

**ANNUAL ENVIRONMENTAL REPORT**  
**FOR GREENSTAR RECYCLING (MUNSTER) LIMITED.**  
**SARFIELD COURT, CORK**  
**LICENCE NO. W0136-02**  
**JANUARY 2013 – DECEMBER 2013**

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| Project   | Annual Environmental Report 2013                  |        |                                  |                        |
|-----------|---|--------|----------------------------------|------------------------|
| Client    | Greenstar Recycling (Munster) Limited<br>W0136-02 |        |                                  |                        |
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# TABLE OF CONTENTS

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|  | <u>PAGE</u> |
|--|-------------|
| <b>1. INTRODUCTION</b> .....                                   | <b>1</b>    |
| <b>2. SITE DESCRIPTION</b> .....                               | <b>2</b>    |
| 2.1    SITE LOCATION AND LAYOUT.....                           | 2           |
| 2.2    WASTE MANAGEMENT ACTIVITIES .....                       | 2           |
| 2.2.1    Waste Types & Processes.....                          | 2           |
| 2.2.2    Plant List.....                                       | 4           |
| <b>3. EMISSION MONITORING</b> .....                            | <b>5</b>    |
| 3.1    SURFACE WATER MONITORING.....                           | 5           |
| 3.2    GROUNDWATER MONITORING.....                             | 8           |
| 3.3    WASTEWATER MONITORING .....                             | 9           |
| 3.4    NOISE SURVEY .....                                      | 10          |
| 3.5    DUST MONITORING.....                                    | 13          |
| 3.6    NUISANCE CONTROL REVIEW.....                            | 13          |
| <b>4. SITE DEVELOPMENT WORKS</b> .....                         | <b>14</b>   |
| 4.1    ENGINEERING WORKS.....                                  | 14          |
| 4.2    SUMMARY OF RESOURCE & ENERGY CONSUMPTION.....           | 14          |
| 4.3    BUND INTEGRITY TEST .....                               | 14          |
| <b>5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY</b> ..... | <b>15</b>   |
| <b>6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS</b> .....         | <b>18</b>   |
| 6.1    INCIDENTS .....   | 18          |
| 6.2    REGISTER OF COMPLAINTS .....                            | 18          |
| <b>7. ENVIRONMENTAL DEVELOPMENT</b> .....                      | <b>19</b>   |
| 7.1    ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT.....          | 19          |
| 7.1.1    Site Management Structure .....                       | 19          |
| 7.1.2    Staff Training.....                                   | 20          |
| 7.2    ENVIRONMENTAL MANAGEMENT PROGRAMME .....                | 20          |
| 7.2.1    Schedule of Objectives 2013 .....                     | 20          |
| 7.3    COMMUNICATIONS PROGRAMME .....                          | 20          |
| 7.4    REPORT FINANCIAL PROVISION .....                        | 24          |
| 7.5    NUISANCE CONTROLS.....                                  | 24          |
| <b>8. OTHER REPORTS</b> .....                                  | <b>25</b>   |
| 8.1    EUROPEAN POLLUTANT RELEASE AND TRANSFER REGISTER.....   | 25          |
| <b>APPENDIX 1</b> .....  |             |
| -    European Pollutant Release and Transfer Register          |             |
| <b>APPENDIX 2</b> .....  |             |
| -    Procedures List   |             |

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# 1. INTRODUCTION

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This is the 2013 Annual Environmental Report (AER) for Greenstar Recycling (Munster) Limited's (Greenstar) Materials Recovery Facility (MRF) located at Sarsfield Court Industrial Estate, Glanmire, County Cork. During the reporting period, Greenstar was in receivership but ownership of the company and transfer of the licence to Starrus Eco Holdings Ltd (trading as Greenstar) was completed in March 2014.

The report covers the period from the 1<sup>st</sup> January 2013 to the 31<sup>st</sup> December 2013. The content of the AER is based on Schedule H of the Waste Licence (W0136-02) and the report format follows guidelines set in the "Guidance Note for Annual Environmental Report" issued by the Environmental Protection Agency (Agency)<sup>1</sup>. Account is also taken of the AER Draft Guidance Document and AER Information Templates issued by the Agency in January 2013<sup>2</sup>.

Greenstar applied for a Waste Licence Review in July 2010 and a Proposed Decision was issued in October 2013. The PD allowed for an extension of the waste acceptance and operational hours to allow for 24 hour waste acceptance and operation, for the operation of a Civic Amenity Centre and to increase the waste acceptance limits pro-rata from 99,017 to 200,000 tonnes per annum. The waste types will remain the same as the previous licence (household, construction & demolition, commercial and industrial and biodegradable non-hazardous wastes). In addition Greenstar sought to remove the existing requirement to achieve a 50% recovery rate and to revise the compliance locations for noise emission limits from the site boundary to the nearest noise sensitive locations as is best practice. The revised licence (W0136-03) allowing for all of the above was issued in February 2014.

On 22<sup>nd</sup> November 2013 a significant fire destroyed the MRF building and waste acceptance activities ceased at the facility at this time. Greenstar managed the potential environmental impacts associated with the fire during and in the weeks following the fire event and has been in regular contact with the Agency since this time. There have been no long term significant environmental impacts associated with the fire. Firewater generated during the firefighting period was fully retained by the surface / foul drainage system on the site. Following analysis to determine its composition, the majority of the firewater was tankered to Eastgate Pumping Station for ultimate discharge to Carrigrennan Wastewater Treatment Plant for treatment with the agreement of Cork City and County Councils. The Agency has subsequently confirmed that it is satisfied that there was no risk of surface or groundwater pollution associated with the fire, so water quality in both local private wells and the nearby public supply were not subject to any risk of impact from the incident. Air quality modelling was also carried out and confirmed that the smoke plume had not impacted on nearest sensitive receptors.

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

<sup>2</sup> EPA (Environmental Protection Agency) 2012 Draft AER Guidance Document

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## 2. SITE DESCRIPTION

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### 2.1 Site Location and Layout

The facility is situated within the Sarsfieldcourt Industrial Estate, approximately 8 km northeast of Cork City and 5 km north of Glanmire in the townland of Sarsfieldcourt. The site occupies 1.56 ha and comprises one MRF building and ancillary infrastructure, including administration offices, yard and parking areas and a vehicle wash. The MRF building has been significantly damaged by fire but it is intended to reconstruct the building during 2014.

### 2.2 Waste Management Activities

During the reporting period the licence allowed Greenstar to accept and process c99,000 tonnes of waste per annum, comprising commercial/industrial non-hazardous waste, household waste, source separated biodegradable waste for composting and construction and demolition wastes. All waste processing takes place inside the waste transfer building, as specified in Condition 5.1 of the licence.

#### 2.2.1 *Waste Types & Processes*

During the reporting period, the facility was licensed to accept the following waste types and quantities, as specified in Schedule A of the Licence: -

- Household (42,129 tonnes)
- Commercial & Industrial (47,130 tonnes)
- Construction & Demolition (4,758 tonnes)
- Source separated biodegradable waste for composting (5,000 tonnes), however composting is not currently carried out.

The maximum tonnage of each waste type accepted, except the source separated biodegradable waste for composting, may be altered with the prior agreement of the Agency as long as the total maximum tonnage is not exceeded.

The key processes carried out at the facility include: -

- Segregation of recyclable materials (wood, metals, glass);
- Segregation and bulking of C&D waste;
- Transfer of recovered and residual materials to appropriately licensed recycling, recovery and disposal outlets;
- Separation of organic fines from MSW waste by shredding and trommelling of the waste;
- Bulking of material for transfer to appropriately licensed recycling, recovery and disposal outlets.
- Production, baling and storage of refuse derived fuel (RDF)

#### *Household Waste*

Mixed household waste as delivered is processed to remove bulky items, food waste, metal and wood. The remaining material is baled and wrapped to produce RDF. All recyclable material is segregated, where possible, from the waste and transferred off-site to suitable licensed or permitted recycling facilities. The remaining non-recyclable and residual material not suitable for RDF production is sent to licensed landfills post processing

#### *Commercial and Industrial Waste*

Greenstar provides skips of various sizes to a wide range of commercial and industrial premises in the Cork Region. Recyclable material is segregated, where possible, from the waste stream and transferred to suitable recycling facilities. The remaining non-recyclable and residual material is sent to licensed landfills or re-directed to the onsite baler for the production of RDF bales of waste material for export to approved recovery facilities.

In addition Greenstar provides a source segregation service for those clients which generate large quantities of commercial and industrial waste. Trained Greenstar staff sort and segregate waste at source and the waste is then collected in skips or bulker vehicles and appropriately transported. All material is transported to the Sarsfieldcourt facility and off-loaded in designated areas and stored pending consignment to recycling facilities or to a licensed landfill.

### *Construction and Demolition Waste*

Construction and demolition material arrives on-site in skips of varying sizes. The loads are inspected and segregated on-site. Recoverable materials are extracted and sent off-site either for re-use or recycling. The non-recyclable materials are transferred to a licensed landfill.

### *Biodegradable waste for composting*

During the reporting period the facility was allowed to compost up to 5,000 tonnes/year of source separated biodegradable waste for composting. However, Greenstar has not yet started composting. Biodegradable wastes suitable for composting which is accepted at the facility are sent to an offsite composting facility.

### *2.2.2 Plant List*

A list of the plant in use at the facility during the reporting period is given in Table 2.1. The plant provided 100% duty and 50% standby for waste processing.

**Table 2.1** Existing Plant

| <b>No.</b> | <b>Plant</b>           | <b>Model</b>            | <b>Operational Capacity</b> | <b>Standby Capacity</b> |
|------------|------------------------|-------------------------|-----------------------------|-------------------------|
| 1          | Tromel                 | Waltec                  | 80 t/hr                     | 0                       |
| 10         | Conveyor Lines         | Generic                 | 80 t/hr                     | 0                       |
| 1          | Baler                  | Bollegraff              | 12 t/hr                     | 0                       |
| 1          | Articulated Grab       | Liebherr L924           | 100 t/hr                    | 100 t/hr                |
| 1          | Loading Shovel         | Volvo L120              | 70 t/hr                     | 0                       |
| 1          | Wheel Wash             | Eurojet                 | 168 hr/wk                   | 0                       |
| 1          | Picking Line           | 7-bay sorting line      | Not in Use                  | N/A                     |
| 1          | Weighbridge – 2 Scales | -                       | 56 hr/wk                    | 56 hr/wk                |
| 1          | Fork Lift              | Jungheinrich 3.0 tonnes | 60 hr/wk                    | 60 hr/wk                |
| 2          | Fork Lift              | Jungheinrich 2.5 tonnes | 60 hr/wk                    | 60 hr/wk                |
| 1          | Fork Lift              | Jungheinrich 3.5 tonnes | 60 hr/wk                    | 60 hr/wk                |
| 1          | Shredder/Bag Opener    | M&J 2000                | 80 t/hr                     | 0                       |
| 1          | Bale wrapper           | Crosswrap               | 12 t/hr                     | 0                       |
| 1          | Articulated Grab       | Fuchs ML340             | 100 t/hr                    | 100 t/hr                |

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### 3. EMISSION MONITORING

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Greenstar implements the comprehensive environmental monitoring programme as specified in the licence to assess the significance of emissions from site activities. The programme includes surface water, wastewater, groundwater, noise and dust monitoring. The monitoring locations are shown on Figure 3.1.

The monitoring results are submitted in reports to the Agency at quarterly intervals. An overview of the results of the monitoring is presented in this Section, with summary data in tables included.

#### 3.1 Surface Water Monitoring

Surface water monitoring was carried out quarterly at three locations (SW-1, SW-2 and SW-3). SW-3 is the discharge point from the facility to a stream approximately 100 metres from the eastern boundary of the site. SW-2 is located to the north and upstream of the discharge point and SW-1 is located to the south and downstream of the outfall.

In Q4 2013 and immediately following the fire, surface water sampling was conducted on the stream (SW-1 and SW-2) by OCM (25<sup>th</sup> November 2013). The discharge to the stream had been shut off due to the fire and so there was no discharge to the stream to sample. Sampling of the surface water which was present in the onsite drains was carried out by Lehane Environmental on three occasions following the fire (11<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup> December 2013) to confirm that the water was suitable for discharge to the Waste Water Treatment Plant.

The range of analysis in the routine monitoring programme included pH, electrical conductivity, Chemical Oxygen Demand (COD), Biological Oxygen Demand (BOD), total organic carbon (TOC), ammoniacal nitrogen, dissolved oxygen, total suspended solids (TSS), mineral oils and oils, fats and greases. The results of the routine monitoring and the monitoring carried out by Lehane Environmental are presented in Tables 3.1 to 3.4.

The Emission Limit Value (ELV) and Trigger Levels apply solely to the discharge from the facility (SW-3). The quarterly monitoring was 100% compliant with the ELVs and Trigger Levels. The quality of the water in the stream is generally good and is not being impacted by facility activities and was not impacted by the fire.

The results show that there was a slight impact on the storm sewer but all water was retained in the system following the fire. The quality of the water retained in the sewer improved over time and the surface water was again suitable for discharge to the stream on the 18<sup>th</sup> December 2013.



**Table 3.1** Surface water Monitoring Results 2013: SW-1

| Parameter                  | Units     | Q1    | Q2    | Q3     | Q4    |
|----------------------------|-----------|-------|-------|--------|-------|
| pH                         | pH units  | 8.19  | 7.84  | 7.78   | 7.7   |
| Conductivity               | mS/cm     | 319   | 280   | 307    | 267   |
| BOD                        | mg/l      | <1    | <1    | <1     | <2    |
| COD                        | mg/l      | <7    | <7    | 29     | <15   |
| Ammoniacal Nitrogen        | mg/l      | 0.12  | <0.03 | 0.03   | <0.1  |
| Dissolved Oxygen           | mg/l      | 11    | 10    | 10     | 11    |
| TOC                        | mg/l      | <2    | 4     | 5      | 1.5   |
| TSS                        | mg/l      | <10   | <10   | <10    | <3    |
| Oils, Fats & Greases       | mg/l      | <0.01 | <0.01 | <0.01  | <5    |
| Nitrate as NO <sub>3</sub> | mg/l      | 8.2   | 26.1  | 25.8   | 6.3   |
| Nitrite as NO <sub>2</sub> | mg/l      | <0.02 | <0.02 | <0.02  | <0.5  |
| Mineral Oils               | mg/l      | <0.01 | <0.01 | <10    | <0.01 |
| Total Coliforms            | cfu/100ml | 150   | 150   | 11,000 |       |
| Faecal Coliforms           | cfu/100ml | 150   | 150   | 1100   |       |

**Table 3.2** Surface water Monitoring Results 2013: SW-2

| Parameter                  | Units     | Q1    | Q2    | Q3    | Q4    |
|----------------------------|-----------|-------|-------|-------|-------|
| pH                         | pH units  | 8.19  | 8.03  | 7.66  | 7.1   |
| Conductivity               | mS/cm     | 288   | 271   | 305   | 277   |
| BOD                        | mg/l      | <1    | <1    | <1    | <2    |
| COD                        | mg/l      | <7    | <7    | <7    | <15   |
| Ammoniacal Nitrogen        | mg/l      | 0.12  | <0.03 | <0.03 | <0.1  |
| Dissolved Oxygen           | mg/l      | 11    | 10    | 9     | 11.5  |
| TOC                        | mg/l      | <2    | 4     | 6     | 1.35  |
| TSS                        | mg/l      | <10   | <10   | <10   | <3    |
| Oils, Fats & Greases       | mg/l      | <0.01 | <0.01 | <0.01 | <5    |
| Nitrate as NO <sub>3</sub> | mg/l      | 15.0  | 27.9  | 25.6  | 6.4   |
| Nitrite as NO <sub>2</sub> | mg/l      | <0.02 | <0.02 | <0.02 | <0.5  |
| Mineral Oils               | mg/l      | <0.01 | <0.01 | <10   | <0.01 |
| Total Coliforms            | cfu/100ml | 460   | 93    | 2400  | -     |
| Faecal Coliforms           | cfu/100ml | 460   | 43    | 2400  | -     |

**Table 3.3** Surface water Monitoring Results 2013: SW-3

| Parameter                  | Units     | Q1     | Q2     | Q3    | Q4 | Trigger Levels | Emission Limit |
|----------------------------|-----------|--------|--------|-------|----|----------------|----------------|
| pH                         | pH units  | 8.36   | 7.92   | 7.45  | -  | N/A            | N/A            |
| Conductivity               | mS/cm     | 473    | 458    | 506   | -  | N/A            | N/A            |
| BOD                        | mg/l      | 3      | 2      | <1    | -  | 25             | N/A            |
| COD                        | mg/l      | 9      | 9      | 24    | -  | N/A            | N/A            |
| Ammoniacal Nitrogen        | mg/l      | 0.38   | 0.25   | 3.41  | -  | N/A            | N/A            |
| Dissolved Oxygen           | mg/l      | 5      | 7      | 2     | -  | N/A            | N/A            |
| TOC                        | mg/l      | <2     | 5      | 11    | -  | N/A            | N/A            |
| TSS                        | mg/l      | <10    | <10    | 10    | -  | 35             | N/A            |
| Oils, Fats & Greases       | mg/l      | <0.01  | <0.01  | <0.01 | -  | N/A            | N/A            |
| Nitrate as NO <sub>3</sub> | mg/l      | 0.8    | 14.9   | 10.7  | -  | N/A            | N/A            |
| Nitrite as NO <sub>2</sub> | mg/l      | <0.02  | <0.02  | 0.11  | -  | N/A            | N/A            |
| Mineral Oils               | mg/l      | <0.01  | <0.01  | <10   | -  | N/A            | 5              |
| Total Coliforms            | cfu/100ml | 46,000 | 46,000 | 2400  | -  | N/A            | N/A            |
| Faecal Coliforms           | cfu/100ml | 4,600  | 2,400  | 2400  | -  | N/A            | N/A            |

**Table 3.4** Surface Water in Drains Monitoring Results.

| Parameter                  | Units    | 11/12/2013 SW3 | 18/12/2013 SW-3 | 19/12/2013 SW-3 | Trigger * Levels | Emission Limit* |
|----------------------------|----------|----------------|-----------------|-----------------|------------------|-----------------|
| pH                         | pH units | 7.48           | 7.58            | 7.48            | N/A              | N/A             |
| Conductivity               | µS/cm    | 0.512          | 0.264           | 0.495           | N/A              | N/A             |
| BOD                        | mg/l     | <1             | <1              | 2               | 25               | N/A             |
| COD                        | mg/l     | 15             | 10              | 16              | N/A              | N/A             |
| Ammoniacal Nitrogen        | mg/l     | 0.57           | 0.12            | 0.38            | N/A              | N/A             |
| Dissolved Oxygen           | mg/l     | 3              | 7               | 5               | N/A              | N/A             |
| TOC                        | mg/l     | <2             | <2              | <2              | N/A              | N/A             |
| Total Suspended Solids     | mg/l     | <10            | 18              | 15              | 35               | N/A             |
| Oils, Fats & Greases       | mg/l     | 1,920          | 230             | <10             | N/A              | N/A             |
| Nitrate as NO <sub>3</sub> | mg/l     | 2.5            | 1               | 9               | N/A              | N/A             |
| Nitrite as NO <sub>2</sub> | mg/l     | 0.86           | 0.12            | 0.12            | N/A              | N/A             |
| Mineral Oils               | mg/l     | 1.92           | 0.23            | <0.01           | N/A              | 5               |

### 3.2 Groundwater Monitoring

There are two groundwater monitoring wells located up and down gradient of site activities. The licence specifies annual groundwater monitoring however, the Agency requested Greenstar to increase the monitoring frequency to biannually in a letter dated the 8<sup>th</sup> January 2007 (ref W0136-02/GC06SMcD). Groundwater monitoring was carried out biannually at two locations (W-1 and W-2) in Q2 and Q4 2013. The direction of groundwater flow is considered to be from west to east towards the stream, which flows along the eastern side of the Industrial Estate. W-2 is at the upgradient and W-1 is at the downgradient side of the site.

The range of analysis included TOC, pH, electrical conductivity, ammoniacal nitrogen, total suspended solids and mineral oils, plus the additional parameters requested by the Agency. There are no Emission Limit Value (ELV) nor Trigger Levels. The tables also include the EPA Interim Guideline Values (IGVs) which were published in May 2003. The IGVs are not statutory guidelines but have been prepared by the EPA to assist in the assessment of impacts on groundwater quality in the context of the implementation of the Water Framework Directive. The Table also includes the Groundwater Regulations Threshold Value (GTV) which were introduced in 2010 (S.I. 9 of 2010) on foot of requirements from the Water Framework Directive and have evolved from the IGVs. The results are included on Tables 3.5 and 3.6.

The quality of the groundwater was good and generally consistent with the previous monitoring carried out. The results indicate that the facility had no impact on groundwater and was not impacted by the fire.

**Table 3.5** Groundwater Monitoring Results 2013: W-1

| Parameter                  | Units    | Q2    | Q4    | IGV     | GTV         |
|----------------------------|----------|-------|-------|---------|-------------|
| pH                         | pH units | 7.16  | 6.9   | 6.5-9.5 | -           |
| Conductivity               | mS/cm    | 0.280 | 0.362 | 1       | 0.800-1.875 |
| TOC                        | mg/l     | 3     | 1.07  | NAC     | -           |
| Ammoniacal Nitrogen        | mg/l     | <0.03 | <0.1  | 0.12    | 0.065-0.175 |
| TSS                        | mg/l     | 838   | 6     | N/A     | -           |
| Nitrate as NO <sub>3</sub> | mg/l     | 15.3  | 1.8   | 25      | 37.5        |
| Nitrite as NO <sub>2</sub> | mg/l     | <0.02 | <0.5  | 0.1     | 0.375       |
| Mineral Oils               | mg/l     | <0.01 | <0.01 | 0.01    | -           |

**Table 3.6** Groundwater Monitoring Results 2013: W-2

| Parameter                  | Units    | Q2    | Q4    | IGV     | GTV         |
|----------------------------|----------|-------|-------|---------|-------------|
| pH                         | pH units | 6.78  | 6.9   | 6.5-9.5 | -           |
| Conductivity               | mS/cm    | 0.174 | 0.388 | 1       | 0.800-1.875 |
| TOC                        | mg/l     | 4     | 0.28  | NAC     | -           |
| Ammoniacal Nitrogen        | mg/l     | <0.03 | <0.1  | 0.12    | 0.065-0.175 |
| TSS                        | mg/l     | 3540  | 605   | N/A     | -           |
| Nitrate as NO <sub>3</sub> | mg/l     | 10.6  | 2.5   | 25      | 37.5        |
| Nitrite as NO <sub>2</sub> | mg/l     | <0.02 | <0.5  | 0.1     | 0.375       |
| Mineral Oils               | mg/l     | <0.01 | <0.01 | 0.01    | -           |

### 3.3 Wastewater Monitoring

Wastewater generated on site is directed to a holding tank located to the east of the site security hut weighbridge building. The accumulated liquid is removed off-site as required to an appropriate wastewater treatment plant (WWTP) for treatment. The volume of wastewater removed in 2013 was 1,815.3 tonnes not including the volumes removed following the fire. Approximately 3,400m<sup>3</sup> was removed to Carrigrennan WWTP and 575m<sup>3</sup> to Athy WWTP following the fire.

Wastewater monitoring is required biannually however an additional sample was collected in December 2013 following the fire. The range of analysis was as specified in Schedule D of the Waste Licence and included pH, BOD, COD, ammoniacal nitrogen, total suspended solids and mineral oils. There are no ELV or Trigger levels set for wastewater. The results are included on Table 3.7.

The waste water was impacted significantly by the fire and the fire water generated in controlling the fire. Each of the parameters was significantly elevated compared to the pre-fire results in September and March. The waste water was however considered suitable for treatment at the Carrigrennan and Athy WWTPs.

**Table 3.7** Wastewater Monitoring Results 2013

| Parameter           | Units    | March 2013 | September 2013 | December 2013 |
|---------------------|----------|------------|----------------|---------------|
| pH                  | pH units | 7.04       | 7.83           | -             |
| Conductivity        | mS/cm    | 754        | 889            | 4,260         |
| BOD                 | mg/l     | 336        | 7              | 5,950         |
| COD                 | mg/l     | 1,197      | 97             | 70.97         |
| Ammoniacal Nitrogen | mg/l     | 27.57      | 27.47          | 160           |
| TSS                 | mg/l     | 122        | <10            | 5.590         |
| Mineral Oils        | mg/l     | 13.3       | <0.01          | -             |

- Not Analysed

### 3.4 Noise Survey

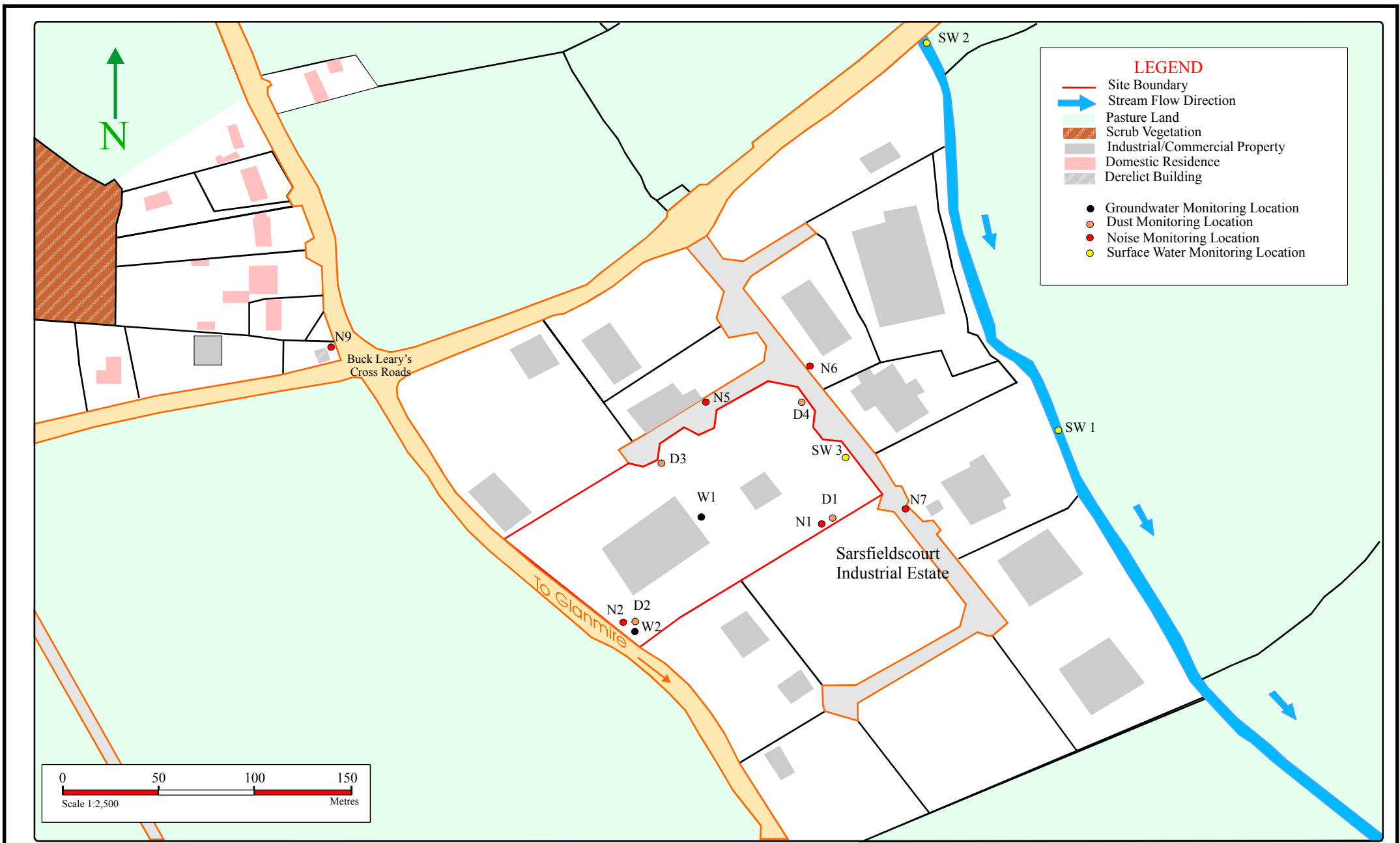
A noise survey is carried out annually at the facility. This was conducted in November 2013. Monitoring was carried out at five noise monitoring locations, N-1, N-2, N-5, N-6 and N-7 specified in the licence and one off-site noise sensitive location N-9. The survey concluded that the facility was fully compliant with its licence requirements. The results are included on Table 3.8.

The licence specifies a daytime noise emission limit of 55 dB at all monitoring locations. Most waste licences however currently issued by the Agency state that specified noise limits should apply to noise sensitive locations only. Given that the Greenstar facility is located in a busy industrial estate, it is considered practical to adopt this approach. Therefore the noise limits of 55 dB daytime and 45 dB night-time limits have been applied to the offsite noise sensitive location N9. Noise emissions from the nearest industrial premises contributed to the noise environment at N9, however no emissions were audible from the Greenstar facility.

**Table 3.8** Noise Monitoring Results 2013

| Station | Time      | L <sub>Aeq</sub> 30 min<br>dB | L <sub>AF10</sub> 30<br>min dB | L <sub>AF90</sub> 30<br>min dB | Specific<br>level*<br>dB | Noise audible   |
|---------|-----------|-------------------------------|--------------------------------|--------------------------------|--------------------------|---|
| N1      | 1136-1206 | 69                            | 71                             | 54                             | 69                       | Greenstar emissions continuously dominant, from intermittent trucks around yard and through entrance, and from continuously audible air handling plant. Offsite, intermittent vehicle movements on industrial estate road audible, particularly truck movements. No other noise audible.  |
| N2      | 1100-1130 | 70                            | 71                             | 65                             | 70                       | Several Greenstar sources dominant: truck and loader movements on yard, operations in building, generator emissions at W gable, road sweeper truck around yard (often passing near N2), and maintenance activity on nearby forklift truck.  |
| N5      | 1406-1436 | 58                            | 60                             | 49                             | 50-51                    | Emissions from intermittent power washing at adjacent premises dominant in addition to continuously audible compressor or similar from 1427. Greenstar air handling plant and truck movements on yard also clearly audible, although not dominant. During lulls in extraneous noise, occasional plant operations in Greenstar building slightly audible. Sporadic traffic on adjacent ind. est. access road dominant when present. Traffic on surrounding ind. est. roads and in several yards also audible. No other noise audible apart from local crows. |
| N6      | 1441-1511 | 62                            | 62                             | 49                             | 50-51                    | Greenstar air handling plant continuously audible at low level. Truck movements on yard and through entrance audible intermittently at low level. Frequent vehicle movements audible through ind. est. roadways and at several premises. Occasional power washing activity audible at nearby premises. Crows.   |
| N7      | 1209-1239 | 67                            | 71                             | 55                             | <55                      | Intermittent vehicle movements on ind. est. roadway dominant when present. Lulls dominated by activity at nearby premises. Greenstar emissions slightly audible, chiefly truck movements through weighbridge area, and slightly audible air handling plant. Truck idling near N7 intrusive 1221-1226.   |
| N9      | 1515-1545 | 68                            | 72                             | 44                             | 40                       | Greenstar air handling plant emissions faintly audible during infrequent lulls in road traffic through adjacent crossroads. Traffic dominant, and almost continuously audible on approaches. Other activity across ind. est. audible at low level from time to time, particularly at nearest premises. Bird song/calls and aircraft. Dog barking occasionally at nearby dwelling.   |

\*Specific level: Sound pressure level contribution considered attributable to facility, determined using real time assessment, field notes, time history profiles, statistical analysis, frequency spectra, near field correction if applicable, and other parameters.



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CLIENT

Greenstar Ltd

TITLE

Sarsfieldscourt  
 Monitoring Locations

Details

© Ordnance Survey Ireland. Government of Ireland.

FIGURE NUMBER

3.1

Scale

Not To Scale

Revision

A

### 3.5 Dust Monitoring

The facility conducts dust monitoring on three occasions annually. The results are included in Table 3.9.

There were no exceedances of the dust deposition limit (350 mg/m<sup>2</sup>/day) set in the Licence at any of the monitoring locations during any of the monitoring events in 2013.

**Table 3.9** Dust Monitoring Results 2013

|     | June<br>mg/m <sup>2</sup> /day | July<br>mg/m <sup>2</sup> /day | August<br>mg/m <sup>2</sup> /day | Deposition Limit<br>mg/m <sup>2</sup> /day |
|-----|--------------------------------|--------------------------------|----------------------------------|--|
| D-1 | 9.8                            | 16.2                           | 15.9                             | 350  |
| D-2 | 14.9                           | 15.1                           | 7.1                              | 350  |
| D-3 | 1.6                            | 25.1                           | 9.6                              | 350  |
| D-4 | 9.8                            | 23.9                           | 22.2                             | 350  |

- Gauge Damaged

### 3.6 Nuisance Control Review

Greenstar installed and commissioned an air emission abatement system in the MRF building in 2006. The system was working well prior to the fire in November 2013 when it was completely destroyed.

The system extracted air from the waste handling area and passed it through a series of filters to remove any dust. The active carbon within the annular vessels acts on the odorous air by binding the odour causing molecules to the carbon thus removing odours from the released air. This technique in conjunction with maintaining the integrity of the extraction area forms the premise for the effective operation of the system and ensured treatment prior to the fore event.

Other controls included automatic fast acting doors installed on both the tunnel entrance and exit and the in and out doorway in the main transfer building. This act in conjunction with a building management system (BMS) which activates an alarm if a door is opened for longer than a pre defined period.

During the reporting period Greenstar implemented a detailed Odour Management Plan (OMP) for waste handling operations and this was updated in May 2012. The OMP is a core document detailing operational and control measures appropriate to management and control of odours. It provides sufficient detail to allow facility and maintenance staff to clearly understand the odour management operational procedures for both normal and abnormal conditions.

Routine inspections and litter patrols, cleaning of site roads and yard areas and vermin control (Quality Pest) are maintained. Greenstar has introduced an Integrated Management System (IMS) and as part of this has developed a list of environmental management procedures, details of which are outlined in Section 7 and include nuisance control measures.



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## 4. SITE DEVELOPMENT WORKS

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### 4.1 Engineering Works

No engineering works were completed prior to the fire event. The MRF building has been made safe with loose/damaged wall and roof cladding removed.

It is proposed to reconstruct the MRF building during 2014. Any reconstruction proposals will comprise Specified Engineering Works in accordance with Condition 3.3 of the new licence.

### 4.2 Summary of Resource & Energy Consumption

Table 4.1 presents an estimate of the resources used on-site during the reporting period.

**Table 4.1** Estimates of Resources Used On-Site in 2012 & 2013

| Resources                           | Quantities 2012 | Quantities 2013 |
|-------------------------------------|-----------------|-----------------|
| Road Diesel                         | 789,360 litres  | 826,926 litres  |
| Gas Oil                             | 201,500 litres  | 212,962 litres  |
| Gear Oil                            | 30 litres       | 37 litres       |
| Ad Blue                             | 5,200 litres    | 5500 litres     |
| Hydraulic, Transmission, Engine Oil | 3,600 litres    | 3600 litres     |
| Anti Freeze                         | 80 litres       | 20 litres       |
| Electricity                         | 196,000 kwh     | 265,850 kwh     |
| Truck Wash Detergent                | 100 litres      | 160 litres      |
| Carbon                              | 27,000 kg       | 30,000 kgs      |

### 4.3 Bund Integrity Test

Bund testing is carried out every three years. The bunds and tanks were tested in June 2012 (Chemstore Unit in Quarantine Area) and September 2012 (underground foul water and process water storage tanks). Completion of bund testing of the covered diesel oil storage tank was completed in February 2013. All bunds were passed fit for purpose.

---

## **5. WASTE RECEIVED AND CONSIGNED FROM THE FACILITY**

---

Table 5.1 shows the total quantities of waste received and consigned from the facility in 2013. Table 5.2 shows the quantities of waste received and consigned in previous years. A breakdown of the waste types is provided in accordance with the European Waste Catalogue and Hazardous Waste (EWC/HWL) list. A more detailed description of the wastes accepted and consigned are provided in the PRTR submission in Appendix 1.

The total amount received in 2013 was 71,812 tonnes. The total amount consigned was 76,478 tonnes. The difference (4,666) consists of 1,844 tonnes of liquid waste generated at the site plus the wastes associated with the fire which occurred in November 2013. All the wastes consigned from the site went to recovery and disposal facilities agreed with the Agency.

**Table 5.1** Waste Received & Consigned 2013

| <b>EWC</b> | <b>Description</b>                             | <b>Waste In</b> | <b>Waste Out</b> |
|------------|--|-----------------|------------------|
| 06 13 03   | Activated Carbon                               |                 | 30               |
| 10 10 08   | Casting cores and moulds                       | 34              |                  |
| 12 01 13   | Solder Dross                                   | 7               |                  |
| 15 01 01   | Cardboard & Paper Packaging                    | 20              | 17               |
| 15 01 03   | Wooden Packaging                               | 47              | 4                |
| 15 01 06   | Mixed Packaging                                | 10,003          | 10,434           |
| 15 01 07   | Glass Packaging                                | 939             | 1866             |
| 16 11 06   | Linings and Refractories                       | 38              |                  |
| 17 01 07   | Mixture of concrete,brick,and tiles            | 54              |                  |
| 17 02 03   | plastic  | 6               |                  |
| 17 04 11   | Cable  | 26              | 4                |
| 17 09 04   | Mixed C&D                                      | 722             | 735              |
| 19 08 05   | Liquid Waste                                   |                 | 1,844            |
| 19 12 10   | Solid Recovered Fuel                           |                 | 17,463           |
| 19 12 12   | Mixed Residual Waste from mechanical treatment |                 | 13,704           |
| 20 01 01   | Paper & Cardboard                              | 8               |                  |
| 20 01 02   | Glass  | 896             | 1                |
| 20 01 08   | Compost and Commercial Food Wastes             | 2680            | 2361             |
| 20 01 36   | WEEE   | 110             | 41               |
| 20 01 38   | Wood from municipal sources                    | 159             | 86               |
| 20 01 39   | Plastic from municipal sources                 |                 | 407              |
| 20 01 40   | Metal from municipal sources                   | 97              |                  |
| 20 02 01   | Glass and Green Waste from municipal sources   | 443             | 702              |
| 20 03 01   | Mixed Residual Waste                           | 41,985          | 15488            |
| 20 03 07   | Bulky Waste                                    | 13,540          | 11320            |
|            |  |                 |                  |
|            | <b>Total Received</b>                          | 71,812          |                  |
|            | <b>Total Consigned</b>                         |                 | 76,478           |
|            | <b>Recovered</b>                               |                 | 62,452           |
|            | <b>Disposed</b>                                |                 | 14,026           |
|            | <b>Recovery Rate</b>                           |                 | 81.66            |

**Table 5.2** Waste Received & Consigned

|                        | 2012   | 2011   | 2010      | 2009      | 2008      | 2007      | 2006      | 20    |
|------------------------|--------|--------|-----------|-----------|-----------|-----------|-----------|-------|
| <b>Total Received</b>  | 75,619 | 67,621 | 68,252.30 | 54,697.49 | 61,288.71 | 88,009.32 | 68,962.92 | 67,27 |
| <b>Total Consigned</b> | 74,035 | 69,848 | 69,987.57 | 46,393.84 | 61,879.66 | 89,229.89 | 68,664.82 | 66,48 |
| <b>Total Recovered</b> | 34,038 | 27,263 | 31,806.90 | 15,521.44 | 21,254.99 | 23,797.77 | 29,861.54 | 26,71 |
| <b>Total Disposed</b>  | 39,996 | 42,585 | 38,180.67 | 40,872.40 | 40,721.72 | 65,432.12 | 38,803.28 | 39,76 |
| <b>Recovery Rate</b>   | 46%    | 39%    | 45.45%    | 27.52%    | 34.29%    | 26.67%    | 44%       | 40    |

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## **6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS**

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### **6.1 Incidents**

On 22<sup>nd</sup> November 2013 a significant fire destroyed the MRF building and waste acceptance activities ceased at the facility at this time. A number of actions were carried out following the fire including notifying the Agency at 07:55 Saturday, 23<sup>rd</sup> November, retention of firewater within the site, monitoring and removal of firewater from the site for appropriate treatment, additional surface water and groundwater monitoring, assessment of potential airborne emissions, removal of waste from the site and the making safe of buildings and ancillary site infrastructure.

There have been no long term significant environmental impacts associated with the fire. Firewater generated during the firefighting period was fully retained by the surface / foul drainage systems on the site. Following analysis to determine its composition, the majority of the firewater was tankered to Carrigrennan WWTP for treatment with the agreement of Cork City and County Councils or to Athy WWTP when Carrigrennan was not available. The Agency have subsequently confirmed that it is satisfied that there was no risk of surface or groundwater pollution associated with the fire, so water quality in both local private wells and the nearby public supply were not subject to any risk of impact from the incident. The air modelling assessment has also confirmed that the smoke plume did not significantly impact on the nearest sensitive receptors.

### **6.2 Register of Complaints**

Greenstar maintains a register of complaints received in accordance with Condition 10.4 of the waste licence. The complaints register includes the details of all complaints and the actions carried out in response to each complaint. There were no complaints during the reporting period that related to activity at the licensed site.

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## 7. ENVIRONMENTAL DEVELOPMENT

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### 7.1 Environmental Management Programme Report

Greenstar have implemented an Integrated Management System (IMS) in accordance with the requirements of Occupational Health and Safety Assessment Series (OHSAS) 18001:2007 and International Standard Organisation (ISO) 14001:2004 in order to manage the Health, Safety and Environmental performance of their business and to control health and safety risk and to minimise their environmental aspects and impacts.

The IMS has been developed for the achievement of continual improvement taking into account the requirements of the Waste Licence Conditions. Greenstar has prepared and effectively implement documented procedures and instructions in accordance with the requirements of both the OHSAS 18001:2007 and ISO 14001:2004. The facility passed an external IMS audit in July 2013.

The schedule of Objectives and Targets, including their status for 2013 (Table 7.1), as well as the proposed Objectives and Targets for 2014 (Table 7.2) are presented below. An index of procedures used at the facility is included in Appendix 2.

#### 7.1.1 Site Management Structure

Details of the site management structure are given below.

**Name:** Louise Demir

**Responsibility:** Operations Manager.

**Experience:** 7 years waste management experience. BSc. Biochemistry (UCC). FÁS Waste Management Course.

**Name:** Michael Hannon

**Responsibility:** Support Service Manager / Deputy Operations Manager.

**Experience:** 13 years waste management experience. FÁS Waste Management Course.

### *7.1.2 Staff Training*

Staff training carried out during the year included operational training. Environmental management system and environmental awareness training was carried out in 2013. Environmental training is carried out for any new staff employed at the facility as required.

## **7.2 Environmental Management Programme**

### *7.2.1 Schedule of Objectives 2013*

The objectives that were achieved during this reporting period are outlined in Table 7.1.

## **7.3 Communications Programme**

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

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

Records available for public inspection on site include:-

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

Opening Times for Inspection of Records are from 10 am – 4 pm. Visits to the site should be arranged in advance by ringing the Facility Manager at 1890 600 900.

The facility manager meets with any interested other occupants of the Industrial Estate and the representatives of the Glanmire Residence Association to discuss the environmental performance of the facility and address any environmental issues or concerns that may arise.

**Table 7.2** Schedule of Objective and Targets 2013

| No | Objective   | Target   | Responsibility  | STATUS                    |
|----|---|--|-----------------|---------------------------|
| 1  | <b>Awareness and Training</b>   | Continue to ensure that appropriate training is carried out specific to all site personnel as per the Company's established Training Matrix. | Site Management | Ongoing                   |
| 2  | <b>Energy &amp; Resource Consumption</b>                                  | Summarise energy and resource usage on a quarterly basis with a view to reducing consumption   | Site Management | Ongoing                   |
|    |   | Review and implement findings of Energy Audit  | Site Management | Not complete              |
|    |   | Upgrade on site generator to ESB substation  | Site Management | Not complete              |
| 3  | <b>Review and Assess the Effectiveness of Nuisance Control Procedures</b> | Continually review and assess all nuisance control procedures to ensure minimal impact on the surrounding area.                              | Site Management | Ongoing                   |
| 4  | <b>Pollution Prevention</b>   | Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values.            | Site Management | Ongoing                   |
| 5  | <b>Infrastructure</b>   | Set up and operation of a Civic Amenity Site   | Site Management | Subject to Licence Review |
| 6  | <b>Surface Water Drainage Assessment</b>                                  | To resolve ongoing elevated levels of coliforms within surface water drainage system.  | Site Management | Ongoing                   |
| 7  | <b>Waste Storage</b>  | Review waste wood processing & storage practices taking account of the recent Agency Position Paper on the Management of Wood Waste          | Site Management | Complete                  |



**Table 7.3** Schedule of Objective and Targets 2014

| No | Objective   | Target  | Responsibility      | Timescale |
|----|---|---|---------------------|-----------|
| 1  | <b>MRF Reconstruction</b>   | Submit SEW proposal to the Agency for agreement and complete the reconstruction of the MRF Building | Site Management/EHS | Q3        |
| 2  | <b>Development and adoption of Fire Prevention Procedure at the facility</b>                        | Reduce risk of fire and enable early detection  | Site Management/EHS | Q-2       |
| 3  | <b>Review of Emergency Response Plan to incorporate fire prevention procedure and new structure</b> | Revision of Plan and additional training for site personnel   | Site Management/EHS | Q-2       |
| 4  | <b>Achieve re-certification to ISO 14001 and OHSAS 18001 standard</b>                               | 3 year certification period expires in 2014. The facility requires re-certification.                | Site Management/EHS | Q-3/Q-4   |
| 5  | <b>Develop and maintain traffic management plan at the facility</b>                                 | Review of all on-site traffic management  | Site Management/EHS | Q-2/Q-3   |
| 6  | <b>Environmental Training of Facility Staff</b>   | Update training presentation with regard to new Licence and ensure training of key managerial staff | Site Management/EHS | Q-2/Q-3   |
| 7  | <b>Site Signage</b>   | Facility Notice Boards to be replaced to reflect new ownership                                      | Site Management/EHS | Q1        |

|           |   |   |                     |         |
|-----------|---|---|---------------------|---------|
| <b>8</b>  | <b>Surface Water Drainage Assessment</b>                                  | To resolve ongoing elevated levels of coliforms within surface water drainage system.   | Site Management/EHS | Q2      |
| <b>9</b>  | <b>Review and Assess the Effectiveness of Nuisance Control Procedures</b> | Continually review and assess all nuisance control procedures to ensure minimal impact on the surrounding area.                   | Site Management/EHS | Ongoing |
| <b>10</b> | <b>Pollution Prevention</b>   | Strive to ensure that monitoring results comply with the licence limits and investigate any exceedances of emission limit values. | Site Management/EHS | Ongoing |
| <b>11</b> | <b>Energy &amp; Resource Consumption</b>                                  | Summarise energy and resource usage on a quarterly basis with a view to reducing consumption                                      | Site Management/EHS | Q2      |
|           |   | Review and implement findings of Energy Audit   |                     |         |
|           |   | Upgrade on site generator to ESB substation   |                     |         |

#### **7.4 Report Financial Provision**

A Decommissioning Management Plan (DMP) and Environmental Liabilities Risk Assessment (ELRA) including Financial Provision (FP) were submitted to the Agency in 2013 as part of the transfer of the licence which occurred in Q1 2014. Both the DMP and ELRA have been approved by the Agency.

#### **7.5 Nuisance Controls**

Greenstar has contracted a vermin control company Quality Pest to carry out nuisance control at the facility.

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## **8. OTHER REPORTS**

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### **8.1 European Pollutant Release and Transfer Register**

Under the European Pollutant Release and Transfer Register Regulation (EC) No. 166/2006 Greenstar are required to submit information annually to the Agency. A copy of the information submitted to the Agency via the web-based data reporting system is included in Appendix 1.

# **APPENDIX 1**

European Pollutant Release and Transfer Register



[Guidance to completing the PRTR workbook](#)

# AER Returns Workbook

Version 1.1.18

|                       |      |
|-----------------------|------|
| <b>REFERENCE YEAR</b> | 2013 |
|-----------------------|------|

## 1. FACILITY IDENTIFICATION

|                            |                              |
|----------------------------|------------------------------|
| Parent Company Name        | Starrus Eco Holdings Limited |
| Facility Name              |                              |
| PRTR Identification Number | W0136                        |
| Licence Number             | W0136-03                     |

### Waste or IPPC Classes of Activity

| No.  | class_name  |
|--|---|
| 4.2  | Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).   |
| 3.11   | Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.  |
| 3.12   | Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.  |
| 3.13   | Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.     |
| 4.13   | Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced. |
| 4.3  | Recycling or reclamation of metals and metal compounds.   |
| 4.4  | Recycling or reclamation of other inorganic materials.  |
| Address 1                                      | Sarsfieldcourt Industrial Estate  |
| Address 2                                      | Sarsfieldcourt  |
| Address 3                                      | Glanmire  |
| Address 4                                      | Cork  |
|  | Cork  |
| Country  | Ireland   |
| Coordinates of Location                        | -8.40596 51.9631  |
| River Basin District                           | IESW  |
| NACE Code                                      | 3832  |
| Main Economic Activity                         | Recovery of sorted materials  |
| <b>AER Returns Contact Name</b>                | Malcolm Dowling   |
| <b>AER Returns Contact Email Address</b>       | malcolm.dowling@greenstar.ie  |
| <b>AER Returns Contact Position</b>            | Environmental Executive   |
| <b>AER Returns Contact Telephone Number</b>    | 01-2947949  |
| <b>AER Returns Contact Mobile Phone Number</b> |   |
| <b>AER Returns Contact Fax Number</b>          |   |
| <b>Production Volume</b>                       | 0.0   |
| <b>Production Volume Units</b>                 |   |
| <b>Number of Installations</b>                 | 0   |
| <b>Number of Operating Hours in Year</b>       | 0   |
| <b>Number of Employees</b>                     | 10  |
| <b>User Feedback/Comments</b>                  |   |
| <b>Web Address</b>                             |   |

## 2. PRTR CLASS ACTIVITIES

| Activity Number | Activity Name   |
|-----------------|---|
| 50.1            | General   |
| 5(c)            | Installations for the disposal of non-hazardous waste |
| 50.1            | General   |

## 3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

|   |    |
|---|----|
| Is it applicable?   | No |
| 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) ? |  |
|--|--|

This question is only applicable if you are an IPPC or Quarry site

4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

| PRTR# : W0136 | Facility Name : | Filename : W0136\_2013.xls | Return Year : 2013 |

02/04/2014 15:34

**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

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

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

**SECTION B : REMAINING PRTR POLLUTANTS**

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

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

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

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

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

**Additional Data Requested from Landfill operators**

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

|   |  |       |             |                            |                                     |
|---|--|-------|-------------|----------------------------|-------------------------------------|
| Landfill:   | 0  |       |             |                            |                                     |
| Please enter summary data on the quantities of methane flared and / or utilised | T (Total) kg/Year                                      | M/C/E | Method Used |                            | Facility Total Capacity m3 per hour |
|   |  |       | Method Code | Designation or Description |                                     |
|   | Total estimated methane generation (as per site model) | 0.0   |             |                            | N/A                                 |
|   | Methane flared   | 0.0   |             |                            | 0.0 (Total Flaring Capacity)        |
|   | Methane utilised in engine/s                           | 0.0   |             |                            | 0.0 (Total Utilising Capacity)      |
| Net methane emission (as reported in Section A above)                           | 0.0  |       |             |                            | N/A                                 |

4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

| PRTR# : W0136 | Facility Name : | Filename : W0136\_2013.xls | Return Year : 2013 |

02/04/2014 15:36

**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this only concerns Releases from your facility

| RELEASES TO WATERS |      |             |             |                            | Please enter all quantities in this section in KGs |                   |                        |                      |
|--------------------|------|-------------|-------------|----------------------------|--|-------------------|------------------------|----------------------|
| POLLUTANT          |      | Method Used |             |                            | QUANTITY   |                   |                        |                      |
| No. Annex II       | Name | M/C/E       | Method Code | Designation or Description | Emission Point 1                                   | T (Total) KG/Year | A (Accidental) KG/Year | F (Fugitive) KG/Year |
|                    |      |             |             |                            | 0.0  | 0.0               | 0.0                    | 0.0                  |

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

**SECTION B : REMAINING PRTR POLLUTANTS**

| RELEASES TO WATERS |      |             |             |                            | Please enter all quantities in this section in KGs |                   |                        |                      |
|--------------------|------|-------------|-------------|----------------------------|--|-------------------|------------------------|----------------------|
| POLLUTANT          |      | Method Used |             |                            | QUANTITY   |                   |                        |                      |
| No. Annex II       | Name | M/C/E       | Method Code | Designation or Description | Emission Point 1                                   | T (Total) KG/Year | A (Accidental) KG/Year | F (Fugitive) KG/Year |
|                    |      |             |             |                            | 0.0  | 0.0               | 0.0                    | 0.0                  |

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

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

| RELEASES TO WATERS |      |             |             |                            | Please enter all quantities in this section in KGs |                   |                        |                      |
|--------------------|------|-------------|-------------|----------------------------|--|-------------------|------------------------|----------------------|
| POLLUTANT          |      | Method Used |             |                            | QUANTITY   |                   |                        |                      |
| Pollutant No.      | Name | M/C/E       | Method Code | Designation or Description | Emission Point 1                                   | T (Total) KG/Year | A (Accidental) KG/Year | F (Fugitive) KG/Year |
|                    |      |             |             |                            | 0.0  | 0.0               | 0.0                    | 0.0                  |

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



4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

| PRTR# : W0136 | Facility Name : | Filename : W0136\_2013.xls | Return Year : 2013 |

02/04/2014 15:36

**SECTION A : PRTR POLLUTANTS**

| OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER |      |        |             |                            | Please enter all quantities in this section in KGs |                   |                        |                      |
|--|------|--------|-------------|----------------------------|--|-------------------|------------------------|----------------------|
| POLLUTANT  |      | METHOD |             |                            | QUANTITY   |                   |                        |                      |
| No. Annex II   | Name | M/C/E  | Method Used |                            | Emission Point 1                                   | T (Total) KG/Year | A (Accidental) KG/Year | F (Fugitive) KG/Year |
|  |      |        | Method Code | Designation or Description |  |                   |                        |                      |
|  |      |        |             |                            | 0.0  | 0.0               | 0.0                    | 0.0                  |

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

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

| OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER |      |        |             |                            | Please enter all quantities in this section in KGs |                   |                        |                      |
|--|------|--------|-------------|----------------------------|--|-------------------|------------------------|----------------------|
| POLLUTANT  |      | METHOD |             |                            | QUANTITY   |                   |                        |                      |
| Pollutant No.  | Name | M/C/E  | Method Used |                            | Emission Point 1                                   | T (Total) KG/Year | A (Accidental) KG/Year | F (Fugitive) KG/Year |
|  |      |        | Method Code | Designation or Description |  |                   |                        |                      |
|  |      |        |             |                            | 0.0  | 0.0               | 0.0                    | 0.0                  |

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

4.4 RELEASES TO LAND

[Link to previous years emissions data](#)

| PRTR# : W0136 | Facility Name : | Filename : W0136\_2013.xls | Return Year : 2013 |

02/04/2014 15:37

**SECTION A : PRTR POLLUTANTS**

| POLLUTANT    |      | RELEASERS TO LAND |             |                            | Please enter all quantities in this section in KGs |                   |                        |
|--------------|------|-------------------|-------------|----------------------------|--|-------------------|------------------------|
| No. Annex II | Name | M/C/E             | METHOD      |                            | QUANTITY   |                   |                        |
|              |      |                   | Method Code | Designation or Description | Emission Point 1                                   | T (Total) KG/Year | A (Accidental) KG/Year |
|              |      |                   |             |                            | 0.0  | 0.0               | 0.0                    |

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

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

| POLLUTANT     |      | RELEASERS TO LAND |             |                            | Please enter all quantities in this section in KGs |                   |                        |
|---------------|------|-------------------|-------------|----------------------------|--|-------------------|------------------------|
| Pollutant No. | Name | M/C/E             | METHOD      |                            | QUANTITY   |                   |                        |
|               |      |                   | Method Code | Designation or Description | Emission Point 1                                   | T (Total) KG/Year | A (Accidental) KG/Year |
|               |      |                   |             |                            | 0.0  | 0.0               | 0.0                    |

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR#: W0136 | Facility Name : | Filename : W0136\_2013.xls | Return Year : 2013 |

02/04/2014 15:37

Please enter all quantities on this sheet in Tonnes

0

| Transfer Destination | European Waste Code | Hazardous | Quantity (Tonnes per Year) | Description of Waste   | Waste Treatment Operation | Method Used |             | Location of Treatment | Haz Waste : Name and Licence/Permit No of Next Destination Facility  | Haz Waste : Address of Next Destination Facility                        | Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY) | Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY) |
|----------------------|---------------------|-----------|----------------------------|--|---------------------------|-------------|-------------|-----------------------|--|---|--|--|
|                      |                     |           |                            |  |                           | M/C/E       | Method Used |                       | Haz Waste: Name and Licence/Permit No of Recoverer/Disposer          | Non Haz Waste: Address of Recoverer/Disposer                            |  |  |
| Within the Country   | 15 01 01            | No        | 17.0                       | paper and cardboard packaging  | R3                        | M           | Weighed     | Offsite in Ireland    | Glyntown Enterprises (Greenstar Ltd), WFP-CK-10-0047-02              | Sarsfield Court ,Glanmire,Co Cork,Ireland                               |  |  |
| Within the Country   | 15 01 03            | No        | 1.0                        | wooden packaging   | R3                        | M           | Weighed     | Offsite in Ireland    | Glyntown Enterprises (Greenstar Ltd), WFP-CK-10-0047-02              | Sarsfield Court ,Glanmire,Co Cork,Ireland                               |  |  |
| Within the Country   | 15 01 07            | No        | 1209.0                     | glass packaging mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03       | R3                        | M           | Weighed     | Offsite in Ireland    | Glassco Recycling,WFP-KE-08-0357-01                                  | Unit 4 Osberstown Business Pk ,Carragh Road ,Naas ,Co. Kildare ,ireland |  |  |
| Within the Country   | 17 09 04            | No        | 735.0                      | sludges from treatment of urban waste  | R13                       | M           | Weighed     | Offsite in Ireland    | Mallow Contracts,CK(N)277/5  | ...,Mournabbey,Co Cork,Ireland  |  |  |
| Within the Country   | 19 08 05            | No        | 1469.0                     | water other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 | R13                       | M           | Weighed     | Offsite in Ireland    | Acorn Recycling Ltd,W0249-01   | ...,Littleton,Co Tipperary,Ireland                                      |  |  |
| Within the Country   | 19 12 12            | No        | 13178.0                    | 11 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12    | R13                       | M           | Weighed     | Offsite in Ireland    | McGill Environmental Services,WFP-CK-09-011-02                       | Ballinvoher,.,Castletownroche,Co Cork,Ireland                           |  |  |
| Within the Country   | 19 12 12            | No        | 526.0                      | 11   | R13                       | M           | Weighed     | Offsite in Ireland    | MRF GES Limerick,W0082-02  | Dock Road,.,Limerick,.,Ireland  |  |  |
| Within the Country   | 20 01 02            | No        | 1.0                        | glass  | R3                        | M           | Weighed     | Offsite in Ireland    | Ashgrove Plant . t/a as Ashgrove Recycling,W0147-01                  | Churchfield Industrial Estate,Churchfield,Cork,.,Ireland                |  |  |
| Within the Country   | 20 01 08            | No        | 2361.0                     | biodegradable kitchen and canteen waste  | R3                        | M           | Weighed     | Offsite in Ireland    | Acorn Recycling Ltd,W0249-01   | ...,Littleton,Co Tipperary,Ireland                                      |  |  |
| Within the Country   | 20 01 38            | No        | 2.0                        | wood other than that mentioned in 20 01 37   | R13                       | M           | Weighed     | Offsite in Ireland    | Cork Recycling Company Ltd,WFP-CK-09-0022-02                         | Lehenaghmore,Togher,Cork,.,Ireland                                      |  |  |
| Within the Country   | 20 01 38            | No        | 12.0                       | wood other than that mentioned in 20 01 37   | R13                       | M           | Weighed     | Offsite in Ireland    | CTO Environmental Solutions Ltd/ Cork City Council,WFP-CK-09-0018-02 | ...,Rostellan,Co Cork,Ireland   |  |  |
| Within the Country   | 20 01 38            | No        | 72.0                       | wood other than that mentioned in 20 01 37   | R13                       | M           | Weighed     | Offsite in Ireland    | Waste Recovery Services,W0107/01                                     | Cullenagh,Fermoy,Cork,.,Ireland   |  |  |
| Within the Country   | 20 01 40            | No        | 82.0                       | metals   | R4                        | M           | Weighed     | Offsite in Ireland    | Davis Recycling at Hammond Lane Metal Co Ltd,WFP-CK-10-0077-02       | ...,Ringaskiddy,Co Cork,Ireland   | KMK Metals, W0113-03,.,Tullamore,Co Offaly,Ireland   | ...,Tullamore,Co Offaly,Ireland  |
| Within the Country   | 20 01 40            | No        | 294.0                      | metals   | R4                        | M           | Weighed     | Offsite in Ireland    | Greenstar Holdings Ltd,W0183-01                                      | Ballycoolin,Dublin 11,Dublin 11,Ireland                                 |  |  |
| Within the Country   | 20 01 40            | No        | 8.0                        | metals   | R4                        | M           | Weighed     | Offsite in Ireland    | pouladuff dismantlers,WFP-CK-10-0070-02                              | forge hill ,cork,CORK,cork.ireland                                      |  |  |
| Within the Country   | 20 03 01            | No        | 2661.0                     | mixed municipal waste  | R13                       | M           | Weighed     | Offsite in Ireland    | Advanced Skip Hire/Wiser,WCP-CK-09-0620-01                           | Unit 6 Rosehill Commercial Park,Ballinacurra,Midleton,Co Cork,Ireland   |  |  |
| Within the Country   | 20 03 01            | No        | 251.0                      | mixed municipal waste  | D5                        | M           | Weighed     | Offsite in Ireland    | Bord na Mona. Drehid Landfil,W0201-03                                | ...,Carbury,Co Kildare,Ireland  |  |  |
| Within the Country   | 20 03 01            | No        | 10476.0                    | mixed municipal waste  | D5                        | M           | Weighed     | Offsite in Ireland    | Kerry County Council North Kerry Landfil Site,W0001-04               | Muingnaminnane,Tralee,Co. Kerry,.,Ireland                               |  |  |
| Within the Country   | 20 03 01            | No        | 1384.0                     | mixed municipal waste  | D5                        | M           | Weighed     | Offsite in Ireland    | Greenstar Holdings Ltd.,W0146-02                                     | Knockharley,Navan,Co. Meath,.,Ireland                                   |  |  |
| Within the Country   | 20 03 01            | No        | 716.0                      | mixed municipal waste  | R13                       | M           | Weighed     | Offsite in Ireland    | MRF Greenstar Bray,W0053-03  | .,Fassaroe,Bray ,Co Wicklow ,Ireland                                    |  |  |

|                    |          |    |   |     |   |         |                    |   |  |
|--------------------|----------|----|---|-----|---|---------|--------------------|---|--|
| Within the Country | 20 03 01 | No | 702.0 mixed municipal waste   | R13 | M | Weighed | Offsite in Ireland | MRF GES Limerick,W0082-02<br>Ashgrove Plant . t/a as<br>Ashgrove Recycling,W0147-01 | Dock Road,,Limerick,,Ireland<br>Churchfield Industrial Estate,Churchfield,Cork,,Ireland and                                |
| Within the Country | 20 03 07 | No | 5.0 bulky waste   | R13 | M | Weighed | Offsite in Ireland | Bord na Mona. Drehid Landfil,W0201-03   | ,,,Carbury,Co Kildare,Ireland  |
| Within the Country | 20 03 07 | No | 264.0 bulky waste   | D5  | M | Weighed | Offsite in Ireland | Kerry County Council North Kerry Landfill Site,W0001-04                             | Muingnaminnane,Tralee,Co. Kerry,,Ireland   |
| Within the Country | 20 03 07 | No | 1651.0 bulky waste  | D5  | M | Weighed | Offsite in Ireland | Marwin Environmental Ltd,TFS Broker<br>IRE/AG027/11                                 | ,,,,,,Ireland  |
| Within the Country | 15 01 03 | No | 3.0 wooden packaging  | R13 | M | Weighed | Offsite in Ireland | Glyntown Enterprises (Greenstar Ltd), WFP-CK-10-0047-02                             | Sarsfield Court<br>,,Glanmire,Co Cork,Ireland<br>Unit 6 Rosehill Industrial Estate,Ballinacurra,Midleton, Co. Cork,Ireland |
| Within the Country | 15 01 06 | No | 4215.0 mixed packaging  | R13 | M | Weighed | Offsite in Ireland | Wiser Bins,WCP-CK-10-0738-01  | Unit 6 Rosehill Commercial Estate,Ballinacurra,Midleton, Co. Cork,Ireland  |
| Within the Country | 15 01 06 | No | 2247.0 mixed packaging  | R13 | M | Weighed | Offsite in Ireland | Advanced Skip Hire/Wiser,WCP-CK-09-0620-01  | Unit 6 Rosehill Commercial Park,Ballinacurra,Midleton,Co Cork,Ireland  |
| Within the Country | 15 01 06 | No | 3972.0 mixed packaging  | R13 | M | Weighed | Offsite in Ireland | Clonmel Waste Disposal Ltd,WP-008-02  | Lawlesstown,Clonmel,,Co Tipperary,Ireland  |
| Within the Country | 15 01 07 | No | 657.0 glass packaging   | R13 | M | Weighed | Offsite in Ireland | pouladuff dismantlers,WFP-CK-10-0070-02   | forge hill<br>,cork,CORK,cork,ireland  |
| Within the Country | 16 02 14 | No | discarded equipment other than those mentioned in 16 02 09 to 16 02 13                                      | R13 | M | Weighed | Offsite in Ireland | Dismantlers Ltd.,   | ,,,,,,Ireland  |
| Within the Country | 17 04 11 | No | 4.0 10 cables other than those mentioned in 17 04   | R13 | M | Weighed | Offsite in Ireland | OC Drain Services.,<br>Cellmark,TFSbroker<br>IRE/G180/11                            | ,,,,,,Ireland  |
| Within the Country | 19 08 05 | No | 375.0 water   | R13 | M | Weighed | Offsite in Ireland | OC Drain Services.,<br>Cellmark,TFSbroker<br>IRE/G180/11                            | ,,,,,,Ireland  |
| Within the Country | 19 12 10 | No | 17463.0 combustible waste (refuse derived fuel)   | R13 | M | Weighed | Offsite in Ireland | OC Drain Services.,<br>Cellmark,TFSbroker<br>IRE/G180/11                            | ,,,,,,Ireland  |
| Within the Country | 20 01 36 | No | 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 | KMK Metals, W0113-03 . .  | ,,,Tullamore,Co Offaly,Ireland   |
| Within the Country | 20 01 40 | No | 23.0 metals   | R13 | M | Weighed | Offsite in Ireland | Clearcircle Metals.,  | ,,,,,,ireland  |
| Within the Country | 20 03 07 | No | 8669.0 bulky waste  | R13 | M | Weighed | Offsite in Ireland | Valcroft Ltd T/A MrBinman.,<br>Waste Recovery<br>Services,W0107/01                  | ,,,,,,Ireland<br>Cullenagh,Fermoy,Cork,,Ireland and  |
| Within the Country | 20 03 07 | No | 490.0 bulky waste   | R13 | M | Weighed | Offsite in Ireland | MRF Greenstar Bray,W0053-03   | .,Fassaroe,Bray ,Co Wicklow ,Ireland   |
| Within the Country | 20 03 07 | No | 241.0 bulky waste   | R13 | M | Weighed | Offsite in Ireland | MRF Greenstar Bray,W0053-03   | .,Fassaroe,Bray ,Co Wicklow ,Ireland   |

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

[Link to previous years waste data](#)

[Link to previous years waste summary data & percentage change](#)

[Link to Waste Guidance](#)

# **APPENDIX 2**

## Procedures List



|                          |  |                             |
|--------------------------|--|-----------------------------|
| <b>Doc. No.:</b> Control | <b>Revision No.:</b> As Shown  | <b>Issue Date:</b> As Shown |
| <b>Approved By:</b>      | Malcolm Dowling – Group Environmental Manager<br>Oliver Callan – Group H&S Manager | <b>Page 1 of 5</b>          |

**Integrated Procedures - IP**

|       |   |                  |
|-------|---|------------------|
| IP-01 | Document & Record Control Procedure                       | Rev 01, 05/07/10 |
| IP-02 | Health & Safety Risk Assessment Procedure                 | Rev 01, 05/07/10 |
| IP-03 | Environmental Aspects & Impacts Procedure                 | Rev 02, 09/09/13 |
| IP-04 | Legal & Regulatory Requirements Procedure                 | Rev 02, 09/09/13 |
| IP-05 | Objectives, Targets & Management Programmes Procedure     | Rev 02, 09/09/13 |
| IP-06 | Competence, Training & Awareness Procedure                | Rev 03, 15/04/13 |
| IP-07 | Communication & Consultation Procedure                    | Rev 01, 05/07/10 |
| IP-08 | Monitoring, Measurement & Improvement Procedure           | Rev 01, 05/07/10 |
| IP-09 | Evaluation of Compliance Procedure                        | Rev 02, 15/09/11 |
| IP-10 | Non Conformances, Corrective/Preventive Actions Procedure | Rev 03, 01/02/11 |
| IP-11 | Internal Audit Procedure                                  | Rev 03, 28/05/12 |
| IP-12 | Management Review Procedure                               | Rev 01, 05/07/10 |
| IP-13 | Control of Contractors/Visitors Procedure                 | Rev 03, 08/06/12 |
| IP-14 | Health & Safety & Environmental Monitoring                | Rev 02, 29/10/10 |
| IP-15 | Emergency Preparedness & Response Procedure               | Rev 02, 01/02/11 |
| IP-16 | Accident Prevention Procedure                             | Rev 03, 30/06/13 |

**Safety Procedures - SP**

|       |   |                  |
|-------|---|------------------|
| SP-01 | Permit to Work Procedure  | Rev 02, 03/05/12 |
| SP-02 | Maintenance & Calibration Procedure                                       | Rev 03, 04/04/11 |
| SP-03 | Mobile Plant Procedure  | Rev 01, 05/07/10 |
| SP-04 | Fork Truck Procedure  | Rev 01, 05/07/10 |
| SP-05 | Operation of Fixed Plant Procedure  | Rev 01, 05/07/10 |
| SP-06 | Lock Out / Tag Out Procedure  | Rev 01, 05/07/10 |
| SP-07 | Health & Safety Notification Procedure                                    | Rev 01, 05/07/10 |
| SP-08 | Motor Claim Notification Procedure  | Rev 01, 01/02/11 |
| SP-09 | MSW Shredder routine Maintenance & Clearing of Blockages Procedure (SCGT) | Rev 01, 01/12/11 |
| SP-10 | Weighbridge & Tipping Procedure (SCGT)                                    | Rev 01, 01/12/11 |
| SP-11 | Cleaning of Washing Bay (Greenogue)                                       | Rev 01, 05/05/12 |
| SP-12 | Ballymount CRF Safe Systems of Work                                       | Rev 01, 23/09/13 |



|                          |  |                             |
|--------------------------|--|-----------------------------|
| <b>Doc. No.: Control</b> | <b>Revision No.: As Shown</b>  | <b>Issue Date: As Shown</b> |
| <b>Approved By:</b>      | Malcolm Dowling – <i>Group Environmental Manager</i><br>Oliver Callan – <i>Group H&amp;S Manager</i> | <b>Page 2 of 5</b>          |

**Environmental Procedures - EP**

|       |   |                  |
|-------|---|------------------|
| EP-01 | Office Waste & Energy Management Procedure    | Rev 01, 05/07/10 |
| EP-02 | Decommissioning and Aftercare Procedure       | Rev 02, 14/09/11 |
| EP-03 | Environment Communications Procedure          | Rev 03, 16/10/13 |
| EP-04 | Waste Permits & Licences Procedure            | Rev 01, 05/07/10 |
| EP-05 | Waste Acceptance Procedure                    | Rev 01, 05/07/10 |
| EP-06 | Unacceptable Waste Procedure                  | Rev 01, 05/07/10 |
| EP-07 | Waste & Material Storage Procedure            | Rev 01, 05/07/10 |
| EP-08 | Waste Processing Procedure                    | Rev 01, 05/07/10 |
| EP-09 | Site Infrastructure Procedure                 | Rev 01, 05/07/10 |
| EP-10 | Nuisance Management Procedure (Site Specific) | (Site Specific)  |
| EP-11 | Civic Amenity Site Procedure                  | Rev 01, 05/07/10 |

|                          |  |  |
|--------------------------|--|--|
| <b>Doc. No.:</b> Control | <b>Revision No.:</b> 02  | <b>Issue Date:</b> 1 <sup>st</sup> February 2011 |
| <b>Approved By:</b>      | Malcolm Dowling – Group Environmental Manager<br>Oliver Callan – Group H&S Manager | <b>Page 3 of 5</b>                               |

**Amendment History**

| Date     | Amendment No. | Procedure No: | Revision No: | Comment   | Authorised By |
|----------|---------------|---------------|--------------|---|---------------|
| 05.07.10 | 01            | All           | 01           | Initial Issue   | M.D & O.C     |
| 13.09.10 | 02            | EP-03         | 02           | Issue of Incident Reports   | M.D           |
| 20.09.10 | 03            | IP-10         | 02           | Env issues not logged on WIMS Database                                    | M.D           |
| 29.10.10 | 04            | IP-13         | 02           | Use of M&M equipment by contractors                                       | M.D & O.C     |
| 29.10.10 | 05            | IP-14         | 02           | Use of M&M equipment by contractors                                       | M.D & O.C     |
| 29.10.10 | 06            | SP-02         | 02           | Inclusion of Maintenance Schedule   | M.D & O.C     |
| 05.11.10 | 07            | IP-04         | 02           | Inclusion of other requirements   | S.B & O.C     |
| 01.02.11 | 08            | SP-08         | 01           | Inclusion of new procedure  | O.C           |
| 01.02.11 | 09            | IP-10         | 03           | Inclusion of SP-08  | O.C           |
| 01.02.11 | 10            | IP-15         | 02           | Removal of SF-022   | O.C           |
| 01.02.11 | 11            | Contents      | As shown     | EP-10 Site Specific   | M.D & O.C     |
| 01.02.11 | 12            | IP-06         | 02           | Addressing Agency Staff needs   | M.D & O.C     |
| 01.02.11 | 13            | Circ List     | 02           | Amendment to document control   | M.D & O.C     |
| 04.04.11 | 14            | SP-02         | 03           | Inclusion of Site Specific Maintenance schedules                          | O.C           |
| 07.06.11 | 15            | IP-11         | 02           | Inclusion of H&S & Env Internal Audit Schedules                           | M.D & O.C     |
| 14/09/11 | 16            | EP-02         | 02           | Inclusion of decommissioning of plant/equipment                           | S.B           |
| 15/09/11 | 17            | IP-09         | 02           | Inclusion of Statutory Inspections  | O.C           |
| 01/12/11 | 18            | SP-09         | 01           | Inclusion of new procedure for SCGT                                       | O.C           |
| 01/12/11 | 19            | SP-10         | 01           | Inclusion of new procedure for SCGT                                       | O.C           |
| 03/05/12 | 20            | SP-01         | 02           | Amendment to remove SF 028  | O.C           |
| 05/05/12 | 21            | SP-11         | 01           | Inclusion of a new procedure for Greenogue                                | O.C           |
| 28/05/12 | 22            | IP-11         | 03           | General Amendments to internal audit procedure                            | M.D & O.C     |
| 08/06/12 | 23            | IP-13         | 03           | Grammatical amendment   | M.D & O.C     |
| 15/04/13 | 24            | IP-06         | 03           | Agency staff – sign-off record sufficient proof of training. TMS optional | M.D & O.C     |





|                          |  |  |
|--------------------------|--|--|
| <b>Doc. No.:</b> Control | <b>Revision No.:</b> 02  | <b>Issue Date:</b> 1 <sup>st</sup> February 2011 |
| <b>Approved By:</b>      | Malcolm Dowling – Group Environmental Manager<br>Oliver Callan – Group H&S Manager | <b>Page 4 of 5</b>                               |

| Date     | Amendment No. | Procedure No: | Revision No: | Comment  | Authorised By |
|----------|---------------|---------------|--------------|--|---------------|
| 30/06/13 | 25            | IP-16         | 1            | Inclusion of new procedure   | M.D.          |
| 09/09/13 | 26            | IP-03         | 2            | Use of Scannell Software Solutions (Enviromanager) instead of IF-03A | M.D & O.C     |
| 09/09/13 | 27            | IP-04         | 3            | Use of Scannell Software Solutions (Enviromanager) instead of IF-03A | M.D & O.C     |
| 09/09/13 | 28            | IP-05         | 2            | Use of Scannell Software Solutions (Enviromanager) instead of IF-03A | M.D & O.C     |
| 16/10/13 | 29            | EP-03         | 3            | Introduction of EPA ALDER Portal                                     | K.B           |
| 23/09/13 | 30            | SP-12         | 1            | Introduction of SP-12O.C   |               |



|                          |  |  |
|--------------------------|--|--|
| <b>Doc. No.:</b> Control | <b>Revision No.:</b> 02  | <b>Issue Date:</b> 1 <sup>st</sup> February 2011 |
| <b>Approved By:</b>      | Malcolm Dowling – <i>Group Environmental Manager</i><br>Oliver Callan – <i>Group H&amp;S Manager</i> | <b>Page 5 of 5</b>                               |

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