THE RECYCLING VILLAGE LTD

ANNUAL ENVIRONMENTAL RETURN 2015

Industrial Emissions Licence Register No:

W0286-01

Licensee:

The Recycling Village Ltd

Location of Activity:

Unit 21,
Duleek Business Park,
Duleek,
Co. Meath,
A92 KV6X

For the Attention of:

Environmental Protection Agency

1. Introduction

1.1 Reporting Period

1.1.1 The following is the Annual Environmental Report (AER) for the period 14th January 2015 to the 31st December 2015 for The Recycling Village Ltd, Unit 21, Duleek Business Park, Duleek, Co. Meath.

1.1.2 This report has been prepared as per Schedule D, Annual Environmental Report, of Industrial Emissions Licence Register No. W0286-01, which was granted to The Recycling Village Ltd by the Agency on 14th January 2015.

1.2 Description of On-Site Waste Activities

1.2.1 The Recycling Village Ltd was established in 2004 to provide a specialist recycling service for waste electrical and electronic equipment (WEEE) in Ireland. The system was specifically designed for dismantling display systems, such as televisions and computer monitors. The company is fully licensed to treat hazardous WEEE and batteries, and is certified to the WEEELABEX Standard for the treatment of Cathode Ray Tubes (CRTs) and Flat Panel Displays (FPDs). Other WEEE is also treated at the facility, such as desktop computer cases, laptops, Uninterruptible Power Supplies (UPS), along with lead acid and other batteries.

1.2.2 The aforementioned WEEE is generated at civic amenity sites and dedicated WEEE collection points as part of the WEEE compliance schemes. The Recycling Village Ltd also has a number of business customers and arranges for the collection and delivery of similar material.

1.2.3 Cathode Ray Tube (CRT) TV and PC monitors are manually processed and dismantled to separate the cathode ray tube (CRT) and outer unit/case. The CRT's themselves are then split into panel and funnel glass and are processed separately, as panel glass is non-hazardous, whereas funnel glass contains lead. The recovered fractions from CRT display systems include glass, ferrous and non-ferrous metals and plastics. Flat Panel Display (FPD) TV and PC monitors are manually processed and dismantled to separate the screen, outer unit/case, the lightbox and backlights. The recovered fractions include ferrous and non-ferrous metals, plastics and mercury-containing backlights. The backlights are removed in an isolation unit and stored in specialised containers. All recovered materials are segregated, bulked and stored on site prior to transport off site for further processing and recycling.

1.2.4 Other WEEE is also manually processed and dismantled to recover separate non-hazardous fractions such as metals and plastics. Hazardous lead acid batteries are also recovered from UPS's. The recovered materials are segregated, bulked and stored on site prior to transport off site for further processing and recycling.

1.2.5 Batteries are sorted, segregated and repackaged prior to transport off site for further processing and recycling.

1.2.6 The Recycling Village Ltd currently employs approximately 20 staff.

2 Emissions from the Facility

2.1 Emissions to Air

2.1.1 Emissions to air from The Recycling Village Ltd are controlled as part of the organisation's Environmental Management System. Exhaust fan speeds are measured and recorded weekly. Once fan speeds come within trigger level values supplied by the manufacturer of the fans, the filters are changed. Documented procedures for controlling emissions to air are in place at The Recycling Village Ltd for Air Emissions Monitoring (EMS 11 04), Mercury Vapour Monitoring (EMS 11 08), Air Extraction Rate Monitoring (EMS 11 09) and Air Filter Exchange (EMS 11 10). Periodic training is carried out with relevant staff members.

2.1.2 Air emissions were sampled and analysed quarterly for Total Particulates and biannually for Metals, as per the requirements of licence Condition C.2.1.

2.1.3 Results of the Air Emissions Surveys are attached in Appendix 1.

2.1.3 Air emissions were in compliance with limits set in the licence during all monitoring surveys.

2.2 Emissions to Storm Sewer (storm water run-off)

2.2.1 Emissions to Storm Water from The Recycling Village Ltd are controlled as part of the organisation's EMS. Documented procedures for controlling emissions to surface waters are in place at The Recycling Village Ltd, i.e. Interceptor Sump Inspection, Cleaning and Maintenance and Effluent Monitoring (EMS 11 01); Storm Water Trigger Level Exceedance Response (EMS 11 11); (*yet to be finalised and approved, refer to Appendix 2*) and the Hazardous Spillage Procedure contained in Environmental Accident Prevention and Emergency Response Procedure (EMS 10 03). Periodic training is carried out with relevant staff members.

2.2.2 Biannual sampling of storm water emissions was carried out as per the requirements of licence Condition C.2.1 for the following parameters: pH, COD, ammonia, (as N), conductivity, mineral oils and metals (including Al, As, Cr, Cu, Hg, Ni, Pb, Zn). Schedule B.6 of the licence sets the emission limit value for Mineral Oils in Storm Water Run-Off at 2mg/L.

2.2.3 While attempting to set the storm water trigger levels, as required by condition 6.10 of the licence, issues were encountered in relation to levels of metals in the storm water emissions.

2.2.4 A summary report detailing the issues encountered and actions taken to investigate and correct the issues and supporting laboratory certificates are attached as Appendix 2.

3 Waste management record.

3.1 Refer to Appendix 3.

4 Quantity and composition of waste accepted and recovered (classified by EWC)

4.1 Refer to Appendix 4.

5 Resource Consumption summary.

5.1 Refer to Appendix 5.

6 Complaints summary.

6.1 There were no complaints lodged against The Recycling Village Ltd in 2015.

7 Schedule of Environmental Objectives and Targets

7.1 An Environmental Management System (EMS) has been in place at The Recycling Village Ltd since August 2012. The EMS was certified to ISO 14001 in May 2013 and successfully passed annual surveillance audits in 2014 and 2015. As such, a schedule of Environmental Management Programmes was already in place when Licence W0286-01 was granted to The Recycling Village Ltd by the Agency.

7.2 In accordance with Section 2.2.2 of the Licence, the Environmental Management Programmes already in progress at The Recycling Village Ltd, along with those previously completed, were assessed, and the top five priority objectives were identified and expanded to allow for the requirement that programmes must run continuously over a 5 year period.

7.3 The top five priority objectives for The Recycling Village Ltd (not listed by order of priority) are listed in the following table:

TABLE 1

1	**PROGRAMME**	**Contractor and Supplier Evaluation**
	OBJECTIVE	To continuously monitor and evaluate all contractors and suppliers to ensure compliance with relevant legislation and with RV's requirements
2	**PROGRAMME**	**Energy and Raw Materials Use**
	OBJECTIVE	To track energy use and raw material consumption on site and to reduce usage in comparison to previous years
3	**PROGRAMME**	**Fire Prevention**
	OBJECTIVE	To assess the risk of fires occurring on site and to implement strategies to reduce the impact of a potential fire on the surrounding environment
4	**PROGRAMME**	**Materials Storage and Dispatch**
	OBJECTIVE	To ensure the correct storage and dispatch of all materials to the correct locations with the correct documentation taking full consideration of applicable regulations
5	**PROGRAMME**	**Domestic Water Use**
	OBJECTIVE	To analyse the amount of water used on site and to reduce the quantity use or to supplement piped water use with rainwater use

7.4 Refer to Appendix 6 for the full 5 Year Environmental Management Plan.

8 Environmental Management Programme – Report for 2015

8.1 Contractor and Supplier Evaluation:

8.1.1 The Contractor and Supplier Procedure was reviewed, updated and approved by senior management. The downstream waste vendor and waste carrier audit schedule was updated and site visits were scheduled for 2016 and 2017. A documentation audit was carried out on files held in The Recycling Village Ltd for contractors and suppliers, and requests for updated documents were sent to relevant parties.

8.2 Energy and Raw Materials Use:

8.2.1 An Energy Audit was conducted by Andrew Wood of Wood Environmental Management Ltd using data from energy bills for 2014. The energy audit indicated lighting in the facility accounts for a large proportion of the energy used on the site. Energy bills for 2015 were collected from the accounts department along with data for raw materials used in 2015.

8.3 Fire Prevention:

8.3.1 Wood Environmental Management Ltd conducted a risk assessment to determine if a fire-water retention facility is required at The Recycling Village Ltd and a Fire Water Retention Report was compiled and submitted to the EPA. A meeting was conducted with Meath Fire Brigade to discuss fire risk and firewater retention requirements at the facility. Monthly fire alarm tests were carried out throughout 2015 to ensure that lights and sounders were operational, and routine evacuation drills were carried out to ensure that the fire alarm system was working and that staff were aware of the procedure. Fire extinguisher tests and specific training in Emergency Planning for certain staff members was conducted on site in July 2015 with MRSK Safety. General fire safety training was conducted with all relevant staff members in November 2015, again by MRSK Safety. Fire hydrant tests were successfully conducted in October 2015 by APEX Fire. A quotation for a smoke detection system for the facility was obtained from APEX Fire in October 2015. The Fire Response flow charts were updated and distributed around the site. A plan of installation was printed and placed as close as is possible to the entrance of the facility. Hazardous wastes were assessed to ensure that they were being properly stored to prevent fires and plant equipment is routinely checked to ensure that it is properly maintained to prevent electrical fires. No fires occurred on site in 2015.

8.4 Materials Storage and Dispatch

8.4.1 A new an onsite Waste Storage Plan and a Logistics Folder was developed in 2015. A new complaints form was also developed to be issued in respect of waste arriving on site in a manner unacceptable under The Recycling Village Ltd standards. No complaints were lodged from any clients with respect to materials sent out in 2015.

8.5 Domestic Water Use

8.5.1 In September 2015 A1 Midland Gas were contracted to replace the cistern systems in staff and office urinals with smaller, less frequent flushing versions.

9 Environmental Management Programme – Proposal for 2016

9.1 Contractor and Supplier Evaluation:

9.1.1 Onsite audits will be conducted for downstream waste vendors starting in May 2016. Prior to the audits, the External Audit Checklist (EF 25) will be reviewed.

9.2 Energy and Raw Materials Use:

9.2.1 The Recycling Village Ltd are investigating replacing current light bulbs at the facility with LED lights. A quotation has been obtained, however further research will be carried out during 2016 on the exact energy use of the current lighting system and more quotations may be obtained for LED light installations. An analysis of monthly production throughput will also be carried out to clarify whether the increase in electricity use during the winter period in 2014 was related to increased production. Energy data from 2015 will be graphed and compared to data from 2014 and 2013 to investigate whether there has been a reduction or increase in energy use over time.

9.3 Fire Prevention:

9.3.1 In 2016 the new smoke alarm system will be installed and all previous fire-related programmes, risk assessments, prevention strategies and response procedures will be audited to identify whether recommendations etc. are being implemented. The feasibility of retaining firewater within the building (WEML suggestion - install 0.2 m sloped ramp at all doors) and potential methods for covering all surface water gullies in the yard, in the event of a fire, will be investigated in 2016 also.

9.4 Materials Storage and Dispatch

9.4.1 Written procedures relating to waste storage and dispatch will be updated in 2016 to take account of the new waste storage plan and logistics folder.

9.5 Domestic Water Use

9.5.1 More research will be carried out in 2016 into domestic water use at The Recycling Village Ltd to clarify whether a rainwater harvesting system would be worth investing in.

10 Pollutant Release and Transfer Register - report for 2015.

10.1 Refer to Appendix 7.

11 Noise monitoring report summary.

11.1 Noise monitoring was carried out onsite at The Recycling Village Ltd in July 2015 by Wood Environmental Management Ltd (WEML). The day-time site boundary Lar (30 minute) noise levels recorded ranged between 49.6 dB(A) and 65.3 dB(A). There were no significant tonal or impulsive noises noted during the noise survey.

11.2 Section 4.4 of Industrial Emissions Licence W0286-01, states that '*Noise from the facility shall not give rise to sound pressure levels (LAeq t) of the installation, measured at the Noise Sensitive Locations (NSL) in the vicinity of the installation, which exceed the limit value(s)*'. Schedule B.4 states that day time noise level (at the NSL) shall not exceed 55dB(A) LAr (30 minutes).

11.3 The Recycling Village Ltd facility is located within a purpose built industrial estate. There are no noise sensitive locations within the vicinity of the facility, and the noise environment that surrounds the boundary noise monitoring locations is a complex one with several different businesses operating simultaneously which all have an effect on the noise in the immediate area in and around the facility.

11.4 As such, due to the location and setting of the facility, environmental consultancy WEML concluded that noise emissions from the facility are unlikely to have a negative impact on sensitive locations beyond the site boundary. It was also stated in the report that the conclusion is further supported by the fact that there have never been any noise complaints relating to the facility.

TABLE 2

Location	Start Time	Duration	LAeq	Comments
N1	09:45	30 mins	58.7	Site operational. Noise from adjacent sites fridge units.
N2	11:30	30 mins	49.6	Site operational. Intermittent noise from air compressor
N3	10:55	30 mins	55.8	Site operational. Noise from forklifts in yard and lorries visiting site.
N4	10:20	30 mins	65.3	Site operational. Noise from forklifts in yard and lorries visiting site

11.5 The full Noise Monitoring Report, prepared by WEML on behalf of The Recycling Village Ltd, was uploaded to EDEN on 31st July 2015.

12 Ambient Monitoring Summary

12.1 Dust Deposition Monitoring

12.1.1 Fitz Scientific was commissioned to carry out dust monitoring at selected locations at The Recycling Village Ltd situated at Duleek Business Park, County Meath. Dust monitoring was conducted as per licence requirements.

12.1.2 Schedule C.2.2 of the licence requires that dust levels be monitored on an annual basis. Schedule C2.2 also states that metal content of the sample was to be analysed. Analysis of metal content included the following metals: Al, As, Cd, Cr, Cu, Hg, Ni, Pb and Zn.

12.1.3 Dust monitoring was conducted at four locations, AD-1, AD-2, AD-3 and AD-4.

12.1.4 Dust monitoring commenced on the 10th December 2015. The dust jars were removed for analysis on the 7th January 2016. Hence the monitoring period for dust collection was 29 days over which the results were averaged. The results of the monitoring survey are displayed in Tables 3 and 4.

12.1.5 All samples analysed were within dustfall limits set in the licence. No limits for metals are set in the licence.

TABLE 3

Dust Deposition Monitoring Results (mg/m3/day)					
Location	Nuisance Limit (mg/m3/day)	2015	2014	2013	2012
D1	350	67.6	9.15	2.4	12.8
D2	350	52.83	11.26	4.8	11.5
D3	350	101.12	n/a	2.4	8.9
D4	350	54.54	4.64	4.8	17.4

TABLE 4

Metal Content in Dustfall 2015						
Parameters	Limit	Units	D1	D2	D3	D4
Aluminium	none specified	mg/Kg	3491.8	2962.6	2440.6	2775.5
Arsenic	none specified	mg/Kg	<0.01	<0.01	<0.01	<0.01
Cadmium	none specified	mg/Kg	<0.01	<0.01	<0.01	<0.01
Chromium	none specified	mg/Kg	<0.01	8.4	12.2	<0.01
Copper	none specified	mg/Kg	73.8	181.8	136.8	326.9
Lead	none specified	mg/Kg	17.4	344.7	840.3	250.1
Mercury	none specified	mg/Kg	<0.0005	1.8	<0.0005	2.3
Nickel	none specified	mg/Kg	<0.01	23.5	113.7	78.4
Zinc	none specified	mg/Kg	1782.6	10009.7	2428.0	12248.6

12.1.6 The full Dust Monitoring Report, prepared by Fitz Scientific on behalf of The Recycling Village Ltd, is attached as Appendix 8.

12.2 Groundwater Monitoring

12.2.1 Wood Environmental Management Ltd (WEML) was commissioned by The Recycling Village Ltd to collect groundwater samples from the three onsite boreholes.

12.2.2 Groundwater analysis is required biannually under licence Schedule C.4.1 for ammonia, total coliforms, iron, pH, phosphate and potassium. Biennial analysis for relevant hazardous substances as per the 'Baseline Report' submitted with the licence application was not conducted in 2015, and is scheduled for 2016.

12.2.3 Samples were collected on 10th July 2015 and on 30th September 2015 and both were delivered to Fitz Scientific Laboratories, Drogheda, for analysis. The laboratory certificates were issued by Fitz Scientific on 24th July and 12th October 2015, respectively.

12.2.4 The results are summarised in Tables 5 and 6, and have been compared with the Interim Guideline Values (IGVs) as published by the EPA in the document *Towards Setting Guideline Values for the Protection of Groundwater in Ireland, Interim Report*.

TABLE 5

Parameters	Units	IGV	BH1	BH2	BH3
Ammonia	mg/L as N	0.15	0.16	0.135	0.069
Coliforms (total)	cfu/100ml	0	4	40	0
Iron	ug/L	200	42980	51670	17420
pH	pH Units	6.5 to 9.5	7.2	7.3	7.3
Phosphate (total)	mg/L as P	0.03	0.033	0.039	0.018
Potassium	mg/L	5	1.037	3.842	0.923

TABLE 6

Parameters	Units	IGV	BH1	BH2	BH3
Ammonia	mg/L as N	0.15	0.042	0.137	0.064
Coliforms (total)	cfu/100ml	0	50	40	110
Iron	ug/L	200	9892	3967	26.17
pH	pH Units	6.5 to 9.5	7.2	7.3	7.3
Phosphate (total)	mg/L as P	0.03	0.276	0.028	<0.024
Potassium	mg/L	5	0.542	9.707	0.07

12.2.5 On examination of the results, the iron levels were found to be in exceedance of the IGVs at all three boreholes (BH) in the July analysis, and BH1 and BH2 in the September analysis; while coliforms were in exceedance at BH1 AND BH2 in July and all three boreholes in September.

12.2.6 As there is no iron present in the processes carried out at the facility, iron levels may be indicative of natural oxidation of metals in the soil, as mentioned in the document *Parameters Of Water Quality - Interpretation and Standards, EPA 2001*:

> *"Iron is present in significant amounts in soils and rocks, principally in insoluble forms. However, many complex reactions which occur naturally in ground formations can give rise to more soluble forms of iron which will therefore be present in water passing through such formations. Appreciable amounts of iron may therefore be present in ground waters."*

12.2.7 Coliform organisms were analysed as Total Coliforms, as such the species present may be natural soil dwelling coliform organisms, or organisms which show the same test behaviour as coliforms, rather than Faecal Coliforms.

12.3 Soil Monitoring

12.3.1 Soil monitoring is required by the licence once every 10 years, as such the next soil monitoring survey will be conducted in 2024.

13 Tank and Pipeline Testing and Inspection Report

13.1 Refer to Appendix 9.

14 Reported Incidents Summary

14.1 Refer to Appendix 10.

15 Energy Efficiency Audit Report Summary

15.1 The energy audit carried out by WEML at The Recycling Village Ltd in November 2015 was a Type 1 energy audit, defined by ISO 50002 as a basic energy audit, which defines high level opportunities and has enough detail to develop low cost/short payback opportunities.

15.2 The full Energy Audit Report was uploaded to EDEN on 14th January 2016.

15.3 The total energy consumption (kWh) in 2014 of operations at The Recycling Village Ltd was 157,508 kWh i.e. 319,658 kWh Total Primary Energy (TPE). The energy consumed was at a total cost of approximately €18,600, and emitted the equivalent of 65.4 tonnes of CO_2. Electricity and gas use at the site were included in the scope of this energy audit. The energy data covered the period January to December 2014 and is based on utility bills provided by The Recycling Village Ltd.

15.4 Of the 2014 annual total primary energy use (TPE) of 319,658 kWh, electricity accounts for 270,250 kWh i.e. 84.5% TPE and gas accounts for 49,408 kWh i.e. 15.5% TPE

15.5 In summary the audit findings suggested that:

- An annual potential energy saving total of 47,512 kWh could be achieved if all recommendations of the energy report are feasible and implemented.
- Potential savings represent around 44% of total audited energy consumption.
- Expected annual energy cost saving of €8,820.

15.6 The recommendations detailed were based on observation, calculations and professional judgement following a walk-round survey. Consequently, further investigations are required in order to confirm the potential savings, costs and feasibility of the recommendations presented in this report.

16 Report on Achievement of Recycling/Recovery Targets in Accordance with Condition 11.10.

16.1 Refer to Appendix 11.

17 Report on the Assessment of the Efficiency of Use of Raw Materials in Processes and the Reduction in Waste Generated.

17.1 This section is not applicable to processes carried out at The Recycling Village Ltd.

18 Report on Progress Made and Proposals Being Developed to Minimise Water Demand and the Volume of Trade Effluent Discharges.

18.1 There is no trade effluent from site processes, as all dismantling and treatment operations performed on site are dry. Hence water is only used on site for domestic purposes.

18.2 In September 2015 A1 Midland Gas were contracted to replace the cistern systems in staff and office urinals with smaller, less frequent flushing versions.

18.3 Quotations obtained in May 2012 for a 5,000L rainwater harvesting system (for non-potable uses) were considered excessive. As such more research will be carried out in 2016 into volumes of water used on site at The Recycling Village Ltd and the potential of investing in a smaller rainwater harvesting system for certain uses.

19 Reports on Financial Provision Made Under This Licence, Management and Staffing Structure of the Facility, and a Programme for Public Information

19.1 Financial Provisions made under the licence:

19.1.1 An Environmental Impairment Liabilities (EIL) Insurance Policy was procured for The Recycling Village Ltd. A summary of cover and exclusions within the policy are as follows:

19.1.1.1 Insurance Policy Covers:

- Onsite clean-up costs, opening the ground, removing/treating soil etc.
- 3rd part bodily/property damage (e.g. if the pollution gets into the groundwater/air and travels away from the site)
- Business interruption costs, e.g. if the EPA shutdown the facility until remediation is complete – the policy will cover costs until the business reopens.
- A "catastrophe-type" policy

19.1.1.2 Exclusions:

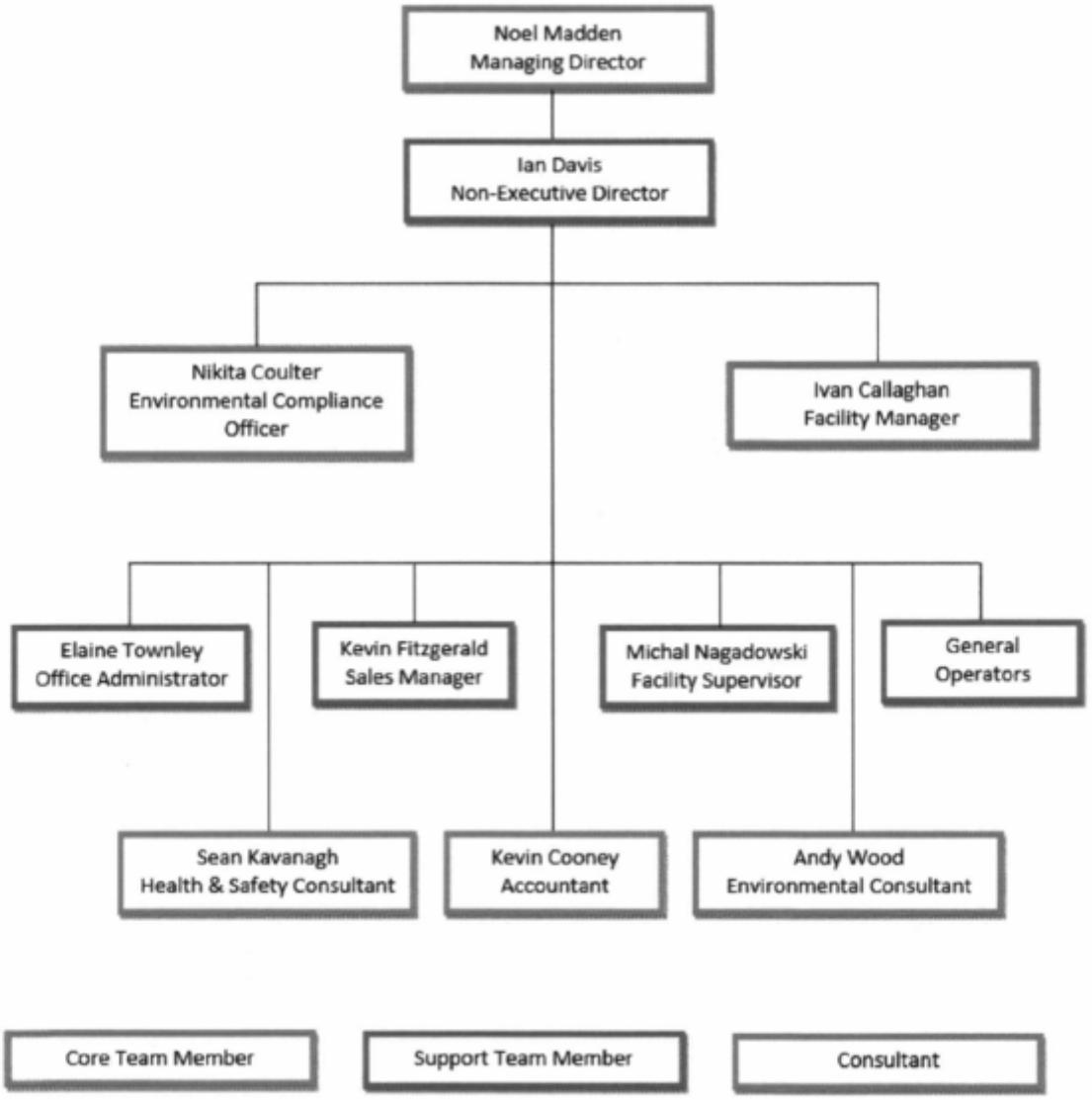
- Asbestos/Lead in the building structure – e.g. leaded paint or pipes
- Fines / penalties
- Intentional non-compliance
- Known conditions – the policy starts from the moment of inception and moves forward, it doesn't cover historical contamination.
- Invasive species, e.g. Japanese Knotweed
- War and Terrorism
- Underground Storage Tanks can be scheduled into the policy if deemed secure at time of inception of policy.

19.1.2 The EIL Policy was submitted to the Agency via the EDEN System on 27th November 2015.

19.1.3 The EIL Policy was subsequently referred by the Agency to the relevant legal advisors and is currently under review.

19.1.4 The company's accountant and insurers are currently in discussions with financial institutions regarding an On-demand Performance Bond to cover the liability in the agreed Decommissioning Management Plan (DMP).

19.3 Management and Staffing Structure:



19.4 Programme for Public Information:

19.4.1 An Installation Notice Board with facility contact details was erected on the exterior wall to the left of the main reception area. The information is legible to persons outside the main entrance to the facility. The company also have an up-to-date website from which members of the public can access contact details for the facility.

19.4.2 Methods for External Communications are documented in EMS 07 Communications Procedure (attached as Appendix 12).

20 Review of Decommissioning Management Plan

20.1 The first Decommissioning Management Plan (DMP), required under Condition 10.2 of Licence W0286-01, was prepared on behalf of The Recycling Village Ltd by Wood Environmental Management Ltd in 2015 and was submitted to the Agency on 31st July 2015 through the EDEN system.

20.2 The DMP was subsequently approved by the Agency.

20.3 The company's accountant and insurers are currently in discussions with financial institutions regarding an On-demand Performance Bond to cover the liability in the agreed Decommissioning Management Plan (DMP).

21 Statement of Measures in Relation to Prevention of Environmental Damage and Remedial Actions (Environmental Liabilities).

21.1 A Statement of Measures was prepared for The Recycling Village Ltd as part of the Environmental Liabilities Risk Assessment. A progress report has been compiled for the measures outlined in the ELRA and is attached as Appendix 13.

22 Environmental Liabilities Risk Assessment Review (every three years or more frequently as dictated by relevant on-site change including financial provisions).

22.1 The first Environmental Liabilities Risk Assessment (ELRA), required under Condition 12.2.2 of Licence W0286-01, was prepared on behalf of The Recycling Village Ltd by Wood Environmental Management Ltd in 2015 and was submitted to the Agency on 6th August 2015 through the EDEN system.

22.2 The ELRA was subsequently approved by the Agency.

23 Any Other Items Specified by the Agency.

23.1 Not applicable at present.

Appendix 1

Air Emissions Monitoring Survey Reports

Air Emissions Monitoring Results 2015							
Frequency	**Parameters**	**Limit**	**Units**	**11-Nov-15**	**02-Sep-15**	**29-May-15**	**27-Mar-15**
Quarterly	Total Particulate Matter	10	mg/m3	<0.64	<0.57	0.74	1.5
Biannually	Aluminium	none specified	mg/m3	<0.02720	n/a	0.017	n/a
	Arsenic	none specified	mg/m3	<0.00108	n/a	0.001	n/a
	Barium	none specified	mg/m3	n/a	n/a	n/a	n/a
	Cadmium	none specified	mg/m3	<0.00124	n/a	0.001	n/a
	Chromium	none specified	mg/m3	<0.01907	n/a	0.011	n/a
	Copper	none specified	mg/m3	<0.30393	n/a	0.159	n/a
	Lead	none specified	mg/m3	<0.07777	n/a	0.049	n/a
	Nickel	none specified	mg/m3	<0.01457	n/a	0.043	n/a
	Strontium	none specified	mg/m3	n/a	n/a	n/a	n/a
	Sulphur	none specified	mg/m3	n/a	n/a	n/a	n/a
	Zinc	none specified	mg/m3	<0.25667	n/a	0.257	n/a
	Mercury	none specified	mg/m3	<0.000016	n/a	0	n/a
Quarterly	Volumetric Flow Rates	10,000	m3/hr	7,831	5,723	7,404	7,463

Executive Summary

Overall Results

A1 (Main Stack)	Concentration				
Parameter	**Units**	**Result**	**MU +/-**	**Limit**	**Compliant**
Total Particulate Matter (TPM)	$mg.m^{-3}$	1.50	0.41	10	Yes
Volumetric Flow Rate (Ref.)	$m^3.hr^{-1}$	7,463	-	10,000	Yes

Accreditation details

Air Scientific Limited	INAB Number: 319T
External Analytical Laboratory	Accreditation number: UKAS 0605

Executive Summary

Overall Results

A1 (Main Stack)	Concentration				
Parameter	**Units**	**Result**	**MU +/-**	**Limit**	**Compliant**
Total Particulate Matter (TPM)	$mg.m^{-3}$	0.74	0.41	10	Yes
Aluminium	$mg.m^{-3}$	0.01692	-	-	-
Arsenic		0.00094			
Cadmium		0.00108			
Chromium		0.01136			
Copper		0.15875			
Lead		0.04908			
Nickel		0.04380			
Zinc		0.25681			
Mercury		0.00042			
Volumetric Flow Rate (Ref.)	$m^3.hr^{-1}$	7,404	-	10,000	Yes

Blank for 29-05-15	Concentration			
Parameter	**Units**	**Result**	**ELV**	**<10% of ELV Compliant**
Total Particulate Matter (TPM)	$mg.m^{-3}$	0.45	10	Yes
Aluminium	$mg.m^{-3}$	0.00959	-	-
Arsenic		0.00076		
Cadmium		0.00085		
Chromium		0.00165		
Copper		0.00100		
Lead		0.00122		
Nickel		0.00200		
Zinc		0.00171		
Mercury		0.00016		

Accreditation details

Air Scientific Limited	INAB Number: 319T
External Analytical Laboratory	Accreditation number: UKAS 1549

Executive Summary

Overall Results

A1	Concentration				
Parameter	**Units**	**Result**	**MU +/-**	**Limit**	**Compliant**
Total Particulate Matter (TPM)	$mg.m^{-3}$	<0.57	0.51	10	Yes
Volumetric Flow Rate (Ref.)	$m^3.hr^{-1}$	5,723	-	10,000	Yes

Blank for 02-09-15	Concentration			
Parameter	**Units**	**Result**	**ELV**	**<10% of ELV Compliant**
Total Particulate Matter (TPM)	$mg.m^{-3}$	<0.57	10	Yes

Accreditation details

Air Scientific Limited	INAB Number: 319T
External Analytical Laboratory	Accreditation number: UKAS 1549

Executive Summary

Overall Results

A1 (Main Stack)	Concentration				
Parameter	**Units**	**Result**	**MU +/-**	**Limit**	**Compliant**
Total Particulate Matter (TPM)	$mg.m^{-3}$	<0.64	0.41	10	Yes
Aluminium	$mg.m^{-3}$	<0.02720	-	-	-
Arsenic		<0.00108			
Cadmium		<0.00124			
Chromium		<0.01907			
Copper		<0.30393			
Lead		<0.07777			
Nickel		<0.01457			
Zinc		<0.25667			
Mercury		<0.000016			
Volumetric Flow Rate (Ref.)	$m^3.hr^{-1}$	7,831	-	10,000	Yes

Blank for 17-11-15	Concentration			
Parameter	**Units**	**Result**	**ELV**	**<10% of ELV Compliant**
Total Particulate Matter (TPM)	$mg.m^{-3}$	0.45	10	Yes
Aluminium	$mg.m^{-3}$	<0.00728	-	-
Arsenic		<0.00098		
Cadmium		<0.00098		
Chromium		<0.00230		
Copper		<0.00105		
Lead		<0.00098		
Nickel		<0.00230		
Zinc		<0.00264		
Mercury		<0.00003		

Accreditation details

Air Scientific Limited	INAB Number: 319T
External Analytical Laboratory	Accreditation number: UKAS 1549

Appendix 2

Storm Water Emissions Monitoring Summary Report and Laboratory Certificates

Background

Storm water emissions arising from The Recycling Village Ltd were sampled as per licence W0286-01 requirements, Schedule C, section C.2.3, in July and December 2015. The samples were analysed for the parameters specified in Section C2.3 the licence and results are shown below in Table 1.

TABLE 1

Parameters	Limit	Units	Jul-15	Dec-15
Ammonia	non set	mg/L as N	0.091	0.068
COD	non set	mg/L	23	21
Conductivity	non set	uscm -1 @20C	121.5	91.5
Mineral Oil	non set	mg/L	<0.0025	0.495
pH	non set	pH Units	7.8	7.7
Suspended Solids	non set	mg/L	n/a	28
Aluminium	non set	ug/L	198.2	126.1
Arsenic	non set	ug/L	0.52	0.233
Cadmium	non set	ug/L	n/a	0.905
Chromium	non set	ug/L	2.128	1.359
Cobalt	non set	ug/L	n/a	0.343
Copper	non set	ug/L	32.01	18.51
Lead	non set	ug/L	200.7	177.5
Mercury	non set	ug/L	<0.04	<0.03
Nickel	non set	ug/L	5.853	3.197
Zinc	non set	ug/L	331.7	300.1

Under Waste Facility Permit WFP-MH-10-00005-01, direct emissions from the oil water separator were subject to analyses at quarterly intervals, and limits were set for Ammonia, pH, BOD, Mineral Oils and Suspended Solids.

Although limits were not set for metals in the WFP, analyses were carried out on all quarterly samples for metals, and the results were compared to limits specified in the Irish Surface Water Regulations (S.I. 272 of 2009; and since September 2015 – S.I. 386 of 2015).

Investigation:

Increases in Lead levels (see Table 2) became apparent during on-going testing and were conspicuously high when compared to limits expressed in the Surface Water Regulations.

TABLE 2

Testing Laboratory		FitzScientific	FitzScientific	FitzScientific	FitzScientific	FitzScientific	FitzScientific	FitzScientific
Location of Sample		SW Outflow (SW4)	SW Outflow (SW4)	SW Outflow (SW4) 13:40	SW Outflow (SW4)	SW Outflow (SW4)	SW Outflow (SW1)	SW Outflow (SW1)
Sample Analysed for:		Total Metals	Total Metals	Total Metals	Total Metals	Total Metals	Total Metals	Total Metals
Parameters	Units	Dec-15	Oct-15	Sep-15	Aug-15	Jul-15	Mar-15	Feb-15
Lead	ug/L	177.5	49.85	245.2	117.5	200.7	234.2	484.4

Several meetings were conducted with environmental consultancy, Wood Environmental Management Ltd. A series of analyses and investigations were carried out on the surface water runoff from different locations around the site (see Table 3 and Site Drainage Plan (12039-LA-01) attached) in order to investigate the source of the Lead. Analysis for other metals was also conducted – Aluminium, Chrimoium, Copper and Zinc, as the levels of those metals in the July sample were also close to or in exceedance of limit values published in the Regulations. During the process, while also preparing the required Surface Water Trigger Level Exceedance Response Procedure, Lead levels remained high and an incident report was filed with the EPA.

TABLE 3

Testing Laboratory		FitzScientific	FitzScientific	FitzScientific	FitzScientific	FitzScientific	FitzScientific
Location of Sample		SW Outflow (SW4)	Car Park	Interceptor	RV side of Acco Drain	Peleus side of Acco Drain	Man-Hole S2 -
Sample Analysed for:		Total Metals	Total Metals	Total Metals	Total Metals	Total Metals	Total Metals
Parameters	Units	Oct-15	Oct-15	Oct-15	Oct-15	Oct-15	Oct-15
Aluminium	ug/L	102.85	<2.33	83.38	694.1	87.46	61.38
Chromium	ug/L	1.579	<0.58	0.985	12.7	1.706	1.319
Copper	ug/L	7.889	0.402	12.97	73.41	7.063	10.02
Lead	ug/L	49.85	0.805	56.85	1361	30.95	89.71
Zinc	ug/L	113.3	521.7	48.36	557.8	75.41	342.1

Environmental consultant, Dr Imelda Shanahan from TMS Environmental was contracted by The Recycling Village Ltd in October 2015 to investigate the incident. Dr Shanahan proposed implementing a robust drain cleaning procedure and carrying out a range of laboratory analyses on samples of storm water run-off from the site. Dr Shanahan suggested that previous samples had possibly been tested for Total Metals, rather than for Dissolved Metals which the limits in the Regulations are set for:

TABLE 4

EU ENVIRONMENTAL OBJECTIVES (SURFACE WATERS) (AMENDMENT) REGULATIONS 2015 S.I. 386 of 2015 *Table 11 - The environmental quality standards (EQS) for priority substances and certain other pollutants to apply for the purpose of assigning chemical status* In the case of metals (cadmium, lead, mercury and nickel) the EQS refers to the dissolved concentration i.e. **the dissolved fraction of a water sample obtained by filtration through a 0.45 µm filter** or any equivalent pre-treatment or, where specifically indicated, to the bioavailable concentration.	
	MAC-EQS Inland Surface Waters
Lead and its compounds (ug/L)	**14**

Dr Shanahan was confident in her assessment, as the conductivity of the water samples was deemed far too low for the metals to be in a dissolved state in the samples. FitzScientific, the laboratory contracted for previous analyses, confirmed that all previous samples had been tested for Total Metals as Dissolved Metals had not been specified for.

Results:

TMS Environmental arranged for several samples to be delivered to ANS Laboratories in the UK for testing. Four tests were carried out and the results are displayed below in Table 5.

- Total Metals – Unpreserved
- Total Metals – Preserved,
- Dissolved Metals – Unpreserved, Filtered
- Dissolved Metals – Preserved, Filtered

TABLE 5

Surface water samples taken 30 November 2015, sent for analysis by TMS Environmental Ltd

	Total Metals - Unpreserved			Total Metals - Preserved		
	SW4	INTERCEPTOR	Down-Pipe	SW4	INTERCEPTOR	Down-Pipe
Lead (mg/L)	0.291	0.595	0.08	0.359	0.553	0.902
Lead (ug/L)	291	595	80	359	553	902

	Dissolved Metals - Unpreserved, Filtered			Dissolved Metals - Preserved, Filtered		
	SW4	INTERCEPTOR	Down-Pipe	SW4	INTERCEPTOR	Down-Pipe
Lead (mg/L)	0.012	0.029	0.012	<0.006	0.014	<0.006
Lead (ug/L)	12	29	12	<6	14	<6

As can be seen from the results in Table 5, level of dissolved lead are within range of the Maximum Allowable Concentration Environmental Quality Standard for Lead in Inland Surface Water Bodies.

Results of further sampling and analysis carried out in Jan/Feb 2016 indicated that when samples are filtered through a 0.45 µm filter and analysed for dissolved metals, lead levels in run-off from The Recycling Village Ltd is in line with the recently set MAC for lead in inland surface waters, please refer to Table 6 below for comparison.

TABLE 6

			TMS	TMS
			Dissolved Metals (Filtered)	Dissolved Metals (Unfiltered)
Parameters	**Limit**	**Units**	**27-Jan-16**	**27-Jan-16**
Lead	14	ug/L	14	35

Continual Improvement:

Sampling of storm water emissions from The Recycling Village Ltd is ongoing; in order to provide a clear set of levels of dissolved metals. Dr Shanahan will assist in the preparation of the SW Trigger Levels for The Recycling Village Ltd after 12 months of sampling and analysis using the new analytical specifications.

Results of Drainage System CCTV Survey with relation to Metals in Storm Water Run-Off Investigation:

A CCTV survey of the sites drainage system was carried out in June 2015 in accordance with Condition 6.9 of the licence. The Recycling Village Ltd had previously carried out a CCTV survey of the drainage system in 2012, in which the drainage company, Greenday Environmental Services Ltd (GESL), reported that an ACCO channel in the yard at the back of the facility was not connected to the yard drainage system.

When GESL were contracted to repeat the drainage survey in 2015, they reported that that the ACCO channel, located in the area used previously to store lead acid battery bins, leaded glass products, and other metal products, is connected to the drainage system. However the pipe connecting it to the underground drainage system by-passes the interceptor drainage system and follows a different drainage pathway (see Site Drainage Plan (12039-LA-01) attached). This deviation of the drainage systems had been the cause of the misinterpretation of the yard drainage system in 2012, as the original site plans given to The Recycling Village Ltd by the property owners indicated that the ACCO channel was connected to the yard interceptor. The site drainage plans have since been redrawn with relevance to the new information.

The sludge which had built up in the back ACCO channel was dug out and sent to FitzScientific for analysis for metals. It is now clear from the results of the sludge analysis that the issues with elevated levels of lead in emissions from SW4 were arising due to the water coming from the ACCO channel at the back of the facility.

All battery bins were removed from the location and are now stored inside the facility in the racking area. New battery handling procedures and acidified water handling procedures and spillage procedure have been implemented at The Recycling Village Ltd.

A covered area with adequate guttering was erected to house the leaded glass fractions in the yard, and to divert water away from the area. All drains onsite at The Recycling Village Ltd were rigorously cleaned and a new drainage maintenance procedure is being drafted with assistance from TMS Environmental.

Sampling Location:

The licence requirement for the site run-off to be sampled from the site's main outflow pipe conflicts with conditions Condition B.6 and C2.3, to sample from SW1 (as mentioned in the licence application), as this is not the main outflow pipe, SW1 is the yard interceptor discharge pipe.

SW4 is the main outflow pipe from the site, in which run-off from the roof down pipes, the car park and the back of the yard mix before leaving the site in the direction of the River Nanny. A request to make a Technical Amendment of Licence W0286-01 has been lodged with the EPA with respect to the change of location of sampling.

Stormwater Monitoring Results 2015					
		TMS	TMS	FitzScientific	FitzScientific
		Dissolved Metals (Filtered)	Dissolved Metals	Total Metals	Total Metals
Parameters	Units	Dec-15	Dec-15	Dec-15	Jul-15
Ammonia	mg/L as N	n/a	n/a	0.068	0.091
COD	mg/L	n/a	n/a	21	23
Conductivity	uscm -1 @20C	n/a	n/a	91.5	121.5
Mineral Oil	mg/L	n/a	n/a	495.39	<2.5
pH	pH Units	n/a	n/a	7.7	7.8
Suspended Soilds	mg/L	n/a	n/a	28	n/a
Aluminium	ug/L	<100	<100	126.1	198.2
Arsenic	ug/L	<0.1	<0.1	0.233	0.52
Cadmium	ug/L	<0.6	<0.6	0.905	n/a
Chromium	ug/L	<2	<2	1.359	2.128
Cobalt	ug/L	<2	<2	0.343	n/a
Copper	ug/L	<9	<9	18.51	32.01
Lead	ug/L	17	18	177.5	200.7
Mercury	ug/L	<0.0001	<0.0001	<0.03	<0.04
Nickel	ug/L	<3	<3	3.197	5.853
Zinc	ug/L	88	160	300.1	331.7

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Confidential Laboratory Test Report

Client: Recycling Village
Unit 21 Duleek Business Park
Duleek
Co. Meath

F.T.A.O: Nikita Coulter
Commencement Date: 30 November 2015
Completion Date: 11 December 2015
Report Date: 11 December 2015
Revision Issued: 07 January 2016

Client Ref.:

TMS Environment Ref: 22789 Rev 1.0

Sample Type: Surface Water

METAL TEST RESULTS

Parameter	*22789-1 Total	*22789-2 Total	*22789-3 Total	Units	Methodology	Test Procedure Ref.
Aluminium	0.3	0.5	< 0.1	mg/L	Note 1	Note 1
Cadmium	0.0013	0.0027	< 0.0006	mg/L	Note 1	Note 1
Chromium	0.006	0.006	< 0.002	mg/L	Note 1	Note 1
Cobalt	< 0.002	< 0.002	< 0.002	mg/L	Note 1	Note 1
Copper	0.027	0.048	< 0.009	mg/L	Note 1	Note 1
Lead	0.291	0.595	0.080	mg/L	Note 1	Note 1
Mercury	0.12	0.40	< 0.10	µg/L	Note 1	Note 1
Nickel	0.021	0.018	0.009	mg/L	Note 1	Note 1
Zinc	0.322	0.467	0.06	mg/L	Note 1	Note 1
Arsenic	< 1.0	< 1.0	< 1.0	µg/L	Note 1	Note 1

*All samples are unpreserved before sending to ALS
Note 1: Analysis subcontracted to ALS

Parameter	*22789-1 Dissolved**	*22789-2 Dissolved**	*22789-3 Dissolved**	Units	Methodology	Test Procedure Ref.
Aluminium	< 0.1	< 0.1	< 0.1	mg/L	Note 1	Note 1
Cadmium	< 0.0006	< 0.0006	< 0.0006	mg/L	Note 1	Note 1
Chromium	< 0.002	< 0.002	< 0.002	mg/L	Note 1	Note 1
Cobalt	< 0.002	< 0.002	< 0.002	mg/L	Note 1	Note 1
Copper	< 0.009	< 0.009	< 0.009	mg/L	Note 1	Note 1
Iron	< 0.23	< 0.23	< 0.23	mg/L	Note 1	Note 1
Lead	0.012	0.029	0.012	mg/L	Note 1	Note 1
Mercury	< 0.00010	< 0.00010	< 0.00010	µg/L	Note 1	Note 1
Nickel	< 0.003	< 0.003	< 0.003	mg/L	Note 1	Note 1
Zinc	0.057	0.070	0.039	mg/L	Note 1	Note 1

*All samples are unpreserved before sending to ALS
**Samples filtered in TMS using a 0.45um pore diameter filter before sending to ALS
Note 1: Analysis subcontracted to ALS

METAL TEST RESULTS

Parameter	*22789-1 Total	*22789-2 Total	*22789-3 Total	Units	Methodology	Test Procedure Ref.
Aluminium	0.4	0.5	0.4	mg/L	Note 1	Note 1
Cadmium	0.0012	0.0013	< 0.0006	mg/L	Note 1	Note 1
Chromium	0.008	0.006	0.009	mg/L	Note 1	Note 1
Cobalt	< 0.002	< 0.002	< 0.002	mg/L	Note 1	Note 1
Copper	0.032	0.042	0.029	mg/L	Note 1	Note 1
Lead	0.359	0.553	0.902	mg/L	Note 1	Note 1
Mercury	< 0.10	0.12	0.28	µg/L	Note 1	Note 1
Nickel	0.018	0.017	0.016	mg/L	Note 1	Note 1
Zinc	0.429	0.440	0.437	mg/L	Note 1	Note 1
Arsenic	< 1.0	< 1.0	1.5	µg/L	Note 1	Note 1

*All samples were preserved before sending to ALS
Note 1: Analysis subcontracted to ALS

Parameter	*22789-1a Dissolved**	*22789-2a Dissolved**	*22789-3a Dissolved**	Units	Methodology	Test Procedure Ref.
Aluminium	< 0.1	< 0.1	< 0.1	mg/L	Note 1	Note 1
Cadmium	< 0.0006	< 0.0006	< 0.0006	mg/L	Note 1	Note 1
Chromium	< 0.002	< 0.002	< 0.002	mg/L	Note 1	Note 1
Cobalt	< 0.002	< 0.002	< 0.002	mg/L	Note 1	Note 1
Copper	< 0.009	< 0.009	< 0.009	mg/L	Note 1	Note 1
Lead	< 0.006	0.014	< 0.006	mg/L	Note 1	Note 1
Mercury	< 0.00010	< 0.00010	< 0.00010	mg/L	Note 1	Note 1
Nickel	< 0.003	< 0.003	< 0.003	mg/L	Note 1	Note 1
Zinc	0.041	0.054	0.058	mg/L	Note 1	Note 1
Arsenic	< 1.0	< 1.0	< 1.0	µg/L	Note 1	Note 1

* All samples were preserved before sending to ALS
**Samples filtered in TMS using a 0.45um pore diameter filter before sending to ALS
Note 1: Analysis subcontracted to ALS

Prepared By: Lee Martin
Laboratory Analyst

Date: 07Jan16

Approved By: Katie Waldron
Katie Waldron
Senior Laboratory Analyst

Date: 07 Jan 16

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Confidential Laboratory Test Report

Client: Recycling Village Ltd
Unit 21 Duleek Business Park
Duleek
Co. Meath

Client Ref.:

F.T.A.O: Nikita Coulter
Commencement Date: 27 January 2016
Completion Date: 04 February 2016
Report Date: 08 February 2016
Page: 1 of 1
TMS Environment Ref: 22909

Sample Type: Surface Water

METAL TEST RESULTS

Parameter	22909-1* RVSW4271	22909-1a* RVSW4271 Filtered**	Units	Methodology	Test Procedure Ref.
Lead, Total as Pb	0.035	0.014	mg/L	Note 1	Note 1

*Samples Unpreserved
** 1a filtered in house first using a 0.45µm filter before sent to ALS.
Note 1: Analysis subcontracted to ALS

Prepared By: Lee Martin
Laboratory Analyst

Date: 08 Feb 16

Approved By: Katie Waldron
Katie Waldron
Senior Laboratory Analyst

Date: 08 Feb 16

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Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/026/01**
	The Recycling Village Ltd.	*Date of Receipt*	**14/12/2015**
	Unit 21	*Sampled On*	**14/12/2015**
	Duleek Business Park	*Date Testing Commenced*	**14/12/2015**
	Duleek	*Received or Collected*	**Delivered by Customer**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**23/12/2015**
Customer Ref	**RV1215H2**	*Sample Type*	**Surface Water**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Aluminium (Surface Water)	177	ICPMS	126.1	ug/L	UKAS
Ammonia (Surface Water)	114	Colorimetry	0.068	mg/L as N	UKAS
Arsenic (Surface Water)	177	ICPMS	0.233	ug/L	UKAS
Cadmium (Surface Water)	177	ICPMS	0.905	ug/L	UKAS
Chromium (Surface Water)	177	ICPMS	1.359	ug/L	UKAS
Cobalt (Surface Water)	177	ICPMS	0.343	ug/L	UKAS
COD (Surface Water)	107	Colorimetry	21	mg/L	UKAS
Conductivity (Surface Water at 20C)	112	Electrometry	91.5	uscm -1@20C	UKAS
Copper (Surface Water)	177	ICPMS	18.51	ug/L	UKAS
Lead (Surface Water)	177	ICPMS	177.5	ug/L	UKAS
Mercury (Surface water)	178	ICPMS	<0.03	ug/L	UKAS
Mineral Oil by Calculation	189	GC-FID	495.39	ug/L	
Nickel (Surface Water)	177	ICPMS	3.197	ug/L	UKAS
pH (Surface Water)	110	Electrometry	7.7	pH Units	UKAS
Solids (Total Suspended)	106	Filtration/ Drying @ 104C	28	mg/L	
Zinc (Surface Water)	177	ICPMS	300.1	ug/L	UKAS

Signed : A Harmon

Aoife Harmon - Technical Supervisor

Date : 23/12/2015

UKAS TESTING 2802

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C
Results shall not be reproduced, except in full, without the approval of Fitz Scientific
Results contained in this report relate only to the samples tested (P) : Presumptive Results
** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2012)

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Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/023/07**
	The Recycling Village Ltd.	*Date of Receipt*	**27/10/2015**
	Unit 21	*Sampled On*	**27/10/2015**
	Duleek Business Park	*Date Testing Commenced*	**27/10/2015**
	Duleek	*Received or Collected*	**Delivered by Customer**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**02/11/2015**
Customer Ref	**RV15SW4**	*Sample Type*	**Surface Water**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Aluminium (Surface Water)	177	ICPMS	102.8	ug/L	UKAS
Chromium (Surface Water)	177	ICPMS	1.579	ug/L	UKAS
Copper (Surface Water)	177	ICPMS	7.889	ug/L	UKAS
Lead (Surface Water)	177	ICPMS	49.85	ug/L	UKAS
Zinc (Surface Water)	177	ICPMS	113.3	ug/L	UKAS

Signed : A Harmon

Aoife Harmon - Technical Supervisor

Date : 02/11/2015

UKAS TESTING
2802

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C

Results contained in this report relate only to the samples tested (P) : Presumptive Results
** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2012)

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Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/023/06**
	The Recycling Village Ltd.	*Date of Receipt*	**27/10/2015**
	Unit 21	*Sampled On*	**27/10/2015**
	Duleek Business Park	*Date Testing Commenced*	**27/10/2015**
	Duleek	*Received or Collected*	**Delivered by Customer**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**02/11/2015**
Customer Ref	**RV15CP**	*Sample Type*	**Surface Water**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Aluminium (Surface Water)	177	ICPMS	<2.33	ug/L	UKAS
Chromium (Surface Water)	177	ICPMS	<0.58	ug/L	UKAS
Copper (Surface Water)	177	ICPMS	0.402	ug/L	UKAS
Lead (Surface Water)	177	ICPMS	0.805	ug/L	UKAS
Zinc (Surface Water)	177	ICPMS	521.7	ug/L	UKAS

Signed : A Harmon

Aoife Harmon - Technical Supervisor

Date : 02/11/2015

UKAS TESTING
2802

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C
Results shall not be reproduced, except in full, without the approval of Fitz Scientific
Results contained in this report relate only to the samples tested (P) : Presumptive Results
** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2012)

Fitz scientific

Monitoring and Testing Services

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Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/023/05**
	The Recycling Village Ltd.	*Date of Receipt*	**27/10/2015**
	Unit 21	*Sampled On*	**27/10/2015**
	Duleek Business Park	*Date Testing Commenced*	**27/10/2015**
	Duleek	*Received or Collected*	**Delivered by Customer**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**02/11/2015**
Customer Ref	**RV15INT**	*Sample Type*	**Surface Water**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Aluminium (Surface Water)	177	ICPMS	83.38	ug/L	UKAS
Chromium (Surface Water)	177	ICPMS	0.985	ug/L	UKAS
Copper (Surface Water)	177	ICPMS	12.97	ug/L	UKAS
Lead (Surface Water)	177	ICPMS	56.85	ug/L	UKAS
Zinc (Surface Water)	177	ICPMS	48.36	ug/L	UKAS

Signed : A Harmon

Aoife Harmon - Technical Supervisor

Date : 02/11/2015

UKAS TESTING
2802

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C
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Results contained in this report relate only to the samples tested (P) : Presumptive Results
** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2012)

Fitz scientific

Monitoring and Testing Services

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Drogheda,
Co. Louth
Ireland
Tel: +353 41 9845440
Fax: +353 41 9846171
Web: www.fitzsci.ie
email info@fitzsci.ie

A copy of this certificate is available on www.fitzsci.ie

Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/023/03**
	The Recycling Village Ltd.	*Date of Receipt*	**27/10/2015**
	Unit 21	*Sampled On*	**27/10/2015**
	Duleek Business Park	*Date Testing Commenced*	**27/10/2015**
	Duleek	*Received or Collected*	**Delivered by Customer**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**02/11/2015**
Customer Ref	**RV15PEL**	*Sample Type*	**Surface Water**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Aluminium (Surface Water)	177	ICPMS	87.46	ug/L	UKAS
Chromium (Surface Water)	177	ICPMS	1.706	ug/L	UKAS
Copper (Surface Water)	177	ICPMS	7.063	ug/L	UKAS
Lead (Surface Water)	177	ICPMS	30.95	ug/L	UKAS
Zinc (Surface Water)	177	ICPMS	75.41	ug/L	UKAS

Signed : A Harmon

Aoife Harmon - Technical Supervisor

Date : 02/11/2015

UKAS TESTING 2802

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C

Results contained in this report relate only to the samples tested (P) : Presumptive Results

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Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/023/04**
	The Recycling Village Ltd.	*Date of Receipt*	**27/10/2015**
	Unit 21	*Sampled On*	**27/10/2015**
	Duleek Business Park	*Date Testing Commenced*	**27/10/2015**
	Duleek	*Received or Collected*	**Delivered by Customer**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**02/11/2015**
Customer Ref	**RV15ACCO**	*Sample Type*	**Surface Water**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Aluminium (Surface Water)	177	ICPMS	694.1	ug/L	UKAS
Chromium (Surface Water)	177	ICPMS	12.7	ug/L	UKAS
Copper (Surface Water)	177	ICPMS	73.41	ug/L	UKAS
Lead (Surface Water)	177	ICPMS	1361	ug/L	UKAS
Zinc (Surface Water)	177	ICPMS	557.8	ug/L	UKAS

Signed : A Harmon

Aoife Harmon - Technical Supervisor

Date : 02/11/2015

UKAS TESTING
2802

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PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
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Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/023/02**
	The Recycling Village Ltd.	*Date of Receipt*	**27/10/2015**
	Unit 21	*Sampled On*	**27/10/2015**
	Duleek Business Park	*Date Testing Commenced*	**27/10/2015**
	Duleek	*Received or Collected*	**Delivered by Customer**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**02/11/2015**
Customer Ref	**RV15MHS21**	*Sample Type*	**Surface Water**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Aluminium (Surface Water)	177	ICPMS	61.38	ug/L	UKAS
Chromium (Surface Water)	177	ICPMS	1.319	ug/L	UKAS
Copper (Surface Water)	177	ICPMS	10.02	ug/L	UKAS
Lead (Surface Water)	177	ICPMS	89.71	ug/L	UKAS
Zinc (Surface Water)	177	ICPMS	342.1	ug/L	UKAS

Signed : A Harmon

Aoife Harmon - Technical Supervisor

Date : 02/11/2015

UKAS TESTING
2802

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C

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Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/021/05**
	The Recycling Village Ltd.	*Date of Receipt*	**15/09/2015**
	Unit 21	*Sampled On*	**14/09/2015**
	Duleek Business Park	*Date Testing Commenced*	**15/09/2015**
	Duleek	*Received or Collected*	**Delivered by Customer**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**01/10/2015**
Customer Ref	**RV0915 SW MIX 2**	*Sample Type*	**Surface Water**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Lead (Surface Water)	177	ICPMS	245.2	ug/L	UKAS

Signed : A Harmon

Aoife Harmon - Technical Supervisor

Date : 01/10/2015

UKAS TESTING 2802

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PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
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Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/020/01**
	The Recycling Village Ltd.	*Date of Receipt*	**19/08/2015**
	Unit 21	*Sampled On*	**19/08/2015**
	Duleek Business Park	*Date Testing Commenced*	**19/08/2015**
	Duleek	*Received or Collected*	**Delivered by Customer**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**02/09/2015**
Customer Ref	**RVSW15**	*Sample Type*	**Trade Effluent**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Lead (Industrial Eff.)	177	ICPMS	117.5	ug/L	UKAS

Signed : Katherine McQuillan

Date : 02/09/2015

Katherine McQuillan - Technical Manager

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C
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UKAS TESTING
2802

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Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/018/01**
	The Recycling Village Ltd.	*Date of Receipt*	**27/07/2015**
	Unit 21	*Sampled On*	**27/07/2015**
	Duleek Business Park	*Date Testing Commenced*	**27/07/2015**
	Duleek	*Received or Collected*	**Delivered by Customer**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**14/08/2015**
Customer Ref	**RV07715H1**	*Sample Type*	**Trade Effluent**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Aluminium (Industrial Eff.)	177	ICPMS	198.2	ug/L	UKAS
Ammonia (Industrial Eff.)	114	Colorimetry	0.091	mg/L as N	UKAS
Arsenic (Industrial Eff.)	177	ICPMS	0.52	ug/L	UKAS
Chromium (Industrial Eff.)	177	ICPMS	2.128	ug/L	UKAS
COD (Industrial Eff.)	107	Colorimetry	23	mg/L	UKAS
Conductivity (Industrial Eff at 20C)	112	Electrometry	121.5	uscm -1 @20C	UKAS
Copper (Industrial Eff.)	177	ICPMS	32.01	ug/L	UKAS
Lead (Industrial Eff.)	177	ICPMS	200.7	ug/L	UKAS
Mercury (Industrial Eff)	178	ICPMS	<0.04	ug/L	UKAS
Mineral Oil by Calculation	189	GC-FID	<2.5	ug/L	
Nickel (Industrial Eff.)	177	ICPMS	5.853	ug/L	UKAS
pH (Industrial Eff)	110	Electrometry	7.8	pH Units	UKAS
Zinc (Industrial Eff.)	177	ICPMS	331.7	ug/L	UKAS

Signed : A Harmon

Aoife Harmon - Technical Supervisor

Date : 14/08/2015

UKAS TESTING
2802

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C

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** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2012)

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Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/014/01**
	The Recycling Village Ltd.	*Date of Receipt*	**20/03/2015**
	Unit 21	*Sampled On*	**18/03/2015**
	Duleek Business Park	*Date Testing Commenced*	**20/03/2015**
	Duleek	*Received or Collected*	**Delivered by Customer**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**31/03/2015**
Customer Ref	**RV0315EX**	*Sample Type*	**Trade Effluent**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Lead (Industrial Eff.)	177	ICPMS	234.2	ug/L	UKAS

Signed : A Harmon

Aoife Harmon - Technical Supervisor

Date : 31/03/2015

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C
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UKAS TESTING
2802

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Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/013/01**
	The Recycling Village Ltd.	*Date of Receipt*	**13/02/2015**
	Unit 21	*Sampled On*	**13/02/2015**
	Duleek Business Park	*Date Testing Commenced*	**13/02/2015**
	Duleek	*Received or Collected*	**Delivered by Customer**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**18/02/2015**
Customer Ref	**RV0215EX**	*Sample Type*	**Trade Effluent**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
BOD (Industrial Eff.)	113	Electrometry	9	mg/L	UKAS
Lead (Industrial Eff.)	177	ICPMS	484.4	ug/L	UKAS

Signed : A Harmon

Aoife Harmon - Technical Supervisor

Date : 18/02/2015

UKAS TESTING 2802

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
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** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2012)

Appendix 3

Waste Management Record

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

[PRTR# : W0286 | Facility Name : The Recycling Village Ltd | Filename : W0286_2015.xls | Return Year : 2015] 12/2/2016 14:21

Please enter all quantities on this sheet in Tonnes 3

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 Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	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					
To Other Countries	16 06 01	Yes	1352.0	lead batteries	R13	M	Weighed	Abroad	G&P Batteries Ltd,ERP DP3292LC	Crescent Works Industrial Estate,Willenhall Rd,Darlaston,WS10 8JR,United Kingdom	HJ Enthoven & Sons Ltd,ERP BL5598IR,Darley Dale Smelter,South Darley,Matlock,DE4 2LP,United Kingdom	Darley Dale Smelter,South Darley,Matlock,DE4 2LP,United Kingdom
Within the Country	16 06 04	No	16.0	alkaline batteries (except 16 06 03)	R13	M	Weighed	Offsite in Ireland	Electrical Waste Management Ltd,WFP-DS-11-0014-04	Unit 648 Jordanstown Drive,Greenogue Business Park,Rathcoole,Co. Dublin,Ireland		
To Other Countries	16 02 15	Yes	200.0	hazardous components removed from discarded equipment	R5	M	Weighed	Abroad	A Jansen BV,1457727	Postbus 60,Kanaaldijk Zuid 24,Son,5691 NL ,Netherlands	A Jansen BV,1457727,Postbus 60,Kanaaldijk Zuid 24,Son,5691 NL ,Netherlands	Postbus 60,Kanaaldijk Zuid 24,Son,5691 NL ,Netherlands
To Other Countries	16 02 15	Yes	50.0	hazardous components removed from discarded equipment	R5	M	Weighed	Abroad	HJ Enthoven & Sons Ltd,ERP BL5598IR	Darley Dale Smelter,South Darley,Matlock,DE4 2LP,United Kingdom	HJ Enthoven & Sons Ltd,ERP BL5598IR,Darley Dale Smelter,South Darley,Matlock,DE4 2LP,United Kingdom	Darley Dale Smelter,South Darley,Matlock,DE4 2LP,United Kingdom
Within the Country	19 12 05	No	1045.0	glass	R5	M	Weighed	Offsite in Ireland	John Gannon Concrete T/A Gannon Eco,WFP-WM-2009-0007-01	Split Hill Quarries,Kilbeggan,Co. Westmeath,N91 TNK3,Ireland		
Within the Country	16 02 16	No	1097.0	components removed from discarded equipment other than those mentioned in 16 02 15	R13	M	Weighed	Offsite in Ireland	Davis Recycling International Ltd,IRE/AG246/15	Unit 648 Jordanstown Drive,Greenogue Business Park,Rathcoole,Co. Dublin,Ireland		
To Other Countries	19 12 04	No	638.0	plastic and rubber	R13	M	Weighed	Abroad	WRC Recycling Ltd,IRE/AG121/15	Floors St,Johnstone,Scotland,PA5 8QS,United Kingdom		
Within the Country	20 01 21	Yes	1.5	fluorescent tubes and other mercury-containing waste	R5	M	Weighed	Offsite in Ireland	Irish Lamp Recycling Ltd,WFP-KE-14-0072-01	Woodstock Industrial Estate ,Kilkenny Road,Athy Co. Kildare,R14 K889,Ireland	Future Industrial Services Ltd,EPR KP3437TF,East Ord Industrial Estate ,Berwick-upon-Tweed,Northumberland,TD1 5 2XF,United Kingdom	East Ord Industrial Estate ,Berwick-upon-Tweed,Northumberland,TD1 5 2XF,United Kingdom
Within the Country	19 12 12	No	63.0	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D10	M	Weighed	Offsite in Ireland	Indaver Ireland Ltd Meath,W0167-02	Carranstown,Duleek,Co. Meath,A92 EP32,Ireland		
Within the Country	20 01 36	No	77.0	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R13	M	Weighed	Offsite in Ireland	Electrical Waste Management Ltd,WFP-DS-11-0014-04	Unit 648 Jordanstown Drive,Greenogue Business Park,Rathcoole,Co. Dublin,Ireland		
Within the Country	20 01 36	No	22.0	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R5	M	Weighed	Offsite in Ireland	KMK Metal Recycling Ltd,W0113-03	Cappincur Industrial Estate,Cappincur ,Tullamore Co. Offaly,R35 NY29,Ireland		
Within the Country	20 01 36	No	127.0	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R13	M	Weighed	Offsite in Ireland	Davis Recycling International Ltd,IRE/AG246/15	Unit 648 Jordanstown Drive,Greenogue Business Park,Rathcoole,Co. Dublin,Ireland		

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 Non Haz Waste : Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste : Address of Recover/Disposer	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					
Within the Country	19 12 07	No	24.0	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Panda Waste Service Ltd,W0140-03	Beauparc Business Park,Rathdrinagh,Navan Co. Meath,C15 P586,Ireland		

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

Appendix 4

Quantity and composition of waste accepted and recovered (classified by EWC)

Quantity and Composition of Waste Accepted and Recovered in 2015 (Classified by EWC Code)

WASTE ACCEPTED		QUANTITY
EWC CODE	DESCRIPTION OF WASTE	TONNES
16 06 01*	Lead acid batteries and accumulators	1181.00
16 06 02*	Ni-Cd batteries and accumulators	0.40
16 06 05	Other batteries and accumulators	2.80
20 01 35*	Discarded electronic and electrical equipment other than those mentioned in 20 01 21, 20 01 23 containing hazardous components	3480.00
20 01 36	Discarded electronic and electrical equipment other than those mentioned in 20 01 21, 20 01 23	292.00
19 12 02	Ferrous metal from metal processing	27.00
19 12 03	Non ferrous metal from metal processing	2.00

Appendix 5

Resource Consumption Summary

Resource Consumption Summary 2015

RESOURCE	UNIT OF MEASUREMENT	QUANTITY	€
Public Water Supply	M^3	288	2,568
Air Emissions Filters	Unit	84	1,764
Pallet Wrap	Roll	168	1,092
Wire	Kgs	3,600	6,708
FIBC	Units	2,100	9,840
Strapping	Roll	12	948
ESB	KWh	137,796	11,700
Gas	KWh	55,284	3,516

Appendix 6

5 Year Environmental Management Plan

Page Number:	0 of 5				
EMS Clause No.:	4.3.3	Prepared By:	N. Coulter	Signature:	
EMS Ref. No.:	ER 008				
Rev. Number:	0	Approved By:	N. Madden	Signature:	
Effective Date:	12/10/2015				

TITLE: FIVE YEAR ENVIRONMENTAL MANAGEMENT PROGRAMME

Summary of Programmes

1	**PROGRAMME**	**Contractor and Supplier Evaluation**
	OBJECTIVE	To continously monitor and evaluate all contractors and suppliers to ensure compliance with relevant legislation and with RV's requirements
		To update the contractor and supplier control procedure to include auditing requirements, to have all required documents on file in RV
	TARGETS	To produce a realistic auditing schedule,
		To have all required documents on file in RV
2	**PROGRAMME**	**Energy and Raw Materials Use**
	OBJECTIVE	To track energy use and raw material consumption on site and to reduce usage in comparison to previous years
	TARGET	To reduce energy consumption by 5% annually
3	**PROGRAMME**	**Fire Prevention**
	OBJECTIVE	To assess the risk of fires occuring on site and to implement strategies to reduce the impact of a potential fire on the surrounding environment
	TARGET	To have no fires occur at the facility and to have a well-developed impact mitigation strategy
4	**PROGRAMME**	**Materials Storage and Dispatch**
	OBJECTIVE	To ensure the correct storage and dispatch of all materials to the correct locations with the correct documentation taking full consideration of applicable regulations
	TARGET	For all materials and accompanying paperwork to arrive at the correct location on schedule with no incidents or complaints from clients
5	**PROGRAMME**	**Domestic Water Use**
	OBJECTIVE	To analyse the amount of water used on site and to reduce the quantity use or to supplement piped water use with rainwater use
	TARGET	To produce an accurate representation of how much water is used on site annually and to devise a plan to reduce consumption

RV

ISO 14001 – ENVIRONMENTAL MANAGEMENT SYSTEM

Page Number:	**1 of 5**	**Prepared By:**	**N. Coulter**	**Signature:**	
EMS Clause No.:	**4.3.3**				
EMS Ref. No.:	**ER 008**				
Rev. Number:	**0**	**Approved By:**	**N. Madden**	**Signature:**	
Effective Date:	**12/10/2015**				

TITLE: FIVE YEAR ENVIRONMENTAL MANAGEMENT PROGRAMME

PROGRAMME	**Contractor and Supplier Evaluation**
OBJECTIVE	To continously monitor and evaluate all contractors and suppliers to ensure compliance with relevant legislation and with RV's requirements
TARGETS	To update the contractor and supplier control procedure to include auditing requirements, to have all required documents on file in RV To produce a realistic auditing schedule, To have all required documents on file in RV
CATEGORY	**Control / Maintain** X **Improve** X **Study / Investigate**

STAGE	TASK	RESPONSIBILITY	POTENTIAL RESOURSES REQUIRED	REVISION	OUTPUT/COMMENTS
1	Review current procedure	Environmental Compliance Officer	Time; appropriate computer software	**At least annually**	*EMS 09 11*
2	Review current checklist	Environmental Compliance Officer	Time; appropriate computer software; access to company and standard requirements	**At least annually**	*To be reviewed April 2016*
3	Propose feasible schedule for current year and subsequent years depending on audit frequency requirements	Environmental Management Team	Time; Contact with contractors and suppliers	**Annually**	*EF 33*
4	Review and approve updates to procedures and supporting documents	Managing Director	Time	**As required**	*EMS 09 11 - finalised Feb 2016*
5	Carry out audits	Environmental Management Team	Time; checklists; contact with contractors and suppliers; funding for travel expenses	**As required**	*Onsite Audits beginning May 2016*
6	Write reports and follow up on any non-conformances with audit requirements	Environmental Management Team	Time; appropriate computer software	**As required**	*EF 25 - held in External Audits Folder*
7	File relevant contracter and supplier document accordingly	Environmental Compliance Officer; Office Administrator	Time; space for storing documents	**As required**	*External Audits Folder*

Page Number:	**2 of 5**	**Prepared By:**	**N. Coulter**	**Signature:**	
EMS Clause No.:	**4.3.3**				
EMS Ref. No.:	**ER 008**				
Rev. Number:	**0**	**Approved By:**	**N. Madden**	**Signature:**	
Effective Date:	**12/10/2015**				

TITLE: FIVE YEAR ENVIRONMENTAL MANAGEMENT PROGRAMME

PROGRAMME	**Energy and Raw Materials Use**		
OBJECTIVE	To track energy use and raw material consumption on site and to reduce usage in comparison to previous years		
TARGET	To reduce energy consumption by 5% annually		
CATEGORY	**Control / Maintain**	**Improve** X	**Study / Investigate** X

STAGE	TASK	RESPONSIBILITY	POTENTIAL RESOURSES REQUIRED	REVISION	OUTPUT/COMMENTS
1	Collect energy invoices from previous years and data on raw materials use	Environmental Compliance Officer	Invoices and data	**Bimonthly**	*Site Energy Use Folder. Online billing with utlities providers alllows bills to be obtained online*
2	Create a spreadsheet of energy cost, energy usage, and raw materials consumption	Environmental Compliance Officer	Time; appropriate computer software	**As required**	*Programme Charter - ENV6 - Site Energy Use file*
3	Conduct a site energy audit and investigate cost-effective methods for reducing consumption of energy and raw materials	Environmental Consultant	Environmental Consultant	**Annually**	*Comlete 23/12/2015 - EPA Reports uploaded to EDEN*
4	Discuss and/or select energy consumption reduction strategies	Environmental Management Team	Time	**As required**	*Investigating LED lighting for the facility*
5	Implement new energy consumption reduction strategies	Environmental Management Team	Time; funding for implementing new strategies	**As required**	*2016*
6	Monitor the progress of implemented strategies by comparing invoices on a bimonthly basis to those from previous years to identify increases/decreases in energy usage and raw materials usage	Environmental Compliance Officer	Invoices and data; time; appropriate computer software	**Bimonthly**	*For heating bills, take account of yearly temperature fluctuations. For electricity and raw materials use take account of fluctuations in quantity of materials being processed*
7	Compile a yearly energy and raw material usage report for management and report incidents where energy usage was higher than previous years	Environmental Compliance Officer	Time; appropriate computer software	**Annually**	*2015 data to be compared with 2014. Production data will be assessed in line with energy use data.*

Page Number:	3 of 5	**Prepared By:**	N. Coulter	**Signature:**	
EMS Clause No.:	4.3.3				
EMS Ref. No.:	ER 008				
Rev. Number:	0	**Approved By:**	N. Madden	**Signature:**	
Effective Date:	12/10/2015				

TITLE: FIVE YEAR ENVIRONMENTAL MANAGEMENT PROGRAMME

PROGRAMME	**Fire Prevention**
OBJECTIVE	To assess the risk of fires occuring on site and to implement strategies to reduce the impact of a potential fire on the surrounding environment
TARGET	To have no fires occur at the facility and to have a well-developed impact mitigation strategy
CATEGORY	**Control / Maintain** X **Improve** X **Study / Investigate** X

STAGE	TASK	RESPONSIBILITY	POTENTIAL RESOURSES REQUIRED	REVISION	OUTPUT/COMMENTS
1	Carry out risk assessment to determine if a fire-water retention facility is required, compile Fire Water Retention Report and submit to EPA	Managing Director and Environmental Compliance Officer	Require services of an environmental consultant and the local fire brigade; maps of the facility, all appropriate documentation relating to fire prevention on site	As determined by the EPA	*Fire Water Retention Report - in EPA Reports 2015 EDEN folder*
2	Obtain quotations for a smoke detection system for the facility	Managing Director and Facility Manager	Contact details for companies	n/a	*Fire Response Equipment Folder*
3	Have a meeting with Meath Fire Brigade to discuss fire risk and firewater retention requirements at the facility	Managing Director and Facility Manager	Consent of Meath Fire Brigade	**n/a**	*Certificates in Fire Response Equipment Folder*
4	Carry out routine evacuation drill to ensure fire alarm system is working and that staff are aware of the procedure #1	Facility Manager	List of staff on site that day	**At least annually**	*Staff Sign On Sheets and Training Recods in Training Folders*
5	Carry out specific annual training in Emergency Response Prodcedures for dedicated team	Facility Manager and Environmental Compliance Officer	Health and safety consultant	**Annually**	*Completed 07-10-15, Certificates in Fire Response Equipment Folder.*
6	Carry out annual fire extinguisher tests	Managing Director and Facility Manager	Health and safety consultant	**Annually**	*Fire Response Equipment Folder*
7	Carry out annual fire safety training	Health and Safety Consultant	Services of a Health and Safety Consultant; staff time to attend training; appropriately qualified trainer; funding	**Annually**	*Fire Response Equipment Folder*
8	Amend Fire-Water Retention Report as required by EPA	Managing Director and Environmental Compliance Officer	Environmental consultant	**As required by the EPA**	*Fire Water Retention Report - in EPA Reports 2015 EDEN folder*
9	Carry out annual fire hydrant tests	Managing Director and Facility Manager	Health and Safety Consultant; Fire hydrant testing company	**Annually**	*Fire Response Equipment Folder*
10	Carry out routine evacuation drill to ensure fire alarm system is working and that staff are aware of the procedure #2	Facility Manager	List of staff on site that day	**At least annually**	*Fire Response Equipment Folder*
11	Update Fire Response Flow Chart	Environmental Compliance Officer	Appropriate computer software	**Biennially**	*Fire Response Equipment Folder*
12	Distribute Fire Flow Chart Around Site	Environmental Compliance Officer	Access to facility notice boards	**Biennially**	*Fire Response Equipment Folder*
13	Audit all previous fire-related programmes, risk assessments, prevention strategies and response procedures to identify whether recommendations etc. are being implemented	Environmental Compliance Officer	Access to appropriate documentation; appropriate computer software	**Biennially**	*Working Documents Folder - Internal Audits*
14	Install smoke detection system once a satisfactory quotation is obtained	Managing Director and Facility Manager; Accountant	Adequate funding; satisfactory quotation and documents from contracted company (refer to FMS 09 11 Section 8.0); platform hoist	**n/a**	*Fire Response Equipment Folder*
15	Have plan of installation printed on durable material and placed as close as is possible to the entrance of the installation.	Managing Director and Facility Manager	Architect; funding; adequate space and tools to erect plan	**As required by the EPA**	*Complete - plan on display in Reception*
16	Investigate the feasibility of retaining firewater within the building (WEML suggestion - install 0.2 m sloped ramp at all doors) and potential methods for covering all surface water gullies in the yard in the event of a fire	Managing Director, Facility Manager, Environmental Compliance Officer; Accountant	Services of a Health and Safety Consultant; consultation with insurance providers; consultation with fire department; consultation with architect / engineer; adequate funding; time to research alternative solutions	**As required by the EPA**	*Project Charter / Fire Response Equipment Folder*
17	Assess whether hazardous wastes and flammable materials are being properly stored to prevent fires	Environmental Compliance Officer and / or Facility Manager	Facility Manager checks all haz wastes weekly	**Weekly / Monthly**	*Checked when waste quantities change - monitoried by Facility Manager*
18	Assess whether plant equipment is being properly maintained to prevent electrical fires	Facility Manager and Facility Supervisor	Equipment maintenance list; recommendations from equipment suppliers	**Daily / Monthly**	*Daily checklist EF 18 - updated by Facility Manager. Equipment Maintenance Folder*
19	Carry out monthly fire alarm tests to ensure lights and sounders are operational	Facility Manager	Time	**Monthly**	*Fire Response Equipment Folder*

Page Number:	**4 of 5**				
EMS Clause No.:	**4.3.3**	**Prepared By:**	**N. Coulter**	**Signature:**	
EMS Ref. No.:	**ER 008**				
Rev. Number:	**0**	**Approved By:**	**N. Madden**	**Signature:**	
Effective Date:	**12/10/2015**				

TITLE: FIVE YEAR ENVIRONMENTAL MANAGEMENT PROGRAMME

PROGRAMME	**Materials Storage and Dispatch**		
OBJECTIVE	To ensure the correct storage and dispatch of all materials to the correct locations with the correct documentation taking full consideration of applicable regulations		
TARGET	For all materials and accompanying paperwork to arrive at the correct location on schedule with no incidents or complaints from clients		
CATEGORY	**Control / Maintain** ☐	**Improve** X	**Study / Investigate** ☐

STAGE	TASK	RESPONSIBILITY	POTENTIAL RESOURSES REQUIRED	REVISION	OUTPUT/COMMENTS
1	Develop an onsite Waste Storage Plan that can be manipulated in real time	Facility Manager	Time; appropriate computer software	**As required**	*Complete - Facility Manager*
2	Update operating procedures and site maps if required	Facility Manager and Environmental Compliance Officer	Time; appropriate computer software; architects	**As required**	*Site map updated to account for new stroage areas. Operating procedures to be updated in 2016*
3	Develop a logistics folder with all information regarding client specifications for their material	Facility Manager	Time; appropriate computer software; contact with clients	**As required**	*Completed - ENV 9 Logistics Folder*
4	Add in information regarding environmental concerns and health and safety requirements	Facility Manager and Environmental Compliance Officer	Time to review appropriate legislation and requirements	**As required**	*Completed - ENV 9 Logistics Folder*
5	Train required personnel in specifications and requirements - share the folder on the company server	Facility Manager and Environmental Compliance Officer	Appropriately qualified trainers; time	**As required**	*Completed - ENV 9 Logistics Folder*
6	Monitor dispatches and check paperwork to ensure conformity with requirements	Facility Manager and Environmental Compliance Officer	Time; access to dispatch documentation	**Continously**	*Ongoing*
7	Report incidents to top management if they arise and devise solutions	Environmental Compliance Officer	Time to prepare reports and consult with management; appropriate computer software to prepare reports	**As required**	*EF 27 - Incident Record*

Page Number:	**5 of 5**	**Prepared By:**	**N. Coulter**	**Signature:**	
EMS Clause No.:	**4.3.3**				
EMS Ref. No.:	**ER 008**				
Rev. Number:	**0**	**Approved By:**	**N. Madden**	**Signature:**	
Effective Date:	**12/10/2015**				

TITLE: FIVE YEAR ENVIRONMENTAL MANAGEMENT PROGRAMME

PROGRAMME	**Domestic Water Use**		
OBJECTIVE	To analyse the amount of water used on site and to reduce the quantity use or to supplement piped water use with rainwater use		
TARGET	To produce an accurate representation of how much water is used on site annually and to devise a plan to reduce consumption		
CATEGORY	**Control / Maintain** ☐	**Improve** X	**Study / Investigate** X

STAGE	TASK	RESPONSIBILITY	POTENTIAL RESOURSES REQUIRED	REVISION	OUTPUT/COMMENTS
1	Establish the annual volume and costs of domestic water used at the site	Environmental Management Team	Time; data; appropriate computer software	**Annually**	*Data obtained from accounts department - to be assessed in 2016*
2	Have site plumbing assessed for leaks / dripping faucets / inefficient flushing systems etc	Facility Manager; Plumber	Time; plan of facility indicating domestic water infrastructure	**As required**	*Plumber suggested replacing cistern systems in urinals with smaller, less frequent flushing versions.*
3	Investigate the market for water saving products eg. push button flushers on urinals etc and rainwater harvesting solutions	Environmental Management Team	Internet/telephone	**As required**	*Ongoing*
4	Research other water saving strategies / campaigns - add to staff training	Environmental Compliance Officer	Internet/telephone	**As required**	*Ongoing*
5	Obtain and assess quotes for appropriate stratgies	Environmental Management Team	Contact with companies providing solutions	**As required**	*Ongoing*
6	Decide on appropriate strategies to be implemented	Managing Director	Time; adequate funds	**As required**	*Ongoing*
7	Implement strategies, carry out any necessary training and review strategies on a monthly basis	Environmental Management Team	Time; adequate funds; data to compare	**As required**	*September 2015 - cistern upgrade carried out*

Appendix 7

Pollutant Release and Transfer Register

Environmental Protection Agency

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2015

1. FACILITY IDENTIFICATION

Parent Company Name	The Recycling Village Limited
Facility Name	The Recycling Village Ltd
PRTR Identification Number	W0286
Licence Number	W0286-01

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Unit 21
Address 2	Duleek Business Park
Address 3	Commons
Address 4	Duleek
	Meath
Country	Ireland
Coordinates of Location	-6.40779981153.66388532
River Basin District	IEEA
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	
AER Returns Contact Email Address	
AER Returns Contact Position	
AER Returns Contact Telephone Number	
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
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	www.therecyclingvillage.ie

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
5(a)	Installations for the recovery or disposal of hazardous waste

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. WASTE IMPORTED/ACCEPTED ONTO SITE Guidance on waste imported/accepted onto site

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	Yes

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

[PRTR# : W0286 | Facility Name : The Recycling Village Ltd | Filename : Environmental Data Monitoring System.xlsx | Return Year : 2015] 16/03/2016 14:22

Please enter all quantities on this sheet in Tonnes

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 License/Permit No of Next Destination Facility Non Haz Waste: Name and License/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	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					
To Other Countries	16 06 01	Yes	1352.0	lead batteries	R13	M	Weighed	Abroad	G&P Batteries Ltd,ERP DP3292LC	Crescent Works Industrial Estate,Willenhall Rd,Dartaston,WS10 8JR,United Kingdom	HJ Enthoven & Sons Ltd,ERP BL5598IR,Darley Dale Smelter,South Darley,Matlock,DE4 2LP,United Kingdom	Darley Dale Smelter,South Darley,Matlock,DE4 2LP,United Kingdom
Within the Country	16 06 04	No	16.0	alkaline batteries (except 16 06 03)	R13	M	Weighed	Offsite in Ireland	Electrical Waste Management Ltd,WFP-DS-11-0014-04	Unit 648 Jordanstown Drive,Greenogue Business Park,Rathcoole,Co. Dublin,Ireland		
To Other Countries	16 02 15	Yes	200.0	hazardous components removed from discarded equipment	R5	M	Weighed	Abroad	A Jansen BV,1457727	Postbus 60,Kanaaldijk Zuid 24,Son,5691 NL ,Netherlands	A Jansen BV,1457727,Postbus 60,Kanaaldijk Zuid 24,Son,5691 NL ,Netherlands	Postbus 60,Kanaaldijk Zuid 24,Son,5691 NL ,Netherlands
To Other Countries	16 02 15	Yes	50.0	hazardous components removed from discarded equipment	R5	M	Weighed	Abroad	HJ Enthoven & Sons Ltd,ERP BL5598IR	Darley Dale Smelter,South Darley,Matlock,DE4 2LP,United Kingdom	HJ Enthoven & Sons Ltd,ERP BL5598IR,Darley Dale Smelter,South Darley,Matlock,DE4 2LP,United Kingdom	Darley Dale Smelter,South Darley,Matlock,DE4 2LP,United Kingdom
Within the Country	19 12 05	No	1045.0	glass	R5	M	Weighed	Offsite in Ireland	John Gannon Concrete T/A Gannon Eco,WFP-WM-2009-0007-01	Split Hill Quarries,Kilbeggan,Co. Westmeath,N91 TNK3,Ireland		
Within the Country	16 02 16	No	1097.0	components removed from discarded equipment other than those mentioned in 16 02 15	R13	M	Weighed	Offsite in Ireland	Davis Recycling International Ltd,IRE/AG246/15	Unit 648 Jordanstown Drive,Greenogue Business Park,Rathcoole,Co. Dublin,Ireland		
To Other Countries	19 12 04	No	638.0	plastic and rubber	R13	M	Weighed	Abroad	WRC Recycling Ltd,IRE/AG121/15	Floors St,Johnstone,Scotland,PA5 8QS,United Kingdom		
Within the Country	20 01 21	Yes	1.5	fluorescent tubes and other mercury-containing waste	R5	M	Weighed	Offsite in Ireland	Irish Lamp Recycling Ltd,WFP-KE-14-0072-01	Woodstock Industrial Estate ,Kilkenny Road,Athy Co. Kildare,R14 K889,Ireland	Future Industrial Services Ltd,EPR KP3437TF,East Ord Industrial Estate ,Berwick-upon-Tweed,Northumberland,TD1 5 2XF,United Kingdom	East Ord Industrial Estate ,Berwick-upon-Tweed,Northumberland,TD1 5 2XF,United Kingdom
Within the Country	19 12 12	No	63.0	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	D10	M	Weighed	Offsite in Ireland	Indaver Ireland Ltd Meath,W0167-02	Carranstown,Duleek,Co. Meath,A92 EP32,Ireland		
Within the Country	20 01 36	No	77.0	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R13	M	Weighed	Offsite in Ireland	Electrical Waste Management Ltd,WFP-DS-11-0014-04	Unit 648 Jordanstown Drive,Greenogue Business Park,Rathcoole,Co. Dublin,Ireland		
Within the Country	20 01 36	No	22.0	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R5	M	Weighed	Offsite in Ireland	KMK Metal Recycling Ltd,W0113-03	Cappincur Industrial Estate,Cappincur ,Tullamore Co. Offaly,R35 NY29,Ireland		
Within the Country	20 01 36	No	127.0	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R13	M	Weighed	Offsite in Ireland	Davis Recycling International Ltd,IRE/AG246/15	Unit 648 Jordanstown Drive,Greenogue Business Park,Rathcoole,Co. Dublin,Ireland		

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 Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	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					
Within the Country	19 12 07	No	24.0	wood other than that mentioned in 19 12 06	R3	M	Weighed	Offsite in Ireland	Panda Waste Service Ltd,W0140-03	Beauparc Business Park,Rathdrinagh,Navan Co. Meath,C15 P586,Ireland		

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

Appendix 8

Dust Monitoring Report

Fitz scientific

Monitoring and Testing Services

The Recycling Village Ltd

Unit 21, Duleek Business Park, Duleek, County Meath.

Dust Monitoring

Report Date:

15th January 2016

Fitz Scientific

Unit 35A, Boyne Business Park, Drogheda, Co. Louth

Report No. 8870/M01

1.0 Introduction

Fitz Scientific was commissioned to carry out dust monitoring at selected locations at The Recycling Village Ltd situated at Duleek Business Park, County Meath. Dust monitoring was conducted as per requirements of IE Licence Register No. W0286-01. Schedule C.2.2 of IE Licence No. W0286-01 requires that dust levels be monitored on an annual basis. Schedule C2.2 also states that metal content of the sample was to be analysed. Analysis of metal content included the following metals: Al, As, Cd, Cr, Cu, Hg, Ni, Pb and Zn. Dust monitoring was conducted at four locations, AD-1, AD-2, AD-3 and AD-4 Dust monitoring commenced on the 10th December 2015. The dust jars were removed for analysis on the 7th January 2016.

2.0 Method – Dust Monitoring

Dust monitoring was carried out using Bergerhoff Instrument according to the VDI 2119 method (Standard Method). With this method, atmospheric deposits are collected in vessels over a 30-day period ± 2 days. The collected samples are then concentrated and the residue subjected to gravimetric weight analysis.

Collecting jars with a volume of 1.5 litres were placed in wire baskets. The top of the jar was positioned 1.5 metres above ground level.

2.1 Jar Preparation

Prior to sampling the jars and lids were acid washed and dried in a fan assisted oven at 100°C. The lids were placed on the jars and labelled. On positioning the jars on the site the lids were removed and the jars were placed in wire containers for a period of 30 ± 2 days. In accordance with criteria set out in the licence, a modification (not included in the standard) to use 2 methoxy ethanol was employed to eliminate interference due to algae growth in the gauge.

2.2 Sample Preparation

On completion of the collection period the jars are removed and immediately sealed air tight and transported directly to the laboratory.

Sample preparation and analysis was carried out in accordance with the VDI 2119 standard.

2.3 Results

Results were calculated from the formula correlating the dust collected, sampling period and the collecting surface of the jars. Results were expressed as $g.m^{-2}.d^{-1}$ and $mg.m^{-2}.d^{-1}$. Analysis of metal content was conducted using Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES Analysis) and the results are expressed as mg/Kg.

3.0 Findings

3.1 Dust Gauges

Table 3.1 Results of dustfall determination at sites AD-1, AD-2, AD-3 and AD-4.
Results are quoted as g m^{-2} d^{-1} (grams per $metre^2$ per day) and mg m^{-2} d^{-1}

Location	Mass of Dust (g)	Collecting Surface (m2)	Sample Duration (days)	Dustfall g m-2 d-1	Dustfall mg m-2 d-1	Dustfall Limit mg m-2 d-1
AD - 1	0.0119	0.00607	29	0.0676	67.60	350
AD - 2	0.0093	0.00607	29	0.0528	52.83	350
AD - 3	0.0178	0.00607	29	0.1011	101.12	350
AD - 4	0.0096	0.00607	29	0.0545	54.54	350

Laboratory Report Refs: 1438/027/01- 04

The quantity of dustfall is determined as the difference between the gross weight of the evaporating dish and the final weight of the evaporating dish (containing the residue). The quantity is then converted into general reference quantities ($mg.m^{-2}.d^{-1}$) using the following formula:

$$x = \frac{G}{F * T}$$

Where;

X = dustfall in g m^{-2} d^{-1}
F = collecting surface in m^2
G = mass of dustfall in g
T = sampling period in days

3.2 Metal Content

Table 3.2 Results of metal content in the dustfall determination at sites AD-1, AD-2, AD-3 and AD-4.
Results are quoted here as mg/Kg.

Test Parameter	Units	AD-1	AD-2	AD-3	AD-4
Aluminium Solid(OES)	mg/Kg	3491.776	2962.56	2440.558	2775.535
Arsenic Solid (OES)	mg/Kg	<0.01	<0.01	<0.01	<0.01
Cadmium Solid (OES)	mg/Kg	<0.01	<0.01	<0.01	<0.01
Chromium Solid (OES)	mg/Kg	<0.01	8.38184	12.1747	<0.01
Copper Solid (OES)	mg/Kg	73.8169	181.8	136.76	326.858
Lead Solid (OES)	mg/Kg	17.3712	344.673	840.29	250.143
Mercury Solid (OES)	mg/Kg	<0.0005	1.8336	<0.0005	2.3299
Nickel Solid (OES)	mg/Kg	<0.01	23.4581	113.706	78.4347
Zinc Solid (OES)	mg/Kg	1782.606	10009.68	2427.994	12248.56

Laboratory Report Refs: 1438/027/01- 04
*Results on the Lab report are expressed in ug/Kg and were converted to mg/Kg

4.0 Conclusion

Monitoring locations AD-1, AD-2, AD-3 and AD-4 were within the dustfall limit for the monitoring period. There is no limits for metal content for dustfall in the IE Licence No. W0286-01.

The monitoring period for dust collection was 29 days over which dust deposition was averaged.

Jason McGuirk
Environmental Scientist

Aadil Khan
Environmental Technical Manager

15th January 2015

Fitz scientific

Monitoring and Testing Services

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A copy of this certificate is available on www.fitzsci.ie

Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/027/01**
	The Recycling Village Ltd.	*Date of Receipt*	**07/01/2016**
	Unit 21	*Sampled On*	**07/01/2016**
	Duleek Business Park	*Date Testing Commenced*	**07/01/2016**
	Duleek	*Received or Collected*	**By Fitz:Victor**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**14/01/2016**
Customer Ref	**AD-1**	*Sample Type*	**F/S Other**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Aluminium Solid(OES)	224	ICP-OES	3491776	ug/Kg	
Arsenic Solid (OES)	224	ICP-OES	<10	ug/Kg	
Cadmium Solid (OES)	224	ICP-OES	<10	ug/Kg	
Chromium Solid (OES)	224	ICP-OES	<10	ug/Kg	
Copper Solid (OES)	224	ICP-OES	73816.9	ug/Kg	
Dust	144	Gravimetry	0.0119	g	
Lead Solid (OES)	224	ICP-OES	17371.2	ug/Kg	
Mercury Solid (OES)	229	ICP-OES	<0.5	ug/Kg	
Nickel Solid (OES)	177	ICP-OES	<10	ug/Kg	
Zinc Solid (OES)	224	ICP-OES	1782606	ug/Kg	

Signed : A Harmon ***Date : 14/01/2016***

Aoife Harmon - Technical Supervisor

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C
Results shall not be reproduced, except in full, without the approval of Fitz Scientific
Results contained in this report relate only to the samples tested (P) : Presumptive Results
** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2012)

Fitz scientific

Monitoring and Testing Services

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Tel: +353 41 9845440
Fax: +353 41 9846171
Web: www.fitzsci.ie
email info@fitzsci.ie

A copy of this certificate is available on www.fitzsci.ie

Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/027/02**
	The Recycling Village Ltd.	*Date of Receipt*	**07/01/2016**
	Unit 21	*Sampled On*	**07/01/2016**
	Duleek Business Park	*Date Testing Commenced*	**07/01/2016**
	Duleek	*Received or Collected*	**By Fitz:Victor**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**14/01/2016**
Customer Ref	**AD-2**	*Sample Type*	**F/S Other**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Aluminium Solid(OES)	224	ICP-OES	2962560	ug/Kg	
Arsenic Solid (OES)	224	ICP-OES	<10	ug/Kg	
Cadmium Solid (OES)	224	ICP-OES	<10	ug/Kg	
Chromium Solid (OES)	224	ICP-OES	8381.84	ug/Kg	
Copper Solid (OES)	224	ICP-OES	181800	ug/Kg	
Dust	144	Gravimetry	0.0093	g	
Lead Solid (OES)	224	ICP-OES	344673	ug/Kg	
Mercury Solid (OES)	229	ICP-OES	1833.6	ug/Kg	
Nickel Solid (OES)	177	ICP-OES	23458.1	ug/Kg	
Zinc Solid (OES)	224	ICP-OES	10009675	ug/Kg	

Signed : A Harmon ***Date : 14/01/2016***

Aoife Harmon - Technical Supervisor

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C
Results shall not be reproduced, except in full, without the approval of Fitz Scientific
Results contained in this report relate only to the samples tested (P) : Presumptive Results
** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2012)

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Monitoring and Testing Services

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Customer	**Nikita Coulter**	*Lab Report Ref. No.*	**1438/027/03**
	The Recycling Village Ltd.	*Date of Receipt*	**07/01/2016**
	Unit 21	*Sampled On*	**07/01/2016**
	Duleek Business Park	*Date Testing Commenced*	**07/01/2016**
	Duleek	*Received or Collected*	**By Fitz:Victor**
	Co. Meath	*Condition on Receipt*	**Acceptable**
Customer PO		*Date of Report*	**14/01/2016**
Customer Ref	**AD-3**	*Sample Type*	**F/S Other**
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Aluminium Solid(OES)	224	ICP-OES	2440558	ug/Kg	
Arsenic Solid (OES)	224	ICP-OES	<10	ug/Kg	
Cadmium Solid (OES)	224	ICP-OES	<10	ug/Kg	
Chromium Solid (OES)	224	ICP-OES	12174.7	ug/Kg	
Copper Solid (OES)	224	ICP-OES	136760	ug/Kg	
Dust	144	Gravimetry	0.0178	g	
Lead Solid (OES)	224	ICP-OES	840290	ug/Kg	
Mercury Solid (OES)	229	ICP-OES	<0.5	ug/Kg	
Nickel Solid (OES)	177	ICP-OES	113706	ug/Kg	
Zinc Solid (OES)	224	ICP-OES	2427994	ug/Kg	

Signed : A Harmon ***Date : 14/01/2016***

Aoife Harmon - Technical Supervisor

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
For bacterial analysis a result of 0 means none detected in volume examined
All organic results are analysed as received and all results are corrected for dry weight at 104 C

Results contained in this report relate only to the samples tested (P) : Presumptive Results
** : The test result for this parameter may be invalid as it has exceeded the recommended holding time (BS EN ISO 5667-3:2012)

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A copy of this certificate is available on www.fitzsci.ie

Customer	Nikita Coulter	*Lab Report Ref. No.*	1438/027/04
	The Recycling Village Ltd.	*Date of Receipt*	07/01/2016
	Unit 21	*Sampled On*	07/01/2016
	Duleek Business Park	*Date Testing Commenced*	07/01/2016
	Duleek	*Received or Collected*	By Fitz:Victor
	Co. Meath	*Condition on Receipt*	Acceptable
Customer PO		*Date of Report*	14/01/2016
Customer Ref	AD-4	*Sample Type*	F/S Other
Ref 2			
Ref 3			

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
Aluminium Solid(OES)	224	ICP-OES	2775535	ug/Kg	
Arsenic Solid (OES)	224	ICP-OES	<10	ug/Kg	
Cadmium Solid (OES)	224	ICP-OES	<10	ug/Kg	
Chromium Solid (OES)	224	ICP-OES	<10	ug/Kg	
Copper Solid (OES)	224	ICP-OES	326858	ug/Kg	
Dust	144	Gravimetry	0.0096	g	
Lead Solid (OES)	224	ICP-OES	250143	ug/Kg	
Mercury Solid (OES)	229	ICP-OES	2329.9	ug/Kg	
Nickel Solid (OES)	177	ICP-OES	78434.7	ug/Kg	
Zinc Solid (OES)	224	ICP-OES	12248561	ug/Kg	

Signed : A Harmon ***Date : 14/01/2016***

Aoife Harmon - Technical Supervisor

Acc. : Accredited Parameters by ISO 17025:2005
PVL - Parametric Value Limit as per EU (Drinking water) Regulations (SI 122 2014)
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Appendix 9

Tank and Pipeline Testing and Inspection Report

Summary of Results from Drainage Survey carried out at The Recycling Village Ltd 2015

S1–Interceptor: OB Obstruction, 5 % height/diameter loss, Remark: Hydrodaire pipe	2
S1-S4: WL Water level, 20 % height/diameter	2
S2-S3: CNI Connection, at 12 o´clock, dia 100 mm, intrusion 50 mm	3
S2-S3: IR Infiltration Running at 11 o´clock	3
S2-S3: CNI Connection, at 12 o´clock, dia 100 mm, intrusion 50 mm	1
S2-S3: CNI Connection, at 12 o´clock, dia 100 mm, intrusion 25 mm	1
S2-S3: CNI Connection, at 10 o´clock, dia 100 mm, intrusion 50 mm	1
F2-F3: CU Camera Underwater	3

The drainage company have informed us that repair works are not required at present on S2-S3 or F2-F3, however they may be required in the future.

Greenday Environmental Drainage Services' Defect Grade Descriptions:

1: Brick: No Structural Defects
Pipe: No Structural Defects
Acceptable Structural Condition

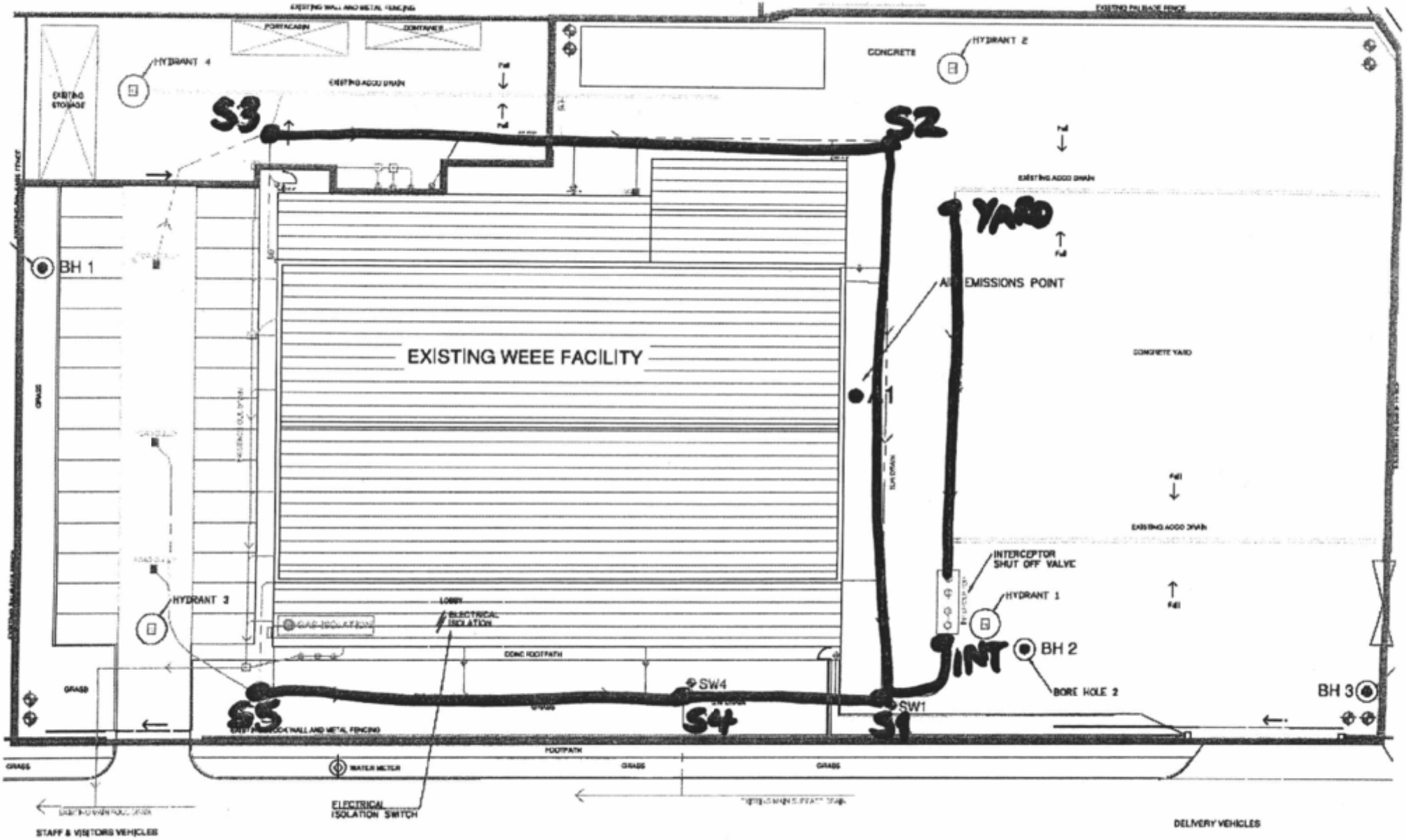
2: Brick: Minor cracking, Surface mortar loss, Spalling slight, wear slight
Pipe: Circumfrential crack, Moderate joint defects, Spalling slight, Wear slight
Minor collapse risk in short term but potential for further deterioration

3: Brick: Total mortorloss without other defects, single brick displaced, deformation up to 5%, Spalling medium, Wear medium
Pipe: Fractures with deformation up tp 5%, Longitudinal cracking or mulitlpe cracking, Minor loss of level, More severe joint defects, Spalling medium, Wear medium
! **Collapse unlikely in near future but future deterioration likely** !

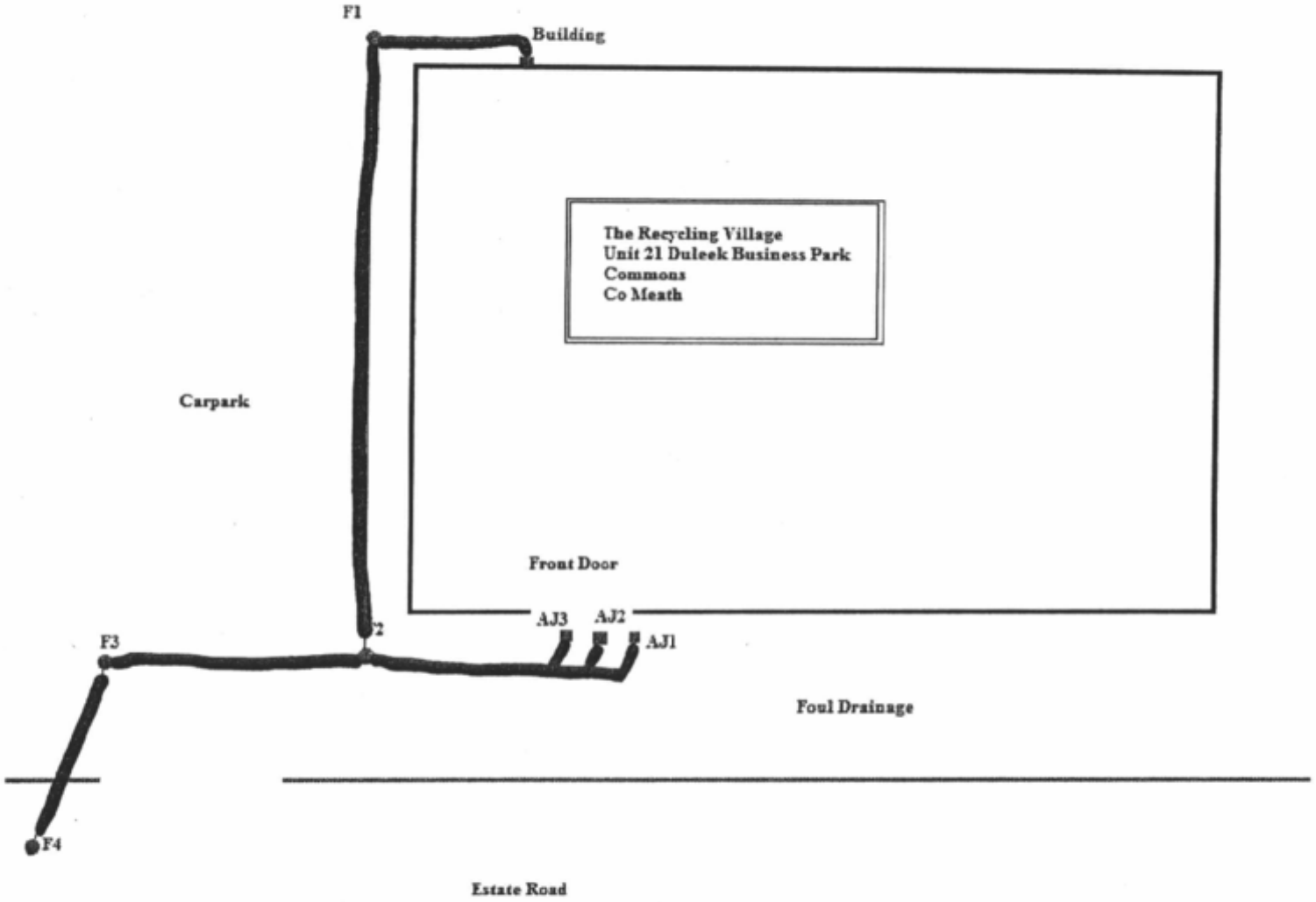
4: Brick: Total mortorloss with deformation greater than 10%, Deformation up to 10% and fractured, Displaced/hanging brickwork, Small number of missing bricks
Pipe: Broken, Deformation up to 10% and broken,, Fractured with deformation 5 - 10%, Multiple fractures, Serious loss of level, spalling large, wear large
!! Collapse likely in foreseeable future !!

5: Brick: Already Collapsed, Missing invert, Deformation over 10% and fractured, Displaced/hanging brickwork and deformation over 10%, Extensive missing bricks
Pipe: Already collapsed, Deformation over 10% and broken, Extensive areas of fabric missing, Fractured with deformation over 10%
!!! Collapsed or collapse imminent !!!

STORM WATER PIPE LINE SURVEY



FOUL LINE SURVEY.



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Old Naas Road
Dublin 12
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Project-information

Project name:	Contract number:	Contact:	Date:
The Recycling Village		**Ivan**	**23/12/2015**

Client	**The Recycling Village**
Contact:	
Position:	
Road	**Unit 21 Duleek Business Park**
Town	**Duleek**
County	**Co Meath**
Telephone:	
Fax:	
Mobile:	
E-Mail:	

Site	**Same as above**
Contact:	
Position:	
Road	
Town	**Foul Drain**
County	
Telephone:	
Fax:	
Mobile:	
E-Mail:	

Contractor	**Greenday Environmental**
Contact:	**Ian Buckley**
Position:	
Road	**Unit D4, Citylink Business Park**
Town	**Old Naas Road**
County	**Dublin 12**
Telephone:	**01/4509778**
Fax:	**01/4509866**
Mobile:	
E-Mail:	**ian.buckley@greenday.ie**

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Inspection report

Date:	Job N°:	Weather:	Operator:	section number:	PLR:
02/06/2015		**Light rain**	**Jon G**	**1**	**S2 X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Rico Mainline		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**S1**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**S2**
Location:		Tape No.:	**1759**	Total length:	**43.5 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 225**		
Use:	**Surface water**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details: **Front of the yard**

1:500	position	code	observation	photo	grade
S1	0.00	MH	Manhole Remark: S1		0
	0.00	WL	Water level, 0 % height/diameter		0
	0.00	WL	Water level, 0 % height/diameter		0
	7.30	JN	Junction at 12 o´clock, dia 100 mm		0
	30.20	JN	Junction at 12 o´clock, dia 100 mm		0
S2	42.80	LL	Line of Sewer deviates left		0
	43.50	MH	Manhole Remark: S2		0
	43.50	FH	Finish Survey		0

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Inspection report

Date:	Job N°:	Weather:	Operator:	section number:	PLR:
02/06/2015		**Light rain**	**Jon G**	**2**	**S4 X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Rico Mainline		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**S4**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**Mains**
Location:		Tape No.:	**1759**	Total length:	**12.6 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 225**		
Use:	**Surface water**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details:

1:500	position	code	observation	photo	grade
S4	0.00	ST	Start of Survey		0
	0.00	MH	Manhole Remark: S4		0
	0.00	WL	Water level, 5 % height/diameter, Remark: Live sewer		0
	7.20	LD	Line of Sewer deviates down		0
Mains	12.60	MH	Manhole Remark: Mains		0
	12.60	FH	Finish Survey		0

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Inspection report

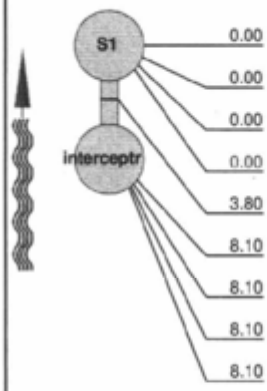
Date:	Job N°:	Weather:	Operator:	section number:	PLR:
02/06/2015		**Light rain**	**Jon G**	**3**	**interceptrX**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Rico Mainline		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**S1**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**interceptr**
Location:		Tape No.:	**1759**	Total length:	**8.1 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 225**		
Use:	**Surface water**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details:



1:500 position	code	observation	photo	grade
0.00	ST	Start of Survey		0
0.00	MH	Manhole Remark: S1		0
0.00	WL	Water level, 0 % height/diameter		0
0.00	OB	Obstruction, 5 % height/diameter loss. Remark: Hydrodaire pipe		2
3.80	LL	Line of Sewer deviates left		0
8.10	DC	Dimension of sewer changes, new dimension dia 150 mm		0
8.10	MC	Sewer Material changes at this point. Steel		0
8.10	GO	Oil Interceptor		0
8.10	FH	Finish Survey		0

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Inspection report

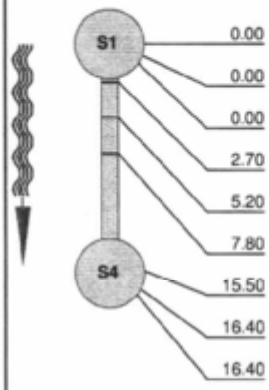
Date:	Job N°:	Weather:	Operator:	section number:	PLR:
02/06/2015		**Light rain**	**Jon G**	**4**	**S1 X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Rico Mainline		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**S1**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**S4**
Location:		Tape No.:	**1759**	Total length:	**16.4 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 225**		
Use:	**Surface water**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details:



1:500 position	code	observation	photo	grade
0.00	ST	Start of Survey		0
0.00	MH	Manhole Remark: S1		0
0.00	WL	Water level, 5 % height/diameter, Remark: Live sewer		0
2.70	GO	Waste connection		0
5.20	WL	Water level, 20 % height/diameter		0
7.80	WL	Water level, 5 % height/diameter		0
15.50	LR	Line of Sewer deviates right		0
16.40	MH	Manhole Remark: S4		0
16.40	FH	Finish Survey		0

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Inspection report

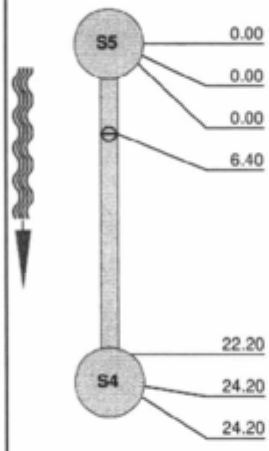
Date:	Job N°:	Weather:	Operator:	section number:	PLR:
02/06/2015		**Light rain**	**Jon G**	**5**	**S5 X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Rico Mainline		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**S5**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**S4**
Location:		Tape No.:	**1759**	Total length:	**24.2 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 225**		
Use:	**Surface water**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details:



1:500 position	code	observation	photo	grade
0.00	ST	Start of Survey		0
0.00	MH	Manhole Remark: S5		0
0.00	WL	Water level, 0 % height/diameter		0
6.40	JN	Junction at 12 o´clock, dia 100 mm		0
22.20	JN	Junction at 12 o´clock, dia 100 mm		0
24.20	MH	Manhole Remark: S4		0
24.20	FH	Finish Survey		0

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Inspection report

Date:	Job N°:	Weather:	Operator:	section number:	PLR:
02/06/2015		**Light rain**	**Jon G**	**6**	**Carpark X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Rico Mainline		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**S5**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**Carpark**
Location:		Tape No.:	**1759**	Total length:	**0.9 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 225**		
Use:	**Surface water**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details:

1:500	position	code	observation	photo	grade
Carpark	0.00	ST	Start of Survey		0
	0.00	MH	Manhole Remark: S5		0
	0.00	WL	Water level, 0 % height/diameter		0
	0.90	DC	Dimension of sewer changes, new dimension dia 100 mm		0
	0.90	FH	Finish Survey		0

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Inspection report

Date:	Job N°:	Weather:	Operator:	section number:	PLR:
02/06/2015		**Light rain**	**Jon G**	**7**	**S3 X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Rico Mainline		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**S2**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**S3**
Location:		Tape No.:	**1759**	Total length:	**48.6 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 225**		
Use:	**Surface water**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details:

1:500	position	code	observation	photo	grade
S2	0.00	ST	Start of Survey		0
	0.00	MH	Manhole Remark: S2		0
	0.00	WL	Water level, 10 % height/diameter		0
	1.10	CNI	Connection, at 12 o´clock, dia 100 mm, intrusion 50 mm		4
	1.10	IR	Infiltration Running at 11 o´clock		4
	3.10	JN	Junction at 12 o´clock, dia 100 mm		0
	4.90	WL	Water level, 0 % height/diameter		0
	14.60	GO	Patch repair		0
	15.40	JN	Junction at 12 o´clock, dia 100 mm		0
	18.20	JN	Junction at 12 o´clock, dia 100 mm		0
	19.00	GO	Patch repair		0
	20.00	CNI	Connection, at 12 o´clock, dia 100 mm, intrusion 50 mm		4
	22.90	CNI	Connection, at 12 o´clock, dia 100 mm, intrusion 25 mm		4
	24.70	JN	Junction at 12 o´clock, dia 100 mm		0
	34.60	GO	Patch repair		0
	37.20	JN	Junction at 12 o´clock, dia 100 mm		0
S3	47.80	CNI	Connection, at 10 o´clock, dia 100 mm, intrusion 50 mm		4
	48.60	MH	Manhole Remark: S3		0
	48.60	FH	Finish Survey		0

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Inspection report

Date:	Job N°:	Weather:	Operator:	section number:	PLR:
02/06/2015		**Light rain**	**Jon G**	**8**	**Yard X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Rico Mainline		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**Interceptr**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**Yard**
Location:		Tape No.:	**1759**	Total length:	**27.5 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 225**		
Use:	**Surface water**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details:

1:500	position	code	observation	photo	grade
Interceptr	0.00	ST	Start of Survey		0
	0.00	MH	Manhole Remark: Interceptr		0
	0.00	WL	Water level, 0 % height/diameter		0
	0.80	CN	Connection, at 12 o´clock, dia 100 mm		0
Yard	27.50	DC	Dimension of sewer changes, new dimension dia 100 mm		0
	27.50	FH	Finish Survey		0

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Dublin 12
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Inspection report

Date:	Job N°:	Weather:	Operator:	section number:	PLR:
23/12/2015		**Dry**	**Jon G**	**9**	**AJ3 X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Push rod		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**AJ3**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**Common**
Location:	**Footpath or verge**	Tape No.:	**1896**	Total length:	**1 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 100**		
Use:	**Foul**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details: **Front door**

1:500	position	code	observation	photo	grade
Common	0.00	ST	Start of Survey		0
	0.00	MH	Manhole Remark: AJ3		0
	0.00	WL	Water level, 0 % height/diameter		0
	0.20	LD	Line of Sewer deviates down		0
	1.00	GO	Connection to common drain		0
	1.00	FH	Finish Survey		0

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Inspection report

Date:	Job N°:	Weather:	Operator:	section number:	PLR:
23/12/2015		**Dry**	**Jon G**	**10**	**AJ2 X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Push rod		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**AJ2**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**Common**
Location:	**Footpath or verge**	Tape No.:	**1896**	Total length:	**0.9 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 100**		
Use:	**Foul**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details: **Front Door**

1:500	position	code	observation	photo	grade
Common	0.00	ST	Start of Survey		0
	0.00	MH	Manhole Remark: AJ2		0
	0.00	WL	Water level, 0 % height/diameter		0
	0.20	LD	Line of Sewer deviates down		0
	0.90	GO	Connection to common drain.		0
	0.90	FH	Finish Survey		0

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Tel: 01/4509778, Fax: 01/4509866

Inspection report

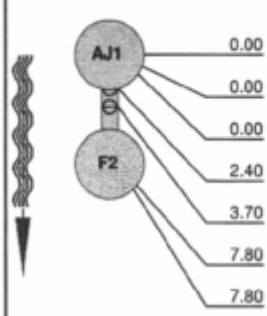
Date:	Job N°:	Weather:	Operator:	section number:	PLR:
23/12/2015		**Dry**	**Jon G**	**11**	**AJ1 X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Push rod		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**AJ1**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**F2**
Location:	**Footpath or verge**	Tape No.:	**1896**	Total length:	**7.8 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 100**		
Use:	**Foul**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details:



1:500	position	code	observation	photo	grade
	0.00	ST	Start of Survey		0
	0.00	MH	Manhole Remark: AJ1		0
	0.00	WL	Water level, 0 % height/diameter		0
	2.40	JN	Junction at 12 o'clock, dia 100 mm		0
	3.70	JN	Junction at 12 o'clock, dia 100 mm		0
	7.80	MH	Manhole Remark: F2		0
	7.80	FH	Finish Survey		0

Greenday Environmental
Old Naas Road
Dublin 12
Tel: 01/4509778, Fax: 01/4509866

Inspection report

Date:	Job N°:	Weather:	Operator:	section number:	PLR:
23/12/2015		**Dry**	**Jon G**	**12**	**F2 X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Push rod		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**F2**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**F3**
Location:	**Footpath or verge**	Tape No.:	**1896**	Total length:	**1.5 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 150**		
Use:	**Foul**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details:

1:500	position	code	observation	photo	grade
F2	0.00	ST	Start of Survey		0
	0.00	MH	Manhole Remark: F2		0
	0.00	CU	Camera Underwater		0
	1.50	SA	Survey abandoned		0

greenday ENVIRONMENTAL

Greenday Environmental
Old Naas Road
Dublin 12
Tel: 01/4509778, Fax: 01/4509866

Inspection report

Date:	Job N°:	Weather:	Operator:	section number:	PLR:
23/12/2015		**Dry**	**Jon G**	**13**	**F2 X**
Present:	Vehicle:	Camera: **Push rod**	Preset:	Cleaned: **Yes**	Grade:

Road:	**Park, Co Meath**	Division:		start MH:	**F2**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**F3**
Location:	**Footpath or verge**	Tape No.:	**1896**	Total length:	**8.2 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 150**
Use:	**Foul**	Material:	**Polyvinyl chloride** Pipe length: **6m**
Catchment:		Lining:	
		Category:	

Comment:

Location details:

1:500	position	code	observation	photo	grade
F2	0.00	ST	Start of Survey		0
	0.00	MH	Manhole Remark: F2		0
	0.00	WL	Water level, 10 % height/diameter		0
F3	0.50	WL	Water level, 20 % height/diameter		0
	2.40	WL	Water level, 0 % height/diameter		0
	8.20	MH	Manhole Remark: F3		0
	8.20	FH	Finish Survey		0

Greenday Environmental
Old Naas Road
Dublin 12
Tel: 01/4509778, Fax: 01/4509866

Inspection report

Date:	Job N°:	Weather:	Operator:	section number:	PLR:
23/12/2015		**Dry**	**Jon G**	**14**	**F3 X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Push rod		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**F3**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**F4**
Location:	**Footpath or verge**	Tape No.:	**1896**	Total length:	**10 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 150**		
Use:	**Foul**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details: **Gate**

1:500	position	code	observation	photo	grade
F3	0.00	ST	Start of Survey		0
	0.00	MH	Manhole Remark: F3		0
	0.00	WL	Water level, 0 % height/diameter		0
F4	10.00	GO	Backdrop to F4		0
	10.00	FH	Finish Survey		0

Greenday Environmental
Old Naas Road
Dublin 12
Tel: 01/4509778, Fax: 01/4509866

Inspection report

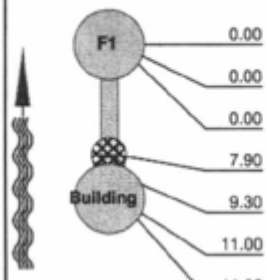
Date:	Job N°:	Weather:	Operator:	section number:	PLR:
23/12/2015		**Dry**	**Jon G**	**15**	**Building X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Push rod		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**F1**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**Building**
Location:	**Footpath or verge**	Tape No.:	**1896**	Total length:	**11 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 150**		
Use:	**Foul**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details: **Back of the building**



1:500 position	code	observation	photo	grade
0.00	ST	Start of Survey		0
0.00	MH	Manhole Remark: F1		0
0.00	WL	Water level, 0 % height/diameter		0
7.90	GO	Manhole		0
9.30	GO	Manhole		0
11.00	DC	Dimension of sewer changes, new dimension dia 100 mm		0
11.00	FH	Finish Survey		0

Greenday Environmental
Old Naas Road
Dublin 12
Tel: 01/4509778, Fax: 01/4509866

Inspection report

Date:	Job N°:	Weather:	Operator:	section number:	PLR:
23/12/2015		**Dry**	**Jon G**	**16**	**F1 X**
Present:	Vehicle:	Camera:	Preset:	Cleaned:	Grade:
		Push rod		**Yes**	

Road:	**Park, Co Meath**	Division:		start MH:	**F1**
Place:	**Unit 21 Duleek Bus**	District:		end MH:	**F2**
Location:	**Footpath or verge**	Tape No.:	**1896**	Total length:	**37.8 m**

Purpose:	**Asset condition**	Shape/Size:	**Circular 150**		
Use:	**Foul**	Material:	**Polyvinyl chloride**	Pipe length:	**6m**
Catchment:		Lining:			
		Category:			

Comment:

Location details: **Side of the building**

1:500	position	code	observation	photo	grade
F1	0.00	ST	Start of Survey		0
	0.00	MH	Manhole Remark: F1		0
	0.00	WL	Water level, 0 % height/diameter		0
	30.10	JN	Junction at 12 o´clock, dia 100 mm		0
	35.30	JN	Junction at 12 o´clock, dia 100 mm		0
F2	37.60	WL	Water level, 20 % height/diameter		0
	37.80	MH	Manhole Remark: F2		0
	37.80	FH	Finish Survey		0

greenday
ENVIRONMENTAL

The Recycling Village,
Unit 21 Duleek Business Park
The Commons,
Duleek,
Co Meath.

HYDROSTATIC TEST 2015

Date	Area	Time From	Time to	Pass Fail
23/12/2015	Oil Interceptor	9am	11am	Pass
23/12/2015	Bunded Pallet	11am	1pm	Pass
23/12/2015	Steel Stores	11am	1pm	Fail.

Both the Oil Interceptor and Bunded Pallet passed the Hydrostatic Test. The bunded Steel storage area failed the test. During the test water leaked onto the ground where there is a seal in the steel sheeting. See attached photo of the water leaking onto the ground.

If you have any questions please do not hesitate to contact me.

Yours sincerely

Ian Buckley
Technical Director
Greenday Environmental

Request for Information

Reference

RI005225

ParentSubject

LR020664

Question

Dear Ms. Coulter,

I refer to your submission LR020664, "Tank and Bund Hydrostatic Test 2015", in relation to hydrostatic tests carried out on an oil interceptor, bunded pallet and bunded steel storage container. The report is based on assessments carried out on the 23/12/2015.

The Agency notes that the 'steel stores' failed the hydrostatic test. In this regard you are required to provide details of remedial actions and the results of any subsequent hydrostatic tests where appropriate by the 09/03/2016.

You are advised that all future hydrostatic tests should be carried out with reference to the Agency *IPC Guidance Note on Storage and Transfer of Materials for Scheduled Activities*, (2004), as amended.

Yours sincerely,

Rachel Griffith

Office of Environmental Enforcement, Dublin

Tel: 01 268 0100

Response

Dear Rachel,

Repair works were carried out on the steel store, and another hydrostatic test was performed on 03 March 2016, however, the store failed yet again. We had a consultation with a company which produces impermeable fiberglass liners (http://www.glassfibre.ie/) on 08 March 2016, and have ordered a liner to be retrofitted into the base of the steel store. Once the liner has been securely fitted, we will repeat the hydrostatic test again. The company who performed the hydrostatic test, Greenday Environmental Drainage Services, have yet to issue us with an official report with the results of the second hydrostatic test, however, it was obvious at the time of the test that the tank had failed. I will upload the results of the tests once I receive them from Greenday.

Kind regards,

Nikita Coulter

Request for Information attachments

- Invoice for 2nd Hydrostatic test - indicates fail.pdf

Close

INVOICE

The Recycling Village Limited
Attention: Ivan
Unit 21 Duleek Business Park
Duleek
CO. MEATH

Invoice Date
3 Mar 2016

Account Number
TRD-001

Invoice Number
INV-009635

VAT Number
9500162R

Absolute Drain Services Limited
Unit D4
Citylink Business Park
Old Naas Road
Dublin 12
+353 1 450 9778

Description	Quantity	Unit Price	Tax	Amount EUR
Job Reference: 7181				
03 Mar 2016 15:00				
Unit 21 Duleek Business Pk, Duleek, Co Meath				
Commercial Tanker	1.00	300.00	13.5%	300.00
On site to carry out testing on the bunded container, this test was a fail as it is still leaking.				
			Subtotal	300.00
			TOTAL SALES VAT @ 13.5% 13.5%	40.50
			TOTAL EUR	**340.50**

Due Date: 9 Mar 2016
Payment terms are as set out above

Bank Details for Transfer
Bank Name: AIB, Irish Farm Centre, Dublin 12
Sort Code: 93-36-27
Account No: 14809-045
IBAN: IE 49 AIBK 93362714809045
BIC: AIBKIE2D

PAYMENT ADVICE

To: Absolute Drain Services Limited
Unit D4
Citylink Business Park
Old Naas Road
Dublin 12
+353 1 450 9778

Customer	The Recycling Village Limited
Account Number	TRD-001
Invoice Number	INV-009635
Amount Due	**340.50**
Due Date	9 Mar 2016
Amount Enclosed	

Enter the amount you are paying above

Appendix 10

Reported Incidents Summary

Licensee Details

First name

Nikita

Surname

Coulter

Address 1

Unit 21 Duleek Business Park

Address 2

Duleek

Town

County

Telephone

0416862366

Alternate phone

Incident Details

Description of Incident

Storm-water emissions monitoring results indicate that the storm-water run-off from the site yard at The Recycling Village Ltd is potentially contaminated with Lead. Several samples have been analysed by an accredited laboratory and an in-house investigation is underway as to the source of the possible lead contamination. Lead levels have been monitored since 2011 and have fluctuated during this time. The highest level of lead in a sample of storm-water run-off was recorded in February 2015 and the levels have been decreasing since. Samples have been taken from the interceptor discharge point, the car park discharge point, the system draining the roof run-off and the main storm water outflow pipe. All known sources of lead handled at the facility have been moved under cover. The drainage system has been thoroughly cleaned and has been inspected by an engineer. New samples of storm water will be analysed for lead once there is sufficient rain-fall to generate a sample.

Incident Category

Category 2

Approximate start of incident?

15/01/2015 00:00

First noticed

15/01/2015 00:00

Still ongoing?

No

Finish date/time

30/11/2015 00:00

New or recurring Incident?

Recurring

Incident nature

Other

Other Incident nature (as submitted)

ELV Parameter - Storm Water Emissions Monitoring - Metals - Lead

Results: First biannual sample, 27-07-2015,
Interceptor discharge point - 200.7 ug/L Lead

Repeated test on 19-08-2015:
Interceptor discharge point - 141.4 ug/L Lead
Main storm water outflow pipe - 117.5 ug/L Lead

Impact of Incident on Environment

Risk of causing EQS failure of receiving water body, River Nanny.

Uncontrolled release to receptors

Water

Details of any vulnerable receptors

Unknown

Likely Cause

Inadequate Operational Procedures/Training

Incident Location

Discharge Point

No

Incident location description

The incident has been recorded at the interceptor outflow pipe and at the main storm-water out-flow pipe.

Communication to Date

EPA notified by phone?

No

Local authorities notified?

No

Inland Fisheries notified?

No

Other agencies notified?

No

Additional Incident Details

Activity in progress at time of incident

Normal Activities

Corrective Actions taken

Action	Date & Time
Investigation of potential lead sources. Movement of all potential lead bearing materials undercover. Drainage system investigation, cleaning and maintenance. Consultation with Environmental Consultant.	15/01/2015 00:00

Preventative Actions to be taken

Action	Target Date
Implementation of a robust yard and drain cleaning programme. Sampling of storm water run-off during periods of heavy rainfall.	30/11/2015

Likelihood of Recurrence

Medium

Uploaded files

File Name
13-02-2015 Lead test interceptor discharge pipe.pdf
14-09-2015 Lead test car park runoff.pdf
14-09-2015 Lead test interceptor discharge pipe.pdf
14-09-2015 Lead test roof runoff.pdf
14-09-2015 Lead test stormwater outflow pipe 1.00pm.pdf
14-09-2015 Lead test stormwater outflow pipe 1.40pm.pdf
Snapshot-INCI008685.pdf
18-03-2015 Lead test interceptor discharge pipe.pdf
19-08-2015 Lead test interceptor discharge pipe.pdf
19-08-2015 Lead test stormwater outflow pipe.pdf
27-07-2015 Full suite interceptor discharge pipe.pdf
27-10-2015 RV Stormwater outflow pipe.pdf
Consultants report 22780 Rev. 1.0 SW Response.pdf

Other relevant information

A full report detailing all actions taken in the course of the investigation and containing all relevant laboratory certificates is currently being compiled and will be submitted to the EDEN Portal once finalised.

Notes

Description	Date & Time
15 October 2015, 14:00 - Notified Meath County Council Environment Section by telephone. Information will be passed to Fiona Fallon, Senior Environmental Engineer. 15 October 2015, 14:15 - Notified Irish Water by telephone. 15 October 2015, 14:35 - Notified Inland Fisheries by email - Noel McGloin	15/10/2015 14:41
18 November 2015, 15:30 - Meeting was held with Environmental Consultant Dr. Imelda Shanahan of TMS Environmental Ltd regarding the levels of metals reported in storm water samples analysed to date. All water samples taken since the granting of IE Licence W0286-01 were anaylsed for Total Metals, however, as stated in S.I. No. 272 of 2009, Schedule 5, Table 10 and Schedule 6, Table 11, "the EQS refers to the dissolved concentration". Hence a monitoring program is being put in place to analyse fresh samples for dissolved metals concentrations to be compared to the levels set in the EQS. Please refer to the Lab report referenced as 27-10-2015 RV Stormwater outflow pipe for the most recent storm water analysis result - total metals concentrations.	18/11/2015 15:55

All Incidents associated with Licence: The Recycling Village Limited (W0286-01)

Show 10 entries Search:

Reg No.	Incident No.	Incident Nature	Category	Raised By	Status	CI Refs.	Incident Date	Date Submitted	Date Closed	Edit	View
W0286-01	INCI008685	Other	Category 2	Nikita Coulter	Closed	n/a	15/01/2015 00:00	12/10/2015 15:05	04/01/2016 08:39		

Showing 1 to 1 of 1 entries First Previous 1 Next Last

Appendix 11

Report on Achievement of Recycling/Recovery Targets

CRT TELEVISIONS

Fraction	% Mass	EWC Codes	Secondary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)	Tertiary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)	Quaternary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)
CLEAN GLASS			**CLEAN GLASS**			**CLEAN GLASS**			**CLEAN GLASS**		
Panel Glass	35	19 12 05	John Gannon Concrete Ltd T/A Gannon Eco	97	97						
FERROUS			**FERROUS**			**FERROUS**			**FERROUS**		
Masks & Bands	9	16 02 16	Davis Recycling International Ltd	n/a	n/a	Hammond Lane Metal Company Ltd	n/a	n/a	Megasa Siderurgica SL	100	99.5
Speakers & Screws	1										
FUNNEL GLASS			**FUNNEL GLASS**			**FUNNEL GLASS**			**FUNNEL GLASS**		
Funnel Glass	21	16 02 15*	H.J. Enthoven	84	84						
			A. Jansen B.V.	97	97						
Funnel Glass Fines		19 12 11*	H.J. Enthoven	84	84						
			A. Jansen B.V.	97	87						
HAZARDOUS WASTE			**HAZARDOUS WASTE**			**HAZARDOUS WASTE**			**HAZARDOUS WASTE**		
Phosphorous Powder	<1	16 05 07*	Indaver Ireland Ltd (Co. Dublin, Transfer Station)	n/a	n/a	AVG Abfall-Verwertungs-Gesellschaft mbH	100	0			
Phosphorous Filters	n/a	15 02 02*									
PCB Capacitors	<1	16 02 15*									
NON-FERROUS			**NON-FERROUS**			**NON-FERROUS**			**NON-FERROUS**		
Copper Yokes	3	16 02 16	Davis Recycling International Ltd	n/a	n/a	The Remet Company Ltd	n/a	n/a	Sansing Ltd	30	40
Cable	1								Sansing Ltd	30	30
Degausse Cable	1								Sansing Ltd	30	30
Plugtops	<1								Sansing Ltd	30	40
Electron Guns	<1								Sansing Ltd	30	100
PCB G3	9								Confidential	30	30
PLASTIC			**PLASTIC**			**PLASTIC**			**PLASTIC**		
Plastic	17	19 12 04	WRC Recycling	n/a	n/a	Foshan Hai Qing Yuan Trading	n/a	n/a	Sihui Weilian Plastic Hardware	TBC	TBC
RESIDUE			**RESIDUE**			**RESIDUE**			**RESIDUE**		
Residue		19 12 12	Indaver Ireland Ltd	100	0						

FPD TELEVISIONS

Fraction	% Mass	EWC Codes	Secondary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)	Tertiary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)	Quaternary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)
FERROUS			FERROUS			FERROUS			FERROUS		
Steel Speakers & Screws	40	16 02 16	Davis Recycling International Ltd	n/a	n/a	Hammond Lane Metal Company Ltd	n/a	n/a	Megasa Siderurgica SL	100	99.5
HAZARDOUS WASTE			HAZARDOUS WASTE			HAZARDOUS WASTE			HAZARDOUS WASTE		
PCB Capacitors	<1	16 02 15*	Indaver Ireland Ltd (Co. Dublin, Transfer Station)	n/a	n/a	AVG Abfall-Verwertungs-Gesellschaft mbH	100	0			
Mercury Filters	n/a	15 02 02*									
CCFL Bulbs	<1	20 01 21*	Irish Lamp Recycling Ltd	93.4	93.4	A1 Metals	60	60	TBC	TBC	TBC
						Gannon Eco	97	97			
						Future Industrial Services Ltd	100	99.9			
NON-FERROUS			NON-FERROUS			NON-FERROUS			NON-FERROUS		
Aluminium	7	16 02 16	Davis Recycling International Ltd	n/a	n/a	The Remet Company Ltd	n/a	n/a	Sansing Ltd	100	99.5
Aluminium Plasma									Sansing Ltd	100	99.5
FPD PCB G1	<1								Confidential	30	30
FPD PCB G2	2.5								Confidential	30	30
PCB G3	5.5								Confidential	30	30
Ribbon Cable	<1								Sansing Ltd		30
Cable									Sansing Ltd		30
Floppy Disc Drives	<1								Sansing Ltd	30	30
Heatsinks	1								Sansing Ltd	100	99.5
Plugtops	<1								Sansing Ltd	30	40
PLASTIC			PLASTIC			PLASTIC			PLASTIC		
ABS	21	19 12 04	WRC Recycling	n/a	n/a	Foshan Hai Qing Yuan Trading Limited Company	n/a	n/a	Sihui Weilian Plastic Hardware Ltd Co.	TBC	TBC
PMMA	6										
GPPS	1.5										
Film	1.7										
RESIDUE			RESIDUE			RESIDUE			RESIDUE		
Screen	6	19 12 12	Indaver Ireland Ltd	100	0						
Residue	2.1										
Plasma Glass	5.2										

PC

Fraction	% Mass	EWC Codes	Secondary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)	Tertiary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)	Quaternary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)
FERROUS			FERROUS			FERROUS			FERROUS		
Steel	67	16 02 16	Davis Recycling International Ltd	n/a	n/a	Hammond Lane Metal	n/a	n/a	Megasa Siderurgica SL	100	99.5
NON-FERROUS			NON-FERROUS			NON-FERROUS			NON-FERROUS		
Hard Disk Drives	1.5								Sensing Ltd	30	30
Floppy Disk Drives	6.7								Sensing Ltd	30	30
Heatsink (Au)	1.5								Sensing Ltd	30	30
Heatsink (Cu_2)	1.6								Sensing Ltd	30	30
PCB Grade1	6								Confidential	30	30
Ribbon Cable	1.2	16 02 16	Davis Recycling International Ltd	n/a	n/a	The Remet Company Ltd	n/a	n/a	Sensing Ltd	30	30
Power Supply	8								Sensing Ltd	30	30
Processor Plastic	<1								Sensing Ltd	30	30
Processor Ceramic	<1								Sensing Ltd	30	30
Processor Block	<1								Sensing Ltd	30	30
RAM	<1								Sensing Ltd	100	99.5
PLASTIC			PLASTIC			PLASTIC			PLASTIC		
Plastic	5.6	19 12 04	WRC Recycling	n/a	n/a	Foshan Hai Qing Yuan Trading	n/a	n/a	Sihui Weilian Plastic Hardware	TBC	TBC

UPS

Fraction	% Mass	EWC Codes	Secondary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)	Tertiary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)	Quaternary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)
FERROUS			FERROUS			FERROUS			FERROUS		
Steel	25	16 02 16	Davis Recycling International Ltd	n/a	n/a	Hammond Lane Metal	n/a	n/a	Megasa Siderurgica SL	100	99.5
NON-FERROUS			NON-FERROUS			NON-FERROUS			NON-FERROUS		
Power Supply	4	16 02 16	Davis Recycling International Ltd	n/a	n/a	The Remet Company Ltd	n/a	n/a	Sansing Ltd	30	30
Transformer	<1								Sansing Ltd	30	30
PCB Grade 3	<1								Sansing Ltd	30	30
Copper Cable	<1								Sansing Ltd	30	30
Heatsink (Au)	<1								Sansing Ltd	100	99.5
BATTERIES			BATTERIES			BATTERIES			RESIDUE		
Battery Lead Acid <10	70	16 06 01*	H.J. Enthoven	100	97						

BATTERIES

Fraction	EWC Codes	Secondary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)	Tertiary Treatment Facility / Broker	Recovery Rate Achieved (%)	Recycling Rate Achieved (%)
BATTERIES		BATTERIES			BATTERIES		
Lead Acid Batteries	16 06 01*	H.J. Enthoven	100	97			
Alkaline Batteries	16 06 04	E.W.M	n/a	n/a	Recypilas	TBC	TBC

Appendix 12

EMS 07 Communications Procedure

Page Number:	1 of 3				
EMS Clause No.:	4.4.3	Prepared By:	N. Coulter	Signature:	
EMS Ref. No.:	EMS 07				
Rev. Number:	3	Approved By:	N. Madden	Signature:	
Effective Date:	08/01/2015				

TITLE: COMMUNICATION PROCEDURE

1.0 PURPOSE

1.1 Effective communication is essential to ensure the successful implementation and operation of the EMS.

1.2 This procedure outlines how The Recycling Village Ltd communicates internally and externally in relation to environmental issues to ensure that personnel at all levels within the organisation are encouraged and facilitated to make proposals for improvements, and submit relevant comments on the EMS.

1.3 The purpose of this procedure is to comply with Clause 4.4.3 of ISO 14001:2004.

2.0 SCOPE

2.1 This procedure describes how The Recycling Village Ltd carries out internal and external communications relating to environmental issues.

3.0 RELATED DOCUMENTS

- 4.4.2 EF 04 Environmental Awareness/Training Schedule
- 4.4.3 ER 002 Environmental Opportunities Register
- 4.4.3 EF 07 External Communication Record

4.0 RESPONSIBILITY

4.1 The Environmental Compliance Officer is responsible for documenting all internal and external communications relating to environmental issues and for ensuring that this procedure is properly implemented.

Page Number:	2 of 3			
EMS Clause No.:	4.4.3	Prepared By:	N. Coulter	Signature:
EMS Ref. No.:	EMS 07			
Rev. Number:	3	Approved By:	N. Madden	Signature:
Effective Date:				

TITLE: COMMUNICATION PROCEDURE

5.0 PROCEDURE

Internal Communications

5.1 The Environmental Compliance Officer is responsible for ensuring that environmental issues are communicated directly to the employees at The Recycling Village Ltd by methods such as:

- Regular Environmental Management Team meetings
- Direct communication by phone, email or personal meetings
- Environmental awareness programme
- Induction training
- Staff notice boards

5.2 Internal communications shall include information on;

- Environmental policy, objectives and targets
- Opportunities for individuals to contribute
- Current environmental issues and projects
- Legal compliance
- Opportunities for improvement
- Benefits of environmental management
- Contact details for further information

5.3 In order to ensure that personnel at all levels within The Recycling Village Ltd are encouraged and facilitated to make proposals for improvements, The Recycling Village Ltd has established an Environmental Opportunities Register (ER 002) which allows all interested parties to lodge environmental improvement suggestions or comments.

5.4 The Environmental Compliance Officer is responsible for ensuring that all suggestions are reviewed and the originator responded to in a timely manner. All appropriate suggestions will be discussed at the environmental team meetings and may form part of the future EMS environmental improvement programmes.

Page Number:	3 of 3			
EMS Clause No.:	4.4.3	Prepared By:	N. Coulter	Signature:
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TITLE: COMMUNICATION PROCEDURE

External Communications

2.3 External communication is achieved through a variety of means including:

- Sharing environmental data with regulatory bodies
- Attendance at relevant environmental seminars
- Participation in specialist environmental working groups
- The Recycling Village Ltd web site

5.4 The Environmental Compliance Officer is responsible for ensuring that all relevant environmental issues are communicated externally as required and by appropriate means e.g., e-mail, reports, presentations, correspondence etc. as per the external communications plan presented below.

5.5 All records of external environmental communications will be maintained in EF 07.

THIRD PARTY	TYPE OF INFORMATION	MEANS OF COMMUNICATION	TIMESCALE	RESPONSIBILITY
Meath CC/EPA	Monitoring Data	e-mail questionnaire	Annually	ECO
Various	General Environmental	Workshop/Seminar Presentations	As required	ECO
Public	General Environmental	Various	As required	ECO
WEEE Ireland/ERP	Contract Compliance Data	Various	As required	Management

5.5 The Recycling Village Ltd has decided not to publish an external annual report for public dissemination regarding its significant environmental aspects. Instead, requests for information relating to significant aspects shall be dealt with on a case by case basis.

Appendix 13

Statement of Measures in Relation to Prevention of Environmental Damage and Remedial Actions

Statement of Measures Summary – Year End 2015

Risk ID	Potential Risk	Risk Score	Mitigation Measures to be Taken	Actions Taken in 2015
1	Receiving unacceptable waste consignments	12	Carry out an effectiveness audit of waste acceptance and waste quarantined procedures e.g. EMS 09 10.	Effectiveness audit of waste handling procedures was conducted in October 2015. A new waste Management Plan was implemented along with a Logistics Folder. Both have been finalised and waste handling documented procedures will be updated in 2016 to take account of the changes.
			Ensure audits of waste haulage companies and waste facilities are appropriate and up to date.	External Audits are conducted at periodic intervals. The schedule for 2016 has been approved. A documentation audit was carried out on waste contractors and requests for updated documents were made to the relevant companies.
4	Materials Storage	12	Carry out an effectiveness audit of waste storage procedures e.g. EF 01, EMS 09 03, 09 05, 09 09, Ground Floor Plan 12039-LA-04 and Yard Management Plan 12039-LA-03.	Effectiveness audit of waste handling procedures was conducted in October 2015. A new waste Management Plan was implemented along with a Logistics Folder. Both have been finalised and waste handling documented procedures will be updated in 2016 to take account of the changes.
			Carry out regular checks of spill kits.	Carried out weekly by Environmental Compliance Officer and recorded on EF 01
2	Waste Unloading/ Handling	9	Carry out an effectiveness audit of waste handling procedures.	Effectiveness audit of waste handling procedures was conducted in October 2015. A new waste Management Plan was implemented along with a Logistics Folder. Both have been finalised and waste handling documented procedures will be updated in 2016 to take account of the changes.
			Carry out regular checks of spill kits.	Carried out weekly by Environmental Compliance Officer and recorded on EF 01

15	Interceptor Sump	8	Commission a further interceptor sump inspection if the last inspection is older than 3 years.	Interceptor Sump was surveyed and integrity tested in 2015
3	WEEE Processing	6	Continue to sample and monitor the emissions from the CRT/FPD disassembly lines extraction vent. Carry out an internal fugitive dust/OHS emission survey.	AXIS Environmental were contracted in 2015 to carry out quarterly air emissions monitoring surveys and subsequent analysis for Particluate Matter and Metals, as required by the licence. An external Dust Deposition survey was carried out along with internal OHS Dust Monitoring in 2015.
12	Contaminated Land	6	Carry out soil testing as per licence requirements	Soil Testing was carried out in April 2014 - not required again until 2024
11	Emissions to Groundwater	4	Continue to sample groundwater as per licence requirements.	Groundwater is sampled on a biannual basis
14	Storm drainage network	4	Commission an integrity survey of the site drainage network every 3 years.	Site drainage was integrity tested in 2015
6	Emissions to Surface Water	4	Continue to sample surface water as per licence requirements.	Surface water was sampled as per licence requirements in 2015. Additional testing as also carried out due to irregularities with analysis for metals.
9	Fire and Firewater	4	Implement the recommendations as detailed in the Fire Water and Fire Water Retention Report, produced by WEML, July 2015	A feasible quotation for a smoke detection system was obtained in 2015. Installation of the system will take place in early 2016.
16	Site Deliveries	4	Ensure that all loads are checked before unloading, certified forklift divers operate machinery and all general operators are trained in the site emergency response and spillage procedures as required.	Relevant training was carried out in July 2015 and November 2015. Refresher forklift training is required in 2016.

5	Ecology	2	The facility is located within a purpose built industrial facility that was constructed in 2005 on a green field site.	No actions required
13	Liquid Storage and Handling	2	Ensure that all general operators are trained in the site emergency response and spillage procedures as required.	Relevant training was carried out in July 2015 and November 2015. Refresher forklift training is required in 2016.
7	Use of Raw Materials and Natural Resources	1	Carry out an energy audit of the facility.	Site Energy Audit was conducted by WEML in November 2015
8	Emissions to Air	1	Continue to sample stack air emission as per licence requirements.	AXIS Environmental were contracted in 2015 to carry out quarterly air emissions monitoring surveys and subsequent analysis for Particulate Matter and Metals, as required by the licence.
10	Nuisance	1	Continue to carry out noise surveys as per licence requirements.	Noise Survey was carried out in July 2015 by WEML
17	Weather	1	Ensure that the site interceptor sump is cleaned when required in order to remove gross solids and oil prior to discharge to the River Nanny	Interceptor Sump is subject to daily visual checks; Sump alarm operation is checked monthly and cleaning is organised as required or at least biannually.