



Office of Environmental Enforcement,
South East Region,
Environmental Protection Agency,
P.O. Box 3000,
Johnstown Castle Estate,
Co. Wexford

31st March 2010

RE: 2009 Annual Environmental Report - Greenstar Ltd. - Gorey, Co. Wexford –
Reg. No. W0220-01

Dear Sir / Madam,

Please find enclosed, on behalf of Greenstar Ltd., an original and 2 no. copies of the Annual Environmental Report completed at the above referenced facility for 2009. The AER file has been uploaded to the EPA website and is a true copy of the original Annual Environmental Report. The AER/PRTR emissions data reporting workbook has also been uploaded to the EPA website.

If you have any queries, please call me.

Yours sincerely,

A handwritten signature in blue ink that reads 'Michael Watson'.

Michael Watson

0904809/MG/MW

Encs.

c.c. Ms Suzanne Byrne, Greenstar Ltd.,
Mr. Sean Doran, Greenstar Ltd.



ANNUAL ENVIRONMENTAL REPORT

GREENSTAR LIMITED.

GOREY BUSINESS PARK, GOREY

COUNTY WEXFORD

LICENCE NO. W0220-01

JANUARY 2009 – DECEMBER 2009

Prepared For: -

Greenstar Ltd.,
Unit 6,
Ballyogan Business Park,
Ballyogan Road,
Sandyford,
Dublin 18.

Prepared By: -

O' Callaghan Moran & Associates,
Granary House,
Rutland Street,
Cork.

31st March 2010

Project		Annual Environmental Report 2009		
Client		Greenstar Ltd. W0220-01		
Report No	Date	Status	Prepared By	Reviewed By
0480905	29/03/2010	Draft	Martina Gleeson PhD	Michael Watson MA.
0480905 Rev A	31/03/2010	Final Issue	Martina Gleeson PhD	Michael Watson MA.

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1. INTRODUCTION

This is the 2009 Annual Environmental Report (AER) prepared for the Greenstar Ltd. (Greenstar), waste transfer facility at Gorey Business Park, Ramstown, Gorey, county Wexford. The AER is required by conditions of Waste Licence Register No.W0220-01, which was issued by the Environmental Protection Agency (Agency) on 1st September 2006. This AER describes site activities from the 1st January 2009 to the 31st December 2009.

The contents of the AER is based on Schedule F of the Waste Licence and the report format follows guidelines set in the “Draft Guidance on Environmental Management Systems and Reporting to the Agency” issued by the Agency¹.

¹ EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

2. SITE DESCRIPTION

2.1 Waste Management Activities

The facility is a non-hazardous waste transfer facility, where wastes are processed and treated to recover recyclable materials thereby minimising the quantity of waste disposed to residual landfill. The Licence allows Greenstar to accept and process 30,000 tonnes of waste per annum.

2.1.1 Waste Types

The facility is licensed to accept the following waste types, which are specified in Schedule A of the Licence: -

- Household Waste (18,000 tonnes),
- Commercial & Industrial and Construction & Demolition (12,000 tonnes).

2.1.2 Waste Handling

Incoming waste is unloaded inside the transfer shed, separated into fractions that are then compacted and loaded onto trailers for transfer off-site to appropriately licensed recovery and disposal facilities. A front loader and grab loader are used to handle the waste.

3. EMISSION MONITORING

Greenstar implements the environmental monitoring programme specified in the Licence to assess the significance of emissions from site activities. The programme specified in the licence includes groundwater, surface water (discharge from holding tank to percolation area), waste water removed off-site and noise monitoring. Surface water runoff is now directed to a wastewater holding tank and has been incorporated into the waste water monitoring programme as agreed with the Agency. The monitoring locations are shown on Figure 3.1.

The monitoring programme is carried out in accordance with the frequency specified in the Licence. The monitoring results are submitted to the Agency at quarterly intervals. An overview of the results of the monitoring results is presented in this Section, with summary tables included.

3.1 Surface Water/ Waste Water Programme

Surface water generated by rainfall on the paved open yard areas discharges via a petrol/oil interceptor to a waste water holding tank and is removed off site to Rilta Environmental in Dublin.

The Licence requires the monitoring of each consignment of surplus water from the holding tank. On the 27th May 2008 the Agency agreed to reduce the frequency of monitoring from sampling each consignment to quarterly sampling and the parameters should include chloride, ammonia and COD (Ref: W0220-01/ap01eok.doc). The bi-annual monitoring for metals and organohalogens remains the same. The results are consistent with dilute waste water which is suitable for acceptance at a waste water treatment plant. The results are included on Table 3.1.

Table 3.1 Waste Water Results 2009

Parameter	Units	Q1 '09	Q2 '09	Q3 '09	Q4 '09
pH	pH Units	8.17	6.8	7.5	7.45
Conductivity	mS/cm	0.901	0.174	0.383	0.226
COD	mg/l	110	14	49	55
Total Ammonia	mg/l	<0.02	0.28	1.93	<0.2
Chloride	mg/l	108.7	8.6	21.8	7.7
Mercury	mg/l	-	<0.001	-	<0.001
Arsenic	mg/l	-	<0.0025	-	<0.0025
Cadmium	mg/l	-	<0.005	-	<0.0005
Chromium	mg/l	-	<0.0015	-	<0.0015
Copper	mg/l	-	<0.007	-	<0.007
Nickel	mg/l	-	0.002	-	0.003
Selenium	mg/l	-	<0.003	-	<0.003
Zinc	mg/l	-	0.01	-	0.007
VOC	µg/l	-	<4	-	<5
SVOC	µg/l	-	<10	-	<10

3.2 Ground Water Monitoring

The Licence requires annual groundwater monitoring. There is an on-site well (MW-1), which was installed to provide both a potable and process water supply. Testing of the well indicated that it was not suitable for potable use and it is not used for this purpose, but is used for monitoring purposes. The well location is shown on Figure 3.1. The monitoring was carried out in 20th August 2009 and a summary of the results is included on Table 3.2.

There are no emission limits or trigger levels set in the Licence. The Agency requested that groundwater trigger levels be prepared for this monitoring well. These were prepared and were submitted to the Agency for their approval on the 30th June 2008. The levels are similar to those measured during previous monitoring events. The proposed trigger levels were not exceeded. The levels of sodium, sulphate, chloride, orthophosphate and conductivity were above the Interim Guidelines Values (IGV) for unpolluted waters set by the Agency. The IGV levels represent typical background or unpolluted conditions. However, the Agency recognises that levels higher than the IGV may occur naturally depending on the local geological and hydrogeological conditions.

These levels are similar to those measured during previous monitoring events and are not related to current site activities. The site was formerly occupied by a tannery, where salt was used in the curing process. Tanneries are recognised sources of soil and groundwater contamination and the elevated levels are consistent with the historic site use, and are not related to the waste transfer activities.

Table 3.2 Groundwater Monitoring Results 2009

Parameter	Units	MW1	Proposed Trigger Level	IGV
pH	pH Units	6.93	6.88	6.5 – 9
Conductivity	mS/cm	4.6	7.84	1
Temperature	°C	12.7	-	NE
Ammoniacal Nitrogen	mg/l	0.06	-	0.15
Chloride	mg/l	1088.6	2579.38	30
Potassium	mg/l	3.79	6.84	5
Sodium	mg/l	665.3	1631.25	150
Mercury	mg/l	<0.001	-	0.001
Arsenic	mg/l	<0.0025	-	0.01
Boron	mg/l	0.04	-	1
Cadmium	mg/l	<0.0005	-	0.005
Chromium	mg/l	<0.0015	-	0.03
Copper	mg/l	<0.007	-	0.03
Lead	mg/l	<0.005	-	0.01
Nickel	mg/l	0.003	-	0.02
Selenium	mg/l	<0.003	-	NE
Zinc	mg/l	0.044	-	0.1
TOC	mg/l	<2	-	NE
Fluoride	mg/l	<0.3	-	1
Sulphate	mg/l	248.94	-	200
ortho Phosphate	mg/l	0.13	-	0.03
Nitrate	mg/l	9.7	-	25
Nitrite	mg/l	<0.02	-	0.1
TON	mg/l	<0.05	-	NE
Dissolved Oxygen	mg/l	7	-	NAC
Total Cyanide	mg/l	<0.04	-	0.01
Total Alkalinity	mg/l	92	-	NAC
Total Phenols	mg/l	<0.01	-	NE
Total Solids	mg/l	2187	-	NE
VOC	µg/l	<5	-	NE
SVOC	µg/l	<10	-	NE
Faecal Coliforms	cfu/100ml	<1	-	0
Total Coliforms	cfu/100ml	<1	-	0

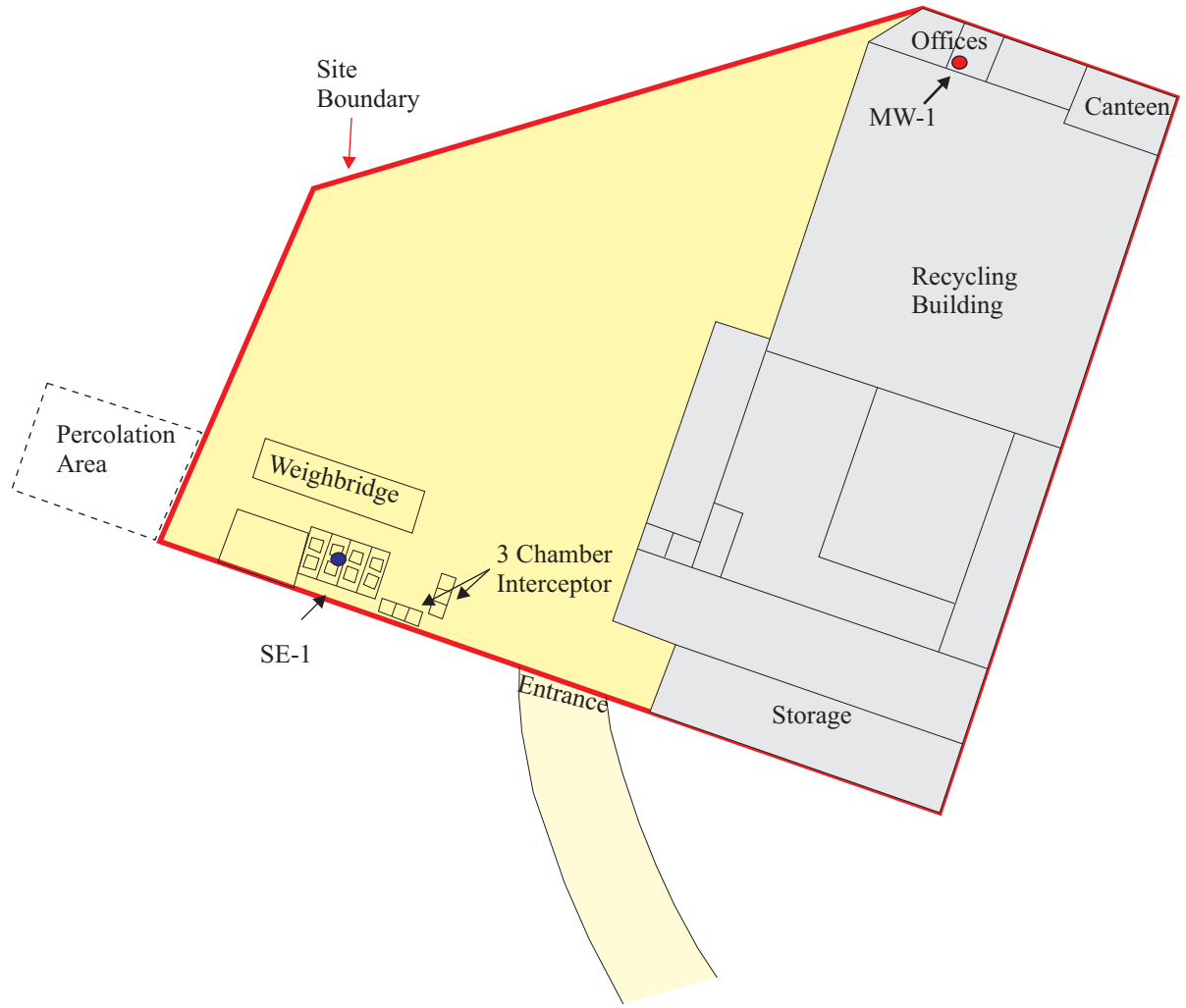
3.3 Noise Monitoring

Greenstar carried out the annual noise survey at the facility in May 2009 and the results were submitted to the Agency in October 2009. Monitoring was carried out at three offsite noise monitoring locations, N-1, N-2 and N-3. The survey was conducted when the site was fully operational. The survey concluded that the facility was in compliance with its licence requirements. A summary of the noise results is shown on Table 3.3.

The licence sets a daytime noise limit of 55 dB with respect to offsite noise sensitive locations. At station N1, the only station not located within the boundaries of Gorey Business Park, the $L_{Aeq\ 30\ min}$ level measured was 64 dB, arising almost entirely from local and distant traffic noise. In addition, noise emissions from an overhead light aircraft were significant. No noise emissions were audible from the Greenstar facility. Greenstar emissions did not give rise to noise levels over 55 dB at N1, and therefore condition 6.17 of waste licence W0220-01 was not breached here.

Table 3.3 Noise Monitoring Results 2009

Station	Time	$L_{Aeq\ 30\ min}$ dB	$L_{AF10\ 30\ min}$ dB	$L_{AF90\ 30\ min}$ dB	Noise audible
N1	1443-1513	64	65	42	No noise audible from facility or from adjacent construction area. Noise dominated by local and distant traffic. Other sources also audible: distant town noise, birdsong, dog barking. Significant intrusion from repeated circling by low altitude light aircraft.
N2	1401-1431	69	71	62	Excavator operating outside site entrance at 40 m dominant. Generator also audible. No other noise audible, apart from intrusive emissions from lifting platform manoeuvring past SLM 1410-1417.
N3	1325-1355	55	59	46	No emissions audible from facility, apart from radio, until loader started 1339. Loader significantly audible thereafter. Excavator operating outside site entrance dominant from 1344. Emissions from air conditioner cassettes at nearby building continuously audible at low level in background. Intermittent vehicle movements in surrounding commercial park audible.



LEGEND	
	Site Boundary
	Building
	Surface Water Monitoring Point
	Ground Water Monitoring Point



O' Callaghan Moran & Associates.
Granary House, Rutland Street,
Cork Ireland.
Tel. (021) 4321521 Fax. (021) 4321522
email: info@ocallaghanmoran.com

CLIENT
Greenstar Ltd.

TITLE
**Monitoring Locations
Gorey**

FIGURE NUMBER
3.1

Scale
Not To Scale

Revision
A

This drawing is the property of O'Callaghan Moran & Associates and shall not be used, reproduced or disclosed to anyone without the prior written permission of O'Callaghan Moran & Associates and shall be returned upon request.

4. SITE DEVELOPMENT WORKS

4.1 Engineering Works

In November 2009, separate areas inside the transfer building (ca. 576 m²) and outside in the yard (ca. 160 m²) were re concreted due to damage and cracking. Inspector, Damien Masterson was informed of this work and that activity at the facility would be curtailed from 20th November to 30th November to facilitate this repair work to site surfaces.

There are no engineering works planned for 2010. Greenstar will inform the Agency about any proposed specified engineering works in accordance with Condition 3.3.1 of the Licence.

4.2 Energy Efficiency

An energy audit was carried out in May 2008 in accordance with Condition 7.1 of the Licence and with the guidance published by the Agency - “Guidance Note on Energy Efficiency Auditing (2003)” and the report was submitted to the Agency on the 30th June 2008. The facility is not a significant consumer of resources however the audit showed that savings could be made by the installation of daylight/time controls on the lighting systems within the facility. The facilities carbon footprint could also be reduced by switching to a renewable energy electricity supply. It is intended to implement these recommendations in 2010. Table 4.1 presents an estimate of the resources used on-site from January to December 2009.

Table 4.1 Estimate of Resources Used On-Site

Resources	Quantities
Diesel	5,477 litres
Odour Control Additive	40 litres
Hydraulic Oil	46 litres
Engine Oil	46 litres
Electricity	23,165 units

4.3 Tank and Pipeline Integrity Testing

Tank and pipeline testing is to be carried out every three years. The tank and pipeline testing was carried out in September 2009 and was passed fit for purpose. A copy of the inspection report is included in Appendix 1.

5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY

Table 5.1 shows the total quantities of waste received and consigned from the facility from January to December 2009. Table 5.2 shows the waste quantities for 2008 while the quantities for previous years are shown on Table 5.3. A breakdown of the waste types is provided in accordance with the European Waste Catalogue and Hazardous Waste (EWC/HWL) list.

The total quantity of waste accepted was 13,476.61 tonnes. The total waste consigned was 13,666.04 tonnes. The difference (approximately 80 tonnes) relates to a <1% error between the waste in and out weighbridges. The recycling rate for the facility is approximately 26%.

All the wastes consigned went to appropriately licensed or permitted recovery and disposal facilities as agreed in advance with the Agency.

Table 5.1 Waste Received & Consigned 2009

EWC	Description	Waste In	Waste Out
15 01 01	Cardboard Packaging	58.48	
15 01 02	Plastic Packaging	1.66	
15 01 06	Mixed Packaging	1,105.48	1,020.60
15 01 07	Glass Packaging	12.81	
17 01 07	C&D Inert Mixed	216.81	197.66
			76.38
17 05 04	C&D Inert Mixed	27.00	
	Soil & Stones	30.32	
19 12 07	Wood		34.88
19 12 12	C&I Dry Mixed	4.86	2,254.54
	MSW Municipal Mixed		60.14
			9,991.53
20 01 02	Glass	1.38	
20 01 38	Wood	46.37	10.20
20 01 40	Metal	4.01	20.06
20 03 01	MSW Municipal Mixed	9,449.96	
20 03 07	C&I Dry Mixed	2,517.47	
	Total Received	13,476.60	
	Total Consigned		13,665.99
	Total Recovery		3,614.32
	Total Disposed		10,051.67
	Recovery Rate		26.4%

Table 5.2 Waste Received & Consigned 2008

EWC	Description	Waste In	Waste Out
15 01 01	Cardboard Packaging	193.73	
15 01 02	Plastic Packaging	1.57	22.58
15 01 06	Mixed Packaging	1,514.24	1,528.95 25.56
15 01 07	Glass Packaging	27.63	
17 01 07	C&D Inert Mixed	48.52	1,926.16
17 05 04	C&D Inert Mixed	1,804.59	
	Soil & Stones	58.76	
19 12 12	C&I Dry Mixed	1.87	641.51
			3,165.84
			8.20
	MSW Municipal Mixed		8,607.34
20 01 01	Cardboard & Paper	0.26	
20 01 38	Wood	129.67	78.97
20 01 40	Metal	34.60	31.72
20 03 01	MSW Municipal Mixed	7,874.60	
20 03 07	C&I Dry Mixed	4,195.14	
	Total Received	15,885.19	
	Total Consigned		16,036.83
	Total Recovery		7,421.29
	Total Disposed		8,615.54
	Recovery Rate		46.28%

Table 5.3 Previous Years Waste Received and Consigned

	2008	2007	2006
Total Received	15,885.19	18,978.75	23,944.64
Total Consigned	16,036.83	19,780.56	25,051.15
Total Recovery	7,421.29	9,229.13	15,895.52
Total Disposed	8,615.54	10,551.43	9,155.63
Recovery Rate	46.28%	46.66%	63%

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

There were no incidents during the reporting period.

6.2 Register of Complaints

Greenstar maintains a register of complaints received in accordance with Condition 11.9 of the waste licence. No complaints were received in 2009.

7. ENVIRONMENTAL DEVELOPMENT & CONTROL

7.1 Management Structure

Details of the site management structure are given below.

Name: Denis Mullally

Responsibility: Operations Manager

Experience: 5 years experience

Name: Sean Doran

Responsibility: Facility Manager/Supervisor

Experience: 5 years experience

Name: Thomas O'Leary

Responsibility: Operative / Machinery / Loader / Driver

Experience: 5 years experience

7.2 EMS

Condition 2.2.2 requires Greenstar to submit a proposal for a documented Environmental Management System (EMS) to the Agency for its approval. The EMS must include a Schedule of Objectives and Targets, an Environmental Management Programme (EMP), Corrective Action Procedures and an Awareness and Training Programme. A proposal for an EMS will be sent to the Agency in 2010 for its approval.

7.2.1 *Schedule of Objectives 2009*

The objectives that were achieved during this reporting period are outlined in Table 7.1. An evaluation of what has been achieved to date is presented below.

Objective 1 - Minimise odours at the facility

Odour is monitored daily at the facility.

Objective 2 – Prevent Litter being deposited beyond the site perimeter.

Litter is removed at the end of each working day

Objective 3 – Develop the Environmental Management System

An EMS for the facility is due for completion in 2010.

Objective 4 - Reduce the electricity/energy usage at the facility.

The recommendations of the Energy Audit Report will be implemented in 2010.

7.2.2 Schedule of Objectives 2010

A schedule of targets and objectives for 2010 has been set by the management of the facility. These objectives are outlined in Table 7.2.

Table 7.1: Schedule of Objective and Targets 2009

No	Objective	Target	Responsibility	Update
1	Minimise odours at the facility	Monitor odour daily.	Facility Manager	Ongoing
2	Prevent Litter being deposited beyond the site perimeter.	Ensure litter is removed at the end of each working day.	Facility Manager	Ongoing
3	Develop the Environmental Management System	Submit a proposal for the EMS to the Agency for its approval. Combine the existing elements of the EMS into a documented Environmental Management Plan for the facility	Environmental Department/Facility Manager	Incomplete. Due for completion 2010
4	Reduce the electricity/energy usage at the facility.	Implement recommendations of the Energy Audit report. Introduce Energy Saving Initiatives & Policies	Facility Manager	Due for completion 2010

Table 7.2: Schedule of Objective and Targets 2010

No	Objective	Target	Responsibility	Timescale
1	Awareness and Training	Continue to ensure that appropriate training is carried out specific to all site personnel as per the Company's established Training Matrix.	Site Management	Ongoing
		Spill training, inclusive of a spill scenario to be carried out.		
2	Energy & Resource Consumption	Summarise energy and resource usage on a quarterly basis with a view to reducing consumption	Site Management	Ongoing
		Review and implement findings of Energy Audit		
3	Review and Assess the Effectiveness of Nuisance Control Procedures	Continually review and assess all nuisance control procedures to ensure minimal impact on the surrounding area.	Site Management	Ongoing
4	Pollution Prevention	Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values.	Site Management	Ongoing
		Continue to ensure the integrity and maintenance of all drainage infrastructure.		
5	Customer Communication & Awareness	Increase route and truck efficiency.	Site Management	Ongoing
		Improve Customer Recycling Rates through the implementation of AMCS Environmental Reporting System		
6	Operations Management	Review segregation organisation within the Material Recovery Building	Site Management	Q3 2010

7.3 Communications Programme

Condition 2.2.2.7 requires the establishment of a Communications Programme. Greenstar is committed to setting the standard in waste management and ensuring environmental compliance in all operations. In addition, Greenstar's updated Environmental and Health & Safety Policy makes a specific commitment to ensuring that the policy itself and records are available to the public and interested parties.

Greenstar has drawn up a Communications Programme, which details how members of the public are facilitated in accessing environmental information at the facility.

Records available for public inspection on site include:-

- Environmental Policy,
- Waste Licence,
- Licence Application and Review documentation,
- Monitoring Records,
- Complaints File,
- EPA Correspondence File.

Opening Times for Inspection of Records are from 10 am – 4 pm.

Visits to the site should be arranged in advance by ringing the Facility Manager or Supervisor at 1890 600 900.

7.4 Nuisance Control

Condition 11.4 of the Waste Licence requires the maintenance of a record of the programme for the control and eradication of vermin and fly infestations at the facility. Greenstar has contracted ISS Ltd to carry out vermin inspections at the facility. ISS Ltd visit the facility monthly and inspect for vermin and inspect and maintain the 9 bait boxes and 4 mice boxes on the site. The facility has not had any problem with fly infestations, but should a problem occur, this can be dealt with by ISS Ltd on a call out basis.

7.5 Water Demand

The only water used on the site is for sanitary purposes in the toilets (2 No. staff), the canteen and occasionally for the odour suppression system. The odour suppression system consists of five roof mounted nozzles which spray a fine mist over the MSW storage area when MSW is brought to the facility. The volume of odour suppressants used in 2009 was 40 litres. The volume of water used is not quantifiable at this time, but is very small.

No water is used in the process, small quantities of water are used in the odour suppression system but majority of the spray is absorbed by the waste and a significant discharge is not generated. Storm water is generated by rainfall on the roof of the process building and rainfall on the open paved areas of the site. This run-off is stored in a holding tank until it is tankered off site. Since the 21st December 2006 the contents of the septic tank have been pumped into the holding tank and tankered off-site. In 2009 39.34 tonnes of waste water was removed off site.

7.6 Waste Generated On-site

The facility is manned by two full-time staff and therefore does not generate a large amount of canteen or office waste. All waste generated is source separated and removed off site for recycling or disposal.

7.7 Pollution Emission Register

The Pollution Emission Register (PER) has been replaced by the European Pollutant Release and Transfer Register Regulation (EC) No. 166/2006. A copy of the information submitted to the Agency via the web-based data reporting system is included in Appendix 2.

7.8 Financial Provision & Measures to Minimise Potential Environmental Damage

Greenstar Ltd. has accrued over €3,000,000 in funds, to provide for any potential environmental liabilities. Greenstar Ltd. has adequate insurance cover for environmental liabilities to €6,350,000 for any one occurrence, which will apply to “sudden identifiable and unintended incidents”.

APPENDIX 1

Bund Report



- **Liquid Waste Management**
- **Drain Cleaning & Plumbing**
- **CCTV Drain Surveys**
- **Hazardous Waste Management**

HORIZON ENVIRONMENTAL LTD.

Unit 26a Collinstown Cross Ind Est

Old Airport Road

Cloghran

Co. Dublin

Tel: (01) 8625030

Fax: (01) 8620880

Email: info@horizonenvironmental.ie

Facsimile

Fax no.:

Tel no.:086 8069940

Company: Greenstar, Gorey

From: Matthew Kilcawley

Attention of: Sean Doran

Date: 18th September 2009

Subject: **Certificate of Pipe and Tank Integrity Test at Greenstar Gorey**

No.of Pages: 2

Dear Sean,

Further to our site Site visit to carry investigations and tests on the Tanks and pipe please find the following confirmation.

CCTV SURVEY OF 100MM DRAIN BETWEEN THE TWO TANKS AND THE RISING MAIN BETWEEN CONNECTED TO THE FINAL OUTLET CHAMBER

- **Works Description:** To gain access to the said lines through the manholes with the inspection equipment. To carry out the survey of the lines using pan and rotate camera. The cctv camera confirmed that there are no defects on the drain and it is flowing free and clear.
- To examine the above ground rising main and report on its integrity, a visual inspection by our service engineer proved that there are not defects on the 35mm diameter main and the pump and float is operating as per pump conformance. We do recommend that the line is checked regularly on site incase of any damage or weathering that might occur in the future.

Bund Test-BS 8007: 1987

To test the surface water holding tank

- The client to fill the tank and put stopper at inlet and outlet and leave idle over 48 hour period
- To observe drop or increase over this period.
- To make note of ambient temperature to allow for taking evaporation into account. 17°C
- To confirm dimensions of each of the bunds.
- To empty the tank and measure the internal dimensions of the tank to confirm its capacity and make observations on its condition

Review:

The Incoming water and outgoing drains were blocked off over a 48-hour period and the measurement from the top of the tank to the water level was taken and found to be 875mm.

Following this period the measurement was taken again and found to be the same 875mm +/- 3mm.

The tank was then emptied and a full visual inspection carried out. No Defects or infiltration issues were found.

The tank is watertight.

Physical characteristics: Concrete made, with 8 chambers.

Internal dimensions: 3.8m long x 2.65 wide x 1.2m deep = 12.084m³

The Oil Tank

The Oil tank is a double skinned tank stored in the Container and is protected from any impact.

We would recommend that there is a spill kit placed in the container in case of spillage during filling.

We would also recommend that a small area beside the pipe connection and the base of the tank is banded as there is a risk of a person standing on the connection.

The Pallet Bund

The Pallet bund was inspected and found to be in good condition and water tight. The unit complies with regulations.

Assuring you of our best endeavours at all times.

Yours sincerely,

Matthew Kilcawley B.Eng

Horizon Environmental Ltd.

APPENDIX 2

European Pollutant Release and Transfer Register



Environmental Protection Agency

| PRTR# : W0220 | Facility Name : Waste Recycling Centre | Filename : W0220_2009.xls | Return Year : 2009 |

AER Returns Worksheet

Version 1.1.10

REFERENCE YEAR	2009
-----------------------	------

1. FACILITY IDENTIFICATION

Parent Company Name	Greenstar Limited
Facility Name	Waste Recycling Centre
PRTR Identification Number	W0220
Licence Number	W0220-01

Waste or IPPC Classes of Activity

No.	class name
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
Address 1	Ramstown
Address 2	Gorey
Address 3	Co Wexford
Address 4	
Country	Ireland
Coordinates of Location	-6.30814 52.6661
River Basin District	IESE
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	Suzanne Byrne
AER Returns Contact Email Address	suzanne.byrne@greenstar.ie
AER Returns Contact Position	Environmental Executive
AER Returns Contact Telephone Number	01-2947949
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	01-2947900
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General

5(c) 50.1	Installations for the disposal of non-hazardous waste General
3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)	
Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4.1 RELEASES TO AIR

| PRTR# : W0220 | Facility Name : Waste Recycling Centre | Filename : W0220_2009.xls | Return Year : 2009 |

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SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
						0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
						0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)

POLLUTANT		METHOD			QUANTITY			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
						0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill:

Waste Recycling Centre

Please enter summary data on the quantities of methane flared and / or utilised

	T (Total) kg/Year	M/C/E	Method Used		Facility Total Capacity m3 per hour
			Method Code	Designation or Description	
Total estimated methane generation (as per site model)	0.0				N/A
Methane flared	0.0				0.0 (Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0 (Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A

4.2 RELEASES TO WATERS

| PRTR# : W0220 | Facility Name : Waste Recycling Centre | Filename : W0220_2009.xls | Return Year : 2009 |

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SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as t

RELEASES TO WATERS									
POLLUTANT		Method Used			QUANTITY				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
						0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS									
POLLUTANT		Method Used			QUANTITY				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
						0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO WATERS									
POLLUTANT		Method Used			QUANTITY				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
						0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.3 RELEASES TO WASTEWATER OR SEWER

| PRTR# : W0220 | Facility Name : Waste Recycling Centre | Filename : W0220_2009.xls | Return Year : 01/04/2010 11:30

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER								
POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Method Used	SE-1 Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
79	Chlorides (as Cl)	C	PER	Calculated based on average result over the reporting period and the volume of waste water removed off site.	1.443778	1.443778	0.0	0.0
22	Nickel and compounds (as Ni)	C	PER	Calculated based on average result over the reporting period and the volume of waste water removed off site.	0.000984	0.000984	0.0	0.0
24	Zinc and compounds (as Zn)	C	PER	Calculated based on average result over the reporting period and the volume of waste water removed off site.	0.003344	0.003344	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER								
POLLUTANT		METHOD			QUANTITY			
Pollutant No.	Name	M/C/E	Method Code	Method Used	SE-1 Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
306	COD	C	PER	Calculated based on average result over the reporting period and the volume of waste water removed off site.	2.24238	2.24238	0.0	0.0
238	Ammonia (as N)	C	PER	Calculated based on average result over the reporting period and the volume of waste water removed off site.	0.035749	0.035749	0.0	0.0
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.4 RELEASES TO LAND

| PRTR# : W0220 | Facility Name : Waste Recycling Centre | Filename : W0220_2009.xls | Return Year : 2009 |

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SECTION A : PRTR POLLUTANTS

RELEASES TO LAND							
POLLUTANT		METHOD			QUANTITY		
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO LAND							
POLLUTANT		METHOD			QUANTITY		
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR# : W0220 | Facility Name : Waste Recycling Centre | Filename : W0220_2009.xls | Return Year : 2009 |

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Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility	Haz Waste : Address of Next Destination Facility	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used		Haz Waste : Name and Licence/Permit No of Recover/Disposer	Non Haz Waste: Address of Recover/Disposer		
Within the Country	15 01 06	No	1020.6	Mixed Packaging	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Fassaroe,Bray,Co. Wicklow,.,Ireland		
Within the Country	17 01 07	No	197.66	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	C.R.S,WP/05/24	Montague,Gorey,Co. Wexford,.,Ireland		
Within the Country	17 01 07	No	76.38	C&D Inert Mixed	R5	M	Weighed	Offsite in Ireland	Thomas Driver,WP 50/06	Rocketts Castle Estate,Portlaw,Co. Waterford,.,Ireland		
Within the Country	19 12 07	No	34.88	Wood	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Fassaroe,Bray,Co. Wicklow,.,Ireland		
Within the Country	19 12 12	No	60.14	MSW Municipal Mixed	D5	M	Weighed	Offsite in Ireland	01 Holmestown Landfill,W0191-	Barntown,Co. Wexford,.,Ireland		
Within the Country	19 12 12	No	9991.53	MSW Municipal Mixed	D5	M	Weighed	Offsite in Ireland	01 Ballynagran Landfill,W0165-	Coolbeg & Kilcandra,Co. Wicklow,.,Ireland		
Within the Country	19 12 12	No	2254.54	C&I Dry Mixed	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Fassaroe,Bray,Co. Wicklow,.,Ireland		
Within the Country	20 01 38	No	10.2	Wood	R13	M	Weighed	Offsite in Ireland	Greenstar Ltd.,W0053-03	Fassaroe,Bray,Co. Wicklow,.,Ireland		
Within the Country	20 01 40	No	20.06	Metal	R4	M	Weighed	Offsite in Ireland	Molloy Metals Recycling,WP/000/15	Ballycarney,Enniscorthy,Co. Wexford,.,Ireland		

* Select a row by double-clicking the Description of Waste then click the delete button