b) Carbon Content	61.76	ASTM D 5373-14,Guidelines
	c) Hydrogen Content	6.89	ASTM D 5373-14,Guidelines
	d) Nitrogen Content	11.84	ASTM D 5373-14,Guidelines
	e) Sulphur Content	0.22	ASTM D 4239-17(mehtod B),Guidelines
	f) Oxygen Content (By difference)	1.22	By Calculation
2.	Proximate Analysis,% by mass (Sun Dried Basis)		IS: 1350 (Pt-I) 1984,RA-2019 Guidelines
	a) Moisture (Inherent)	3.23 ✓	
	b) Ash	18.07 ✓	
	c) Volatile Matter	51.37 ✓	
	d) Fixed Carbon (By difference)	27.33 ✓	
3.	Total Moisture content,% by mass (As Received Basis)	21.09	IS: 1350 (Pt-I) 1984,RA-2019 Guidelines
4.	Gross Calorific Value,Kcals/kg (Sun Dried Basis)	6640	IS: 1350 (Pt-II) 2017,Guidelines
5.	Net Calorific Value,Kcals/kg (Sun Dried Basis)	6290	IS: 1350 (Pt-II) 2017,Guidelines
6.	Gross Calorific Value,Kcals/kg (As Received Basis)	5410	IS: 1350 (Pt-II) 2017,Guidelines
7.	Net Calorific Value,Kcals/kg (As Received Basis)	5030	IS: 1350 (Pt-II) 2017,Guidelines

AUTHORISED SIGNATORY

EMPLOYEE CODE:(8423)

GC-01(Rev-05)

Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

SRI-C1 (Rev. 03)

See overleaf for terms & conditions



TEST CERTIFICATE

NO : C1/0000236289

8.	Bulk Density, Kg/m ³ (As Received Basis)	288	ASTM D-5057-2017, Guidelines
9.	Carbon/Nitrogen Ratio (Sun Dried Basis)	1 : 0.192	By Calculation
10.	Chemical Analysis % by mass (On Ash Basis)		IS:1350 (P-1) 1984, RA-2013, IS:1355-1984, RA-2009, ASTM D-3682-01, RA-2006 & 6349-09, By AAS & ICP, ASTM D 808-2016, Guidelines
	a. Aluminium as Al ₂ O ₃	3.17	
	b. Calcium as CaO	7.31	
	c. Iron as Fe ₂ O ₃	4.52	
	d. Magnesium as MgO	1.04	
	e. Silica as SiO ₂	63.82	
	f. Sodium as Na ₂ O	15.75	
	g. Potassium as K ₂ O	1.65	
	h. Sulphate as SO ₃	0.01	
	i. Titanium as TiO ₂	0.41	
	j. Phosphorous as P ₂ O ₅	0.32	
	k. Vanadium as V ₂ O ₅	0.01	
	l. Chloride as Cl	1.21	
	m. Copper as CuO	0.03	
	n. Cadmium as CdO	less than 0.01	
	o. Zinc as ZnO	0.09	
	p. Nickel as NiO	0.01	
	q. Lead as PbO	0.01	
	r. Chromium as Cr ₂ O ₃	0.02	
	s. Barium as BaO	0.04	
	t. Manganese MnO ₂	0.01	
	u. Loss on Ignition	0.23	
11.	Heavy Metals, ppm (Sun Dried Basis)		ASTM D-3682-01, RA-2006 & 6349-09, By AAS & VGA
	a. Arsenic as As	2.74	
	b. Mercury as Hg	0.57	
	c. Selenium as Se	0.09	

Note: * Hydrogen & Oxygen include H & Ox of sample moisture in Ultimate analysis.

D.O.R. :- 30.10.2020
D.O.C. :- 29.11.2020


AUTHORISED SIGNATORY
EMPLOYEE CODE: (3423)

GC-01 (Rev. 05) 2/2
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SRI-C1 (Rev. 03)



DELHI ANALYTICAL RESEARCH LABORATORY

(A GOVERNMENT APPROVED & ISO 9001 : 2008 CERTIFIED TESTING LABORATORY)

Plot No. 2, Timber Block, Jhilmil Industrial Area, Delhi-110095

NABL Approved, MOEF Approved & Fssai Approved Laboratory

E-mail : darltesting@gmail.com, info@darltesting.org, Ph. : 011-43545890, 09717324010

TEST REPORT

REPORT NO.	820201217M001	DATE OF RECEIPT	17/12/2020
ISSUED TO.	DAYA CHARAN & COMPANY D-2/96, Janak Puri, New Delhi - 110058.	TEST STARTED ON	17/12/2020
		DATE OF REPORTING	23/12/2020
		ISSUE OF TEST REPORT	23/12/2020
SUBMITTED BY	DAYA CHARAN & COMPANY D-2/96, Janak Puri, New Delhi - 110058.	REF.NO.	N.S.
		SAMPLE QTY.	1 kg
		BATCH NO.	N.S.
SAMPLE NAME.	INNERT TROMMEL	MFG :- N.S	Exp :- N.S

Description:- One sample of "INNERT TROMMEL" was submitted by party on dated - 17/12/2020.

SN	Parameter	Unit	Result	Test method
1	Colour	--	Brek	FOC - 1985
2	Odour	--	Odourless	FOC - 1985
3	Moisture	%	6.21	FOC - 1985
4	Bulk Density	gm/cm ³	0.92	FOC - 1985
5	C/N Ration	--	3.1	FOC - 1985
6	pH Value (1:2)	--	4.98	FOC - 1985
7	Conductivity(as dsm-1)	dsm	0.2	FOC - 1985
8	Pathogens	/gm	Nil	FOC - 1985

Heavy Metal Content

10	Arsenic(as As)	mg/kg	0.052	DARL/SOP/CHEM/INST/AAS/16
11	Cadmium (as Cd)	mg/kg	1.24	DARL/SOP/CHEM/INST/AAS/16
12	Chromium (as Cr)	mg/kg	18.12	DARL/SOP/CHEM/INST/AAS/16
13	Copper(as Cr)	mg/kg	35	DARL/SOP/CHEM/INST/AAS/16
14	Mercury (as Hg)	mg/kg	0.55	DARL/SOP/CHEM/INST/AAS/16

Handwritten signature: Hemu
EE SBM

Handwritten signature: Joul
Assistant Engineer
MC, Gurugram



DELHI ANALYTICAL RESEARCH LABORATORY

(A GOVERNMENT APPROVED & ISO 9001 : 2008 CERTIFIED TESTING LABORATORY)

Plot No. 2, Timber Block, Jhilmil Industrial Area, Delhi-110095

NABL Approved, MOEF Approved & Fssai Approved Laboratory

E-mail : darltesting@gmail.com, info@darltesting.org, Ph. : 011-43545890, 09717324010

TEST REPORT

REPORT NO.	820201217M001	DATE OF RECEIPT	17/12/2020
ISSUED TO.	DAYA CHARAN & COMPANY D-2/96, Janak Puri, New Delhi - 110058.	TEST STARTED ON	17/12/2020
		DATE OF REPORTING	23/12/2020
		ISSUE OF TEST REPORT	23/12/2020
SUBMITTED BY	DAYA CHARAN & COMPANY D-2/96, Janak Puri, New Delhi - 110058.	REF.NO.	N.S.
		SAMPLE QTY.	1 kg
		BATCH NO.	N.S
SAMPLE NAME.	INNERT TROMMEL	MFG :- N.S	Exp :- N.S

15	Nickle (as Ni)	Mg/kg	19.98	DARL/SOP/CHEM/INST/AAS/16
16	Lead (as Pb)	Mg/kg	26.12	DARL/SOP/CHEM/INST/AAS/16
17	Zinc (as Zn)	Mg/kg	89.12	DARL/SOP/CHEM/INST/AAS/16
18	Ash Contain	Mg/kg	26.21	DARL/SOP/CHEM/INST/AAS/16

Note: 1. BLQ:- Below Limit of Quantification

2. Figure in bracket indicate limit of quantification

REPORT REMARK: Party asked for above test only.

Signature of Analyst



ARIHANT ANALYTICAL LABORATORY PVT. LTD.

(NABL Accredited Laboratory)

Annexure IV

272, Phase-IV, Sec-57, HSIIDC, Kundli, Sonapat-131028 (Haryana)
 Ph. : 7082301442, 9250014551 Email : aalkundli@gmail.com
 Website : www.aalkundli.com

TEST CERTIFICATE

Page 1 of 1

Issued To:

M/s Ecogreen Energy Gurgaon-Faridabad Pvt. Ltd.
 Unit No.228-236, Tower-A, Space I-Tech Park,
 Sector-49, Gurgaon - 122 018 (HR)

Report No. AAL WQT-20201103008

Sample Description:

One sample described as **DTRO Outlet Water**, Source:
 Stage-1, DTRO-2 Bandhwari Plant, Gurgaon, Marked
 As: "DTRO Water 1st Stage" was received.

Date of Receiving: 03/11/2020
 Date of Starting: 03/11/2020
 Date of Completion: 10/11/2020
 Date of Reporting: 10/11/2020

TEST RESULT

S. No.	Test parameters	Unit	Results	Testing Method
1	pH Value	-	6.34	IS 3025(P-11)-1983
2	Dissolved Solids (Inorganic)	mg/l	314.0	IS 3025 (P-18)-1984
3	Total Suspended Solids	mg/l	ND (DL=5.0)	IS 3025 (P-17)-1984
4	Biochemical Oxygen Demand (BOD - 3 days at 27°C)	mg/l	ND (DL=5.0)	IS 3025(P-44)-1993
5	Chemical Oxygen Demand (COD)	mg/l	18.0	IS 3025(P-58)-2006
6	Total Kjeldahl Nitrogen (as N)	mg/l	19.6	IS 3025(P-34)-1988
7	Ammonical Nitrogen (as N)	mg/l	14.2	IS 3025(P-34)-1988
8	Cadmium (as Cd)	mg/l	ND (DL=0.1)	IS 3025(P-41)-1992
9	Arsenic (as As)	mg/l	ND (DL=0.05)	IS 3025(P-37)-1988
10	Cyanide (as CN)	mg/l	ND (DL=0.05)	IS 3025(P-27)-1986
11	Lead (as Pb)	mg/l	ND (DL=0.05)	IS 3025(P-47)-1994
12	Zinc (as Zn)	mg/l	ND (DL=0.05)	IS 3025(P-49)-1994
13	Chromium (as Cr)	mg/l	ND (DL=0.2)	IS 3025(P-52)-2003
14	Nickel (as Ni)	mg/l	ND (DL=0.1)	IS 3025(P-54)-2003
15	Copper (as Cu)	mg/l	ND (DL=0.1)	IS 3025(P-42)-1992
16	Mercury (as Hg)	mg/l	ND (DL=0.01)	IS 3025(P-48)-1994
17	Fluoride (as F)	mg/l	ND (DL=0.1)	IS 3025(P-60)-2008
18	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	ND (DL=0.01)	IS 3025(P-43)-1992
19	Chlorides (as Cl)	mg/l	76.0	IS 3025(P-32)-1988

ND=Not Detected, DL=Detection Limit Note: - (*) Test parameters are not covered under NABL Scope

****End of Report****

Ashutosh Srivastava
Ashutosh Srivastava
 (SR. ANALYST)
 Authorised Signatory

Note: 1. The Result Indicated above refer to the tested sample and listed test parameters only endorsement of products is neither inferred nor implied



ARIHANT ANALYTICAL LABORATORY PVT. LTD.

(NABL Accredited Laboratory)

272, Phase-IV, Sec-57, HSIIDC, Kundli, Sonapat-131028 (Haryana)
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Website : www.aalkundli.com

TEST CERTIFICATE

Page 1 of 1

Issued To: M/s Ecogreen Engergy Gurgaon-Faridabad Pvt. Ltd.
Unit No.228-236, Tower-A, Space I-Tech Park,
Sector-49, Gurgaon - 122 018 (HR)

Report No. AAL WQT-20201103009

Sample Description: One sample described as **DTRO Outlet Water**, Source:
Stage-2, DTRO-2 Bandhwari Plant, Gurgaon, Marked
As: "DTRO Water 2nd Stage" was received.

Date of Receiving: 03/11/2020
Date of Starting: 03/11/2020
Date of Completion: 10/11/2020
Date of Reporting: 10/11/2020

TEST RESULT

S. No.	Test parameters	Unit	Results	Testing Method
1	pH Value	-	7.42	IS 3025(P-11)-1983
2	Dissolved Solids (Inorganic)	mg/l	62.0	IS 3025 (P-18)-1984
3	Total Suspended Solids	mg/l	ND (DL=5.0)	IS 3025 (P-17)-1984
4	Biochemical Oxygen Demand (BOD - 3 days at 27°C)	mg/l	ND (DL=5.0)	IS 3025(P-44)-1993
5	Chemical Oxygen Demand (COD)	mg/l	5.0	IS 3025(P-58)-2006
6	Total Kjeldahl Nitrogen (as N)	mg/l	4.6	IS 3025(P-34)-1988
7	Ammonical Nitrogen (as N)	mg/l	3.2	IS 3025(P-34)-1988
8	Cadmium (as Cd)	mg/l	ND (DL=0.1)	IS 3025(P-41)-1992
9	Arsenic (as As)	mg/l	ND (DL=0.05)	IS 3025(P-37)-1988
10	Cyanide (as CN)	mg/l	ND (DL=0.05)	IS 3025(P-27)-1986
11	Lead (as Pb)	mg/l	ND (DL=0.05)	IS 3025(P-47)-1994
12	Zinc (as Zn)	mg/l	ND (DL=0.05)	IS 3025(P-49)-1994
13	Chromium (as Cr)	mg/l	ND (DL=0.2)	IS 3025(P-52)-2003
14	Nickel (as Ni)	mg/l	ND (DL=0.1)	IS 3025(P-54)-2003
15	Copper (as Cu)	mg/l	ND (DL=0.1)	IS 3025(P-42)-1992
16	Mercury (as Hg)	mg/l	ND (DL=0.001)	IS 3025(P-48)-1994
17	Fluoride (as F)	mg/l	ND (DL=0.1)	IS 3025(P-60)-2008
18	Phenolic Compound (as C ₆ H ₅ OH)	mg/l	ND (DL=0.01)	IS 3025(P-43)-1992
19	Chlorides (as Cl)	mg/l	13.6	IS 3025(P-32)-1988

ND=Not Detected, DL=Detection Limit Note: - (*) Test parameters are not covered under NABL Scope

****End of Report****

Ashutosh Srivastava
Ashutosh Srivastava
(SR, ANALYST)
Authorised Signatory

eco green Ecogreen Energy Pvt. Ltd.		
Bandhwari Plant, Gurgaon-Faridabad Road, Gurugram, Haryana		
LTP /DTRO TREATED WATER TRANSFER SLIP		Slip No:- 2551
From <i>Bandhwan</i>	To <i>Baharampur</i>	Vehicle No. :- <i>HR55 Q6999</i>
		Vehicle Capacity:- <i>24 KL</i>
		Date & Time:- <i>1/12/20 - 12:15 AM</i>
Description:		
LTP/ DTRO Treated Water from Bhanwari Plant to <i>Baharampur S.T.P</i>		
Issued By	Received By	Approved By
<i>Ary</i>	<i>Anil</i>	

eco green Ecogreen Energy Pvt. Ltd.		
Bandhwari Plant, Gurgaon-Faridabad Road, Gurugram, Haryana		
LTP /DTRO TREATED WATER TRANSFER SLIP		Slip No:- 2552
From <i>Bandhwan</i>	To <i>Baharampur</i>	Vehicle No. :- <i>HR3841830</i>
		Vehicle Capacity:- <i>8.6 KL</i>
		Date & Time:- <i>1/12/20 - 1:05 AM</i>
Description:		
LTP/ DTRO Treated Water from Bhanwari Plant to <i>Baharampur S.T.P</i>		
Issued By	Received By	Approved By
<i>Ary</i>	<i>Anil</i>	

eco green Ecogreen Energy Pvt. Ltd.		
Bandhwari Plant, Gurgaon-Faridabad Road, Gurugram, Haryana		
LTP /DTRO TREATED WATER TRANSFER SLIP		Slip No:- 2553
From <i>Bandhwan</i>	To <i>Baharampur</i>	Vehicle No. :- <i>HR55 Q6999</i>
		Vehicle Capacity:- <i>24 KL</i>
		Date & Time:- <i>1/12/20 - 3:15 AM</i>
Description:		
LTP/ DTRO Treated Water from Bhanwari Plant to <i>Baharampur S.T.P</i>		
Issued By	Received By	Approved By
<i>Ary</i>	<i>Anil</i>	

ecogreen Ecogreen Energy Pvt. Ltd.

Bandhwari Plant, Gurgaon-Faridabad Road, Gurugram, Haryana

LTP /DTRO TREATED WATER TRANSFER SLIP

From	To	Slip No:- 2556
Bandhwari	Baharampur	Vehicle No. :- HR55 Q6999
		Vehicle Capacity:- 24 KL
		Date & Time:- 1/12/20 - 2:10 PM

Description:

LTP/ DTRO Treated Water from Bhanwari Plant to Baharampur S.T.P

Issued By	Received By	Approved By
<i>Arj</i>	<i>Anil</i>	

ecogreen Ecogreen Energy Pvt. Ltd.

Bandhwari Plant, Gurgaon-Faridabad Road, Gurugram, Haryana

LTP /DTRO TREATED WATER TRANSFER SLIP

From	To	Slip No:- 2558
Bandhwari	Baharampur	Vehicle No. :- HR38 Y1830
		Vehicle Capacity:- 8.6 KL
		Date & Time:- 1/12/20 - 10:15 AM

Description:

LTP/ DTRO Treated Water from Bhanwari Plant to Baharampur S.T.P

Issued By	Received By	Approved By
<i>Arj</i>	<i>Anil</i>	

ecogreen Ecogreen Energy Pvt. Ltd.

Bandhwari Plant, Gurgaon-Faridabad Road, Gurugram, Haryana

LTP /DTRO TREATED WATER TRANSFER SLIP

From	To	Slip No:- 2557
Bandhwari	Baharampur	Vehicle No. :- UP 83 T 5271
		Vehicle Capacity:- 30 KL
		Date & Time:- 1/12/20 - 8:25 AM

Description:

LTP/ DTRO Treated Water from Bhanwari Plant to Baharampur S.T.P

Issued By	Received By	Approved By
<i>Arj</i>	<i>Anil</i>	

Item No. 04

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

(By Video Conferencing)

Original Application No. 514/2018
(Earlier O.A. No. 415/2015)

Vivek Kamboj & Anr.

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 30.09.2020

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S. P. WANGDI, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Applicant(s): Mr. Rahul Choudhary, Advocate

Respondent(s): Mr. Rahul Khurana, Advocate
Mr. Vinay Pratap, Commissioner, MCG
Mr. Raj Kumar, Advocate for CPCB

DR. Shamsuddin, Advocate in I.A. 232/2020 & 233/2020

ORDER

1. The issue for consideration is the remedial action, as per statutory rules, for the legacy waste dumped at *Bandhwari* landfill site, near Gurgaon. The waste dumped is from Gurgaon and Faridabad. Inaction of the authorities in scientific management of the waste has resulted in leachate being discharged, causing contamination of the ground water, polluting surface water and also polluting the air, with potential for damage to the public health and the environment.

2. The Tribunal has been monitoring the remedial action by the Municipal Corporation, Gurgaon in the last four years and has

repeatedly found failure of the authorities in performing their basic responsibility, to effectuate the right of the citizens to clean environment.

3. It will be suffice to refer to the last two orders dated 19.11.2019 and 27.02.2020, finding the action taken to be highly inadequate. On 20.11.2019, the Tribunal directed:

*“6. Accordingly, we have further considered the matter in the light of affidavit filed on behalf of Municipal Corporation, Gurgaon on 13.11.2019 to the effect that **two trommels machines are being installed with the capacity of 300 TPD each which will work in double shifts. More machines will be installed as soon as more space will be available.***

*7. We are of the view that there is need to take further meaningful and prompt action by preparing **an appropriate action plan and executing it so as to clear the legacy waste in shortest possible time but within six months. This timeline is being fixed in view of long time which has already gone in the process.** It may be ensured that bio-remediation is carried out rather than mere mechanical separation. **Failure to comply may result in coercive action, including stoppage of salaries and entries in ACRs of concerned Municipal Commissioners.** Municipal Commissioner, Gurgaon may file progress report as on 15.01.2020 by 20.01.2020 by e-mail at judicial-ngt@gov.in. CPCB may evaluate whether clearance of legacy is being done as per applicable guidelines and furnish a report before the next date by e-mail at judicial-ngt@gov.in.”*

4. Thereafter, the Municipal Corporation, Gurgaon filed the progress report dated 26.02.2020 indicating its action plan. The relevant extract from the progress report is as follows:-

“3. Treatment and disposal of fresh MSW by Municipal Corporations of Gurugram and Faridabad, (hereinafter called as "MCG" & "MCF"):-

- i. in order to reduce pressure at the Bandhwari Landfill Site due to combined disposal of approximate 1900 metric tons per day of fresh MSW from both the Corporations, it has been decided by both the Corporations to scientifically process fresh waste at new sites, so that legacy MSW at Bandhwari site can be treated within the timeline mention by this Hon'ble Tribunal. This has been necessitated by lack of available space at Bandhwari site to handle both Fresh & Legacy MSW simultaneously.*
- ii. That to process the approximate 1900 Metric tons of fresh MSW daily within the jurisdiction of both Corporations, in scientific*

manner as prescribed by SWM Rules 2016 and CPCB, it has been decided that from 15th March 2020 onwards fresh MSW of both Corporations will be transported and bio-remediated for 4-5 weeks at the new identified site.

- iii. That the possession of the new identified sites have been taken by both the Corporations in their respective jurisdictions for scientific treatment and disposal of fresh MSW, copy of both are annexed herewith. **(Annexure R/1 and R/2)**
- iv. That the layout plans of the both fresh MSW processing facilities have been prepared by both Corporations for the execution of work and the same is annexed herewith **(Annexure - R/3 & R/4)**
- v. That as per guidelines of CPCB, sites are being lined up with HDPE membrane and the proposed combined processing capacity of both sites is (1200 MT from MCG + 900 MT from MCF) = 2100 TPD. Work for treatment of fresh MSW is proposed to be done by both Corporations on their own through assistance of solid waste management experts. The schedule of deployment of trommels at the new sites for bio-mining of bio-remediated fresh MSW is as under:

For Gurugram:-

Sr. No.	Schedule	Schedule of Deployment
1	Trommel 1 (Capacity of 300 TPD in single shift).	On or before 11 th March 2020
2	Trommel 2 (Capacity of 300 TPD in single shift).	On or before 25 th March 2020
3	Trommel 3 (Capacity of 300 TPD in single shift).	On or before 5 th April 2020
4	Trommel 4 (Capacity of 300 TPD in single shift).	On or before 19 ^h April 2020

For Faridabad

Sr.No.	Schedule	Schedule of Deployment
1	Trommel 1 (Capacity of 300 TPD in single shift).	On or before 11 th March 2020
2	Trommel 2 (Capacity of 300 TPD in single shift).	On or before 25 th March 2020
3	Trommel 3 (Capacity of 300 TPD in single shift).	On or before 5 th April 2020

- vi. Considering the future annual increase of 5% in waste generated within both Corporations, the above proposed

processing capacity at both sites will be sufficient for next 3 years.

- vii. *That bio remediation of fresh MSW is expected to start from 15th March 2020 onwards, as per the CPCB guidelines for bio-stabilization through windrow methodology and spray of bio culture. After the fresh MSW is stabilised for 4-5 weeks in windrows, bio-mining will start from 15th April 2020 onwards, however, installation of trommels will start from 11th March onwards. Till the time stabilized waste is ready for bio-mining, the waste processing capacity will be of 2100 TPD. Further, by adopting the CPCB guidelines for bio-stabilization of fresh waste it will be ensured that minimum leachate is generated and necessary steps for safe collection of same will be done at the processing site. The collected leachate will be transported to CETP, Manesar (Gurugram) and CETP, Sector-25 (Faridabad) respectively for scientific treatment and final disposal,*
- viii. *Both the Corporations have already done arrangements for disposal of byproduct, which will be generated after bio-mining process, such as :*
- *Refuse—Derived Fuel (RDF) will be sent to nearby cement kilns and Waste to Energy plants*
 - *C&D waste recovered from bio-mining will be sent to C&D waste processing plant of MCG, which is situated next to the site of proposed MSW processing plant.*
 - *100 % reuse of compost in parks, gardens, dividers etc. under the jurisdiction of MCG & MCF*

4. Treatment of Legacy MSW at Bandhwari:-

- i. *That from 15th March 2020 onwards fresh MSW will not be transported to Bandhwari by both Municipal Corporation Gurugram and Municipal Corporation Faridabad.*
- ii. *That considering the legacy MSW at the site, which is approximately 27.5 Lacs MT, the MCG will immediately install necessary processing capacity / infrastructure to the tune of 1800 TPD within next 45 days for treatment of legacy MSW, which will be further enhanced as per below given schedule.*
- iii. *That further segregated fraction of Refuse-Derived Fuel (RDF) and compost of around 5000 MT, which was stored at Bandhwari site has been removed with immediate effect to create additional space for installation of additional processing capacity of 1200 TPD. Compost has been utilized for horticulture by MCG and RDF has been channelized to nearby cement kilns and Waste-to-Energy plants.*
- iv. *That additionally 2 DTROs (Disc-type Reverse Osmosis units) have been made operational at site with leachate processing capacity of 400 KLD. With the current processing capacity 4-5 acres of space occupied by leachate storage ponds will also be cleared in next 4 months and additional space will be created for further installation of processing capacity as per the below mentioned schedule.*

- v. That further, to treat total 27.5 lakhs MT within timeline as directed by this Hon'ble Tribunal, the revised schedule/action plan has been prepared for installation of higher processing capacity at Bandhwari site by MCG for treating legacy waste in shortest possible time. Currently 02 trommels of 600 TPD are operational at site and process of installation of additional 02 trammels with 600 TPD capacity will be completed by 3rd week of March 2020. The revised action plan for installation of additional capacity for treating legacy MSW is as under:-

Sr. No.	Trommel Machine Installation Time	No. of working Trommels	Capacity of each trommel (TPD)	Waste to the Bio remediation (In Ton)	Waste to the bio-mined by working in two shift (In Ton)
1	March 2020	4	300 TPD	100000	72000
2	April 2020	6	300 TPD	150000	108000
3	May 2020	8	300 TPD	200000	144000
4	June 2020	10	300 TPD	250000	180000
5	July 2020	12	300 TPD	300000	216000
6	August 2020	14	300 TPD	350000	252000
7	September 2020	16	300 TPD	400000	288000
8	October 2020	18	300 TPD	450000	324000
9	November 2020	20	300 TPD	500000	360000
Total				27,00,000	19,44,000

- vi. The above revised action plan has been made considering that the weight of dumped legacy MSW will be reduced by 40% after proper stabilisation and bio-remediation and the reduced weight will be processed through bio-mining.
- vii. That as per the direction of this Hon'ble Tribunal, MCG will undertake processing of legacy MSW on its own through assistance of solid waste management experts instead of further relying on the concessionaire.
- viii. That in pursuance to the detailed environmental damage cost assessment report submitted by CPCB and NEERI before this Hon'ble Tribunal, the contents of which are being examined in detail by state government for suitable remedial actions, MCG undertakes to discharge its due responsibility to prevent future potential environmental damage by ensuring compliance of safeguards prescribed under SWM Rules 2016 and CPCB guidelines.”

5. Accordingly, vide order dated 27.02.2020, the Tribunal directed as follows:-

“4. In view of the above, we direct that further steps be taken in the matter in terms of the above plan and status as on 15.06.2020 may be brought on record by 20.06.2020 by email at judicial-ngt@gov.in.

5. **We also direct that the CPCB and the State PCB may oversee the execution of the above action plan and file its independent report by 30.06.2020 by email at judicial-ngt@gov.in.** Nodal agency will be the CPCB

6. We are also informed that issue of contamination of ground water is also involved. **The CPCB may give its report about the steps taken in the matter so far and further steps required to be taken in its next report.** The CPCB will be at liberty to give directions for the remediation steps which may be taken by the Municipal Corporation, Gurgaon and the said Corporation may take such steps accordingly.”

6. Accordingly, the Municipal Corporation has filed status report as on 15.06.2020 and an additional status report dated 29.09.2020. We may refer to the additional status report which is the latest as follows:-

“3. That in compliance of order dated 27.02.2020 status report dated 20.06.2020 as on 15.06.2020 was filed before this Hon'ble Tribunal for treatment of legacy waste stating that 02 Trommels are currently operational at the site and **07 Trommels machines for processing of MSW will be installed by 15 July, 2020.** Further 30000 MT of waste has been bio-remediated and 12000 MT of waste has been processed into segregated fraction out of which 6500 MT has been removed from the site. **It was further prayed to grant extension of 03 months in terms of action plan dated 26.02.2020 (to requisite timeline) due to extraordinary situation developed due to COVID-19 lockdown w.e.f 25.03.2020 affecting production of trommels and availability of manpower.**

4. Updated action taken cum progress report of legacy waste processing and infrastructure till 28.09.2020 is summarized as below:-

I. At present 8 trommel machines of 300 TPD each are currently operational at the site and 01 trommel of 300 TPD is under installation. Photos of operational Trommels machines are attached as **Annexure - R/1.**

- II. That around 88,500 MT of waste has been bio-remediated till date. Around 31,348 MT of bio—remediated waste is ready for bio-mining.
- III. Further around 21,453 MT of waste has been processed /bio mined into segregated fraction of Refuse Derived Fuel (RDF), compost and inert.
- IV. That segregated fraction of compost, Refuse-Derived Fuel (RDF) and inert of around 20,000 MT has been removed from site till date. MCG has authorized agency which regularly collects SCF/RDF from MSW site and transports to cement industry/ Waste to Energy Plants. Copy of work order dated 09.03.2020 is attached as **Annexure - R/2.**
- V. That MCG will shortly allot work order for establishment of Tin shed over an area of 1 acres of land at Bandhwari for which tender was floated on dated 11.07.2020. After allotment of work order it is expected that establishment of Tin shed will be completed within 3 months so that bio-remediated material can be stored properly and processing work may not be hampered due to rain. This land was reclaimed after processing and clearing of leachate storage ponds through 02 DTROs (Disc-type Reverse Osmosis units) operational at site.

5. Treatment and disposal of Fresh MSW by Municipal Corporation Faridabad and Gurugram (hereinafter called as "MCG" & "MCF"):-

- I. Municipal Corporation Faridabad:-It** is stated boundary wall of MSW fresh waste site at village Sihi is completed and work of HDPE lining along with laying of pipeline around the facility for collection of leachate is in process and will be completed soon. E-tenders has been called for establishment of trommel machines and same will be opened on 01.10.2020. Copy of status of work and time line for installation of trommel of MCFis attached as **Annexure R/3.**
- II. Municipal Corporation Gurugram :-As** stated in progress report dated 20.06.2020 in relation with transportation and processing of fresh MSW at Farruknagar site, MCG is unable to take possession till date due to large scale protests, Civil Revision No. 1936 of 2020 titled as Rishipal & Ors. Vs. Municipal Committee, Farrukhnagar has also been filed before the Hon'ble Punjab and Haryana High Court, Chandigarh against Judgment dated 02.06.2020 in C.M Appeal No. 01 of 2020 passed by Ld. Additional District Judge, Gurugram and now the matter is listed on 06.10.2020. Further the same matter is also

*subjudice before this Hon'ble Tribunal as OA No. 171/2020 titled as Poonam Yadav Vs M.C. Farrukhnagar & Ors. in which Hon'ble Tribunal vide order dated 21.08.2020 directed District Magistrate Gurugram and Haryana State Pollution Control Board to furnish factual and action taken report on various alleged allegations of applicant. (Copy of relevant order of Hon'ble High Court Punjab and Haryana and order dated 21.08.2020 of Hon'ble National Green Tribunal, New Delhi are attached as **Annexure R/4**).*

III. *MCG has also explored possibilities of transporting and processing of fresh waste in neighboring areas of Mewat i.e village Karoli. Possession of the site has been taken, layout for the same is already prepared and infrastructure work order is finalized. However again due to large public protest and apprehension of disturbance of law and order in the area further progress could not be carried forward. The constant negotiation with local people is being carried out by MCG with assurance that as soon as treatment of legacy waste is completed at Bandhwari and the waste disposal plant is operational, MCG will start transporting and processing waste at Bandhwari. MCG is actively engaging the protestors/local leaders to reach at a solution amicably. Copy of various newspaper report is attached as **Annexure R/5**.*

6. *That it is humbly submitted that in compliance of aforesaid directions issued by this Hon'ble Tribunal, answering respondent is making all efforts to take steps, for management of Municipal Solid Waste and treatment of legacy waste. As already stated earlier in progress report dated 20.06.2020 due to prevailing circumstances of COVID — 19, extension of 3 months may kindly be granted to requisite timeline in terms of action plan filed on 26.02.2020.”*

7. The perusal of the above shows that the remediation presently happening is by employing eight machines of 300 TPD each i.e. 2400 TPD per day. Per day fresh generation of the waste which is arriving at the site is 2000 TPD. Thus, the situation is far from satisfactory. The number of the trommel machines needs to be suitably increased, apart from other steps. While the Commissioner, Municipal Corporation, Gurgaon, present in person through Video Conferencing, has stated the number of machines is likely to increase to 20 and the Corporation is

open to examine appropriate increase, we are of the view that having regard to the long pending problem and need for expeditious action, suitable increase of machines, preferably upto 50 or more is required to be explored, in phases, if not immediately. We understand that sufficient numbers of machines are now available and the Ahmedabad and Indore Municipal Corporations have hired number of machines for similar activity. The Municipal Corporation, Gurgaon may interact with the said Corporations where similar work has been executed with better speed. The Municipal Corporation may ensure that since presently the trommels are being operated on generator sets which may be detrimental to the environment, alternative arrangement of dedicated electricity supply for the purpose may be made at the earliest, preferably within two months. We are told that there is a monitoring at the State Level also. We expect the Additional Chief Secretary, Local Bodies and the Commissioner, Municipal Corporation to jointly oversee the expeditious execution of the remediation activity, using such coercive authority as may be necessary against non-performing officers or agencies employed for the work. The priority of the Corporation has to be expeditious removal of the waste in a scientific manner, in the interest of public health and the environment. It is made clear that if there is inadequate progress even in the further extended time, the Tribunal may have to require the personal presence of the Chief Secretary and pass necessary coercive orders.

8. We may also consider the report filed by the CPCB on 24.09.2020.

The information given in tabular form is as follows:-

“Table 1: Overview of the CPCB observations vis-a-vis action plan of MCG

Sl. No.	Major points of action plan dated 26-2-2020 of Municipal Corporation, Gurugram	Observations made by CPCB and HSPCB
1	Treatment of fresh waste	
1a	Treatment & disposal of fresh MSW by Municipal Corporations of Gurugram and Faridabad at new identified sites at Farukkh Nagar and Sihi	<ul style="list-style-type: none"> • As informed it could not be undertaken at Farukh Nagar site due to public protest. • At Sihi site, boundary wall and foundation to install trommels are being constructed, but no lining system has been done provided as per Schedule-I of Solid Waste Management Rules, 2016. This site was also inspected on 18-9-2020.
1b	No fresh waste dumping at Bandhwari site from 15th March, 2020.	Fresh waste @ 2000 TPD is still being dumped at Bandhwari site.
2	Treatment of legacy waste at Bandhwari	
2a	16 working September, 2020	<ul style="list-style-type: none"> • 8 trommels of capacity 300 TPD each having screen size of 6mm, 16 mm and 35 mm are operational in one shift and 1 more trommel is under installation. (Annexure-11). • Operation is not continuous, only 1 or 2 trommels were in operation till 15 September, 2020 that also for short time.
2b	17.5 lakh ton legacy waste to be bio remediated by September, 2020	Only 0.85 lakh MT waste has been Bioremediated and out of it, 0.20 Lakh MT has been passed through trommels, Remaining 0.65 lakh MT stabilized waste is not screened and dumped on

		site.
2c	Take-off of segregated fractions (Compost, RDF, Inerts).	<ul style="list-style-type: none"> • Remediated Waste is segregated into RDF, Inert and compost. • As informed, approx. 3000 MT Compost is sent for use in parks and 9000 MT RDF to WTE & cement plant. 8000 MT Inerts has been sent for use in filling low lying areas. • Testing of screened fractions has not been done since last 7 months.

9. The observations in the report are:-

“CPCB had earlier inspected this dumpsite on 4th Feb,2020 and at that time height of dumpsite was informed 27 m and total dumped waste was 27.5 lakh Ton. **Presently, as informed, height of dumpsite is increased to 36 m and quantity of total waste dumped is increased to approx. 31 lakh Ton as fresh waste @ 2000 TPD is still being dumped at site and Only 20,000 T bio remediated legacy waste has been processed through trammels in last one year which is less than 1 % of total dumped waste at site.**

Waste stabilization of both fresh and legacy waste through bio-remediation is being practiced at Bandwari dumpsite.

For channelization and disposal of RDF and plastic waste, MCG has issued Work Order (Annexure-III) dated 09.03.2020 to M/S Rapidue Technologies Pvt. Ltd. Further it was informed that MCG is in process of undertaking an agreement with M/S Ultratech Cement for disposal of RDF. It was observed that **utilization/disposal of different screened fraction is still a major issue being faced creating space constraint at site.**

Presently, leachate is being stored in 7 ponds and its treatment is being carried out @ 400 KLD in two DRTO plants which were in operation at the time of inspection and another treatment plant based on activated sludge and Dissolved Air Flotation (DAF) of 150 KLD capacity was under maintenance. Thus, **total capacity of .2, leachate treatment plants is 550 KLD and**

it was informed that 350 KLD leachate is generated from dumped waste and 33000 KL leachate is filled in 7 ponds.

If all the three leachate treatment plants are run continuously at full capacity, 7 ponds having 33000 KLD leachate may be emptied out in $33000/200= 165$ days and space may be used for installation of more no. of trommels and Waste to Energy plant (for which Environmental Clearance has been obtained in November, 2019).

The bio-remediation is being carried out in the open. No shed has been provided in the bio-remediation and trammel area in absence of which work may be hampered during rain.”

10. The above observations show that the information given by the Corporation is not based on ground reality. The observations in the CPCB report be implemented by the Municipal Corporation, Gurgaon and further action report filed in the matter before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF. CPCB may also give its independent report of status as on 31.12.2020 particularly with regard to ground water contamination and proper manifest system for treatment of leachate at identified STP, quality of inert material used for filling the low-lying area and duly authorized agencies receiving the material for further processing/recycling by mail likewise.

List again on 18.01.2021.

A copy of this order be forwarded to the Chief Secretary, Haryana, Additional Chief Secretary, Local Bodies, Haryana and the CPCB by e-mail for compliance.

I.A. No. 232/2020 and I.A. No. 233/2020 have been filed with suggestions against shifting of the site. The applicants are at liberty to give suggestions to the concerned authority which may be duly considered. The I.A.s are disposed of.

I.A. No. 689/2019 has been filed for remediation of ground water in and around the waste site and health check of the concerned effected inhabitants. This aspect may also be looked into by the Municipal Commissioner, Gurgaon on its own merit. I.A. No. 689/2019 is accordingly disposed of.

Adarsh Kumar Goel, CP

S. P. Wangdi, JM

Dr. Nagin Nanda, EM

September 30, 2020
Original Application No. 514/2018
(Earlier O.A. No. 415/2015)
(I.A. No. 689/2019, I.A. No. 232/2020& I.A. No. 233/2020)
SN