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ANNUAL ENVIRONMENTAL REPORT

STARRUS ECO HOLDINGS LTD

SIX CROSS ROADS, WATERFORD

LICENCE NO. W0116-02

JANUARY 2016 – DECEMBER 2016

Prepared For: -

Starrus Eco Holdings Ltd.,
Fassaroe,
Bray,
Co. Wicklow

Prepared By: -

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31st March 2017

Project	Annual Environmental Report 2016			
Client	Starrus Eco Holdings Ltd. W0116-02			
Report No	Date	Status	Prepared By	Reviewed By
0481104	30/03/2017	Draft	Martina Gleeson PhD	Jim O'Callaghan MSc
	31/03/2017	Final	Martina Gleeson PhD	Jim O'Callaghan MSc

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1. INTRODUCTION

This is the 2016 Annual Environmental Report (AER) for the Starrus Eco Holding Ltd. (SEHL) Materials Recovery Facility (MRF) at Six Cross Roads, Butlerstown, County Waterford. The report covers the period from the 1st January 2016 to the 31st December 2016.

The content of the AER is based on Schedule F of the Waste Licence (W0116-02) and the report format follows guidelines set in the "*Guidance Note for Annual Environmental Report*" issued by the Environmental Protection Agency (Agency)[1]. Cognisance was also taken of the AER Draft Guidance Document issued in January 2012[2].

[1] EPA (Environmental Protection Agency) 1999 Waste Licensing – Draft Guidance on Environmental Management Systems and Reporting to the Agency

[2] EPA (Environmental Protection Agency) 2012 Draft AER Guidance Document

2. SITE DESCRIPTION

2.1 Site Location and Layout

The installation is located at Six Cross Roads, Carriganard, Butlerstown and is accessible from the Six Cross Roads, just south of the Waterford by-pass (R710). The surrounding area to the north, south and east of the installation is occupied by industrial and commercial premises. The installation is bordered to the west by a third class road and agricultural land.

The waste processing building which houses the baler is located in the eastern section of the site. The baled materials are stored on the hard standing within the waste processing building and on the external paved section along the northern boundary of the site. The runoff from the areas used to store the bales is diverted by the waste water drainage system to an underground tank**.** The weighbridge and site office are located to the east of the yard.

2.2 Waste Management Activities

The licence allows SEHL to accept and process 70,000 tonnes of waste per annum, comprising commercial/industrial non-hazardous waste, household waste, and construction and demolition wastes.

2.2.1 Waste Types & Processes

The installation is licensed to accept the following waste types and quantities, as specified in Schedule A of the licence: -

- Household (30,000 tonnes)
- Industrial Non-Hazardous Solid (20,000 tonnes)
- Construction & Demolition (20,000 tonnes)

No hazardous wastes are accepted. The maximum amount of each waste type accepted, may be altered with the prior agreement of the Agency as long as the total maximum tonnage is not exceeded.

The installation was used for storage purposes in 2016.

2.2.2 Plant List

A list of the plant in use at the installation is given in Table 2.1. The plant provides 100% duty and 50% standby for waste processing.

Table 2.1 Plant List – 2016

No.	Plant	Model	Operational Capacity tpd	Standby Capacity tpd
1	Road Sweeper	Iveco 180E23	500 lts	
2	Loading Shovel	Volvo L90F	200	120

3. EMISSION MONITORING

The monitoring specified in the licence includes surface water, dust and noise monitoring. The monitoring locations are shown on Figure 3.1. The surface water monitoring results are included in reports submitted to the Agency at quarterly intervals. The dust and noise monitoring results are reported to the agency bi-annually. An overview of the monitoring completed in 2016 is presented in this section.

3.1 Surface Water Monitoring

Surface water monitoring is carried out at three locations (SW-1, SW-2 and SW-3). Rainwater run-off from the site discharges to a culverted stream on the eastern side of the access road (cul de sac). The receiving stream runs from the New Ring Road to the Six Cross Roads and is culverted from the start of the industrial estate to the Six Cross Roads.

The monitoring locations include the surface water discharge point and up and downstream of the discharge, as shown on Figure 3.1. SW-1 is to the north and upstream of the installation. SW-2 is at the discharge point and SW-3 is to the south and downstream, where the stream is not culverted. This is the closest accessible downstream location.

The samples, collected by SEHL staff, were analysed for the quarterly parameters specified in Schedule C of the Licence. The results are presented on Tables 3.1 to 3.3. It was not possible to collect a samples in Q2 2016 due to a prolonged dry spell. The methodologies were all ISO/CEN approved or equivalent and the method detection limits were lower than the proposed trigger levels for the discharge. The results were all less than the proposed trigger levels.

Table 3.1 Surface Water Monitoring Results – Q1 2016

Parameter	Units	SW-1 Upstream	SW-2 Discharge	SW-3 Downstream	Proposed Trigger Level*
pH	pH units	7.21	7.28	7.71	5.5 – 9.0
Conductivity	mS/cm	0.888	0.120	0.142	1.000
COD	mg/l	15	14	26	40
Total Ammonia	mg/l	0.19	0.86	0.19	3.78
Suspended Solids	mg/l	<10	<10	27	-
Mineral Oils	mg/l	<0.01	<0.01	<0.01	-

* The Trigger levels only apply to the discharge point SW-2

Table 3.2 Surface Water Monitoring Results – Q3 2016

Parameter	Units	SW-1 Upstream	SW-2* Discharge	SW-3 Downstream	Proposed Trigger Level*
pH	pH units	6.67	7.01	7.12	5.5 – 9.0
Conductivity	mS/cm	0.285	0.153	0.338	1.000
COD	mg/l	23	<7	9	40
Total Ammonia	mg/l	1.18	1.35	0.55	3.78
Suspended Solids	mg/l	<10	<10	14	-
Mineral Oils	mg/l	<0.01	<0.01	<0.01	-

* The Trigger levels only apply to the discharge point SW-2

Table 3.3 Surface Water Monitoring Results – Q4 2016

Parameter	Units	SW-1 Upstream	SW-2* Discharge	SW-3 Downstream	Proposed Trigger Level*
pH	pH units	6.64	6.33	6.69	5.5 – 9.0
Conductivity	mS/cm	0.320	0.058	0.266	1.000
COD	mg/l	205	10	41	40
Total Ammonia	mg/l	3.60	0.57	1.83	3.78
Suspended Solids	mg/l	44	21	41	-
Mineral Oils	mg/l	0.270	<0.001	<0.001	-

* The Trigger levels only apply to the discharge point SW-2

3.2 Noise Monitoring

The licence requires bi-annual noise surveys to be completed. The monitoring locations include three boundary locations (N1 – N3) and two off site noise sensitive locations (N4 and N5). There were no on site operations being undertaken during the noise survey, however the gate was opened several times to allow trucks enter and exit. The surveys confirmed that noise emissions fully complied with the licence and that the installation is not impacting negatively on the nearest sensitive receptors. The first noise survey was conducted in September and the second in December. A summary of the noise results is shown in Tables 3.4 and 3.5.

Table 3.4 Noise Monitoring Results September 2016

Station	Date	Time	Wind vector	$L_{Aeq\ 30\ min}$ dB	$L_{AF10\ 30\ min}$ dB	$L_{AF90\ 30\ min}$ dB	Specific $L_{Aeq\ 30\ min}$ dB
N1	14.09.16	1214-1244	0	57	56	48	54
	Facility: No emissions apart from single vehicle movement through gate at 1219 (requiring gate opening), and again 1243. **Extraneous**: Road traffic to N and NW continuously clearly audible, dominating soundscape. Lightly rustling shrubbery by gate continuously slightly audible. Sporadic traffic on access roadway outside gate dominant when present. Bird song/calls and aircraft. Occasional activity audible at low level at premises to immediate N and S. **Specific $L_{Aeq\ T}$ determination**: LAeq for both vehicle movements, normalised to 30 min.						
N2	14.09.16	1246-1316	0	63	67	46	62
	Facility: Truck manoeuvring and idling onsite 1252-1303 dominant. **Extraneous**: Outside 1252-1303, regular plant activity at premises outside boundary clearly audible and significant. Road traffic to N also significant. Sporadic activity on local access road and at premises to S also audible. **Specific $L_{Aeq\ T}$ determination**: LAeq for period 1252-1303, normalised to 30 min.						
N3	14.09.16	1319-1349	0	55	57	50	56
	Facility: Truck onsite from 1347 dominant. **Extraneous**: Road traffic to N and NW continuously clearly audible, dominating soundscape. Sporadic traffic on access roadway outside gate significant when present. Bird song/calls and aircraft. Occasional activity audible at low level at adjacent premises to N and S. **Specific $L_{Aeq\ T}$ determination**: LAeq from 1347, normalised to 30 min.						
N4	14.09.16	1131-1201	+	50	53	45	<<45
	Facility: No emissions. **Extraneous**: Intermittent road traffic through adjacent junction dominant when present. Road traffic also continuously audible to N. Pneumatic breaker audible at low level to SW throughout interval. Bird song/calls, aircraft. Lightly rustling vegetation almost continuously audible. **Specific $L_{Aeq\ T}$ determination**: No emissions, thus <<L90.						
N5	14.09.16	1058-1128	+	62	62	50	<<50
	Facility: No emissions. **Extraneous**: Intermittent passing traffic dominant when present. Road traffic continuously quite audible to N. Pneumatic breaker audible at low level to SW throughout interval. Bird song/calls, aircraft. Lightly rustling vegetation almost continuously audible. Air handling system continuously audible at low level at nearby premises. **Specific $L_{Aeq\ T}$ determination**: No emissions, thus <<L90.						

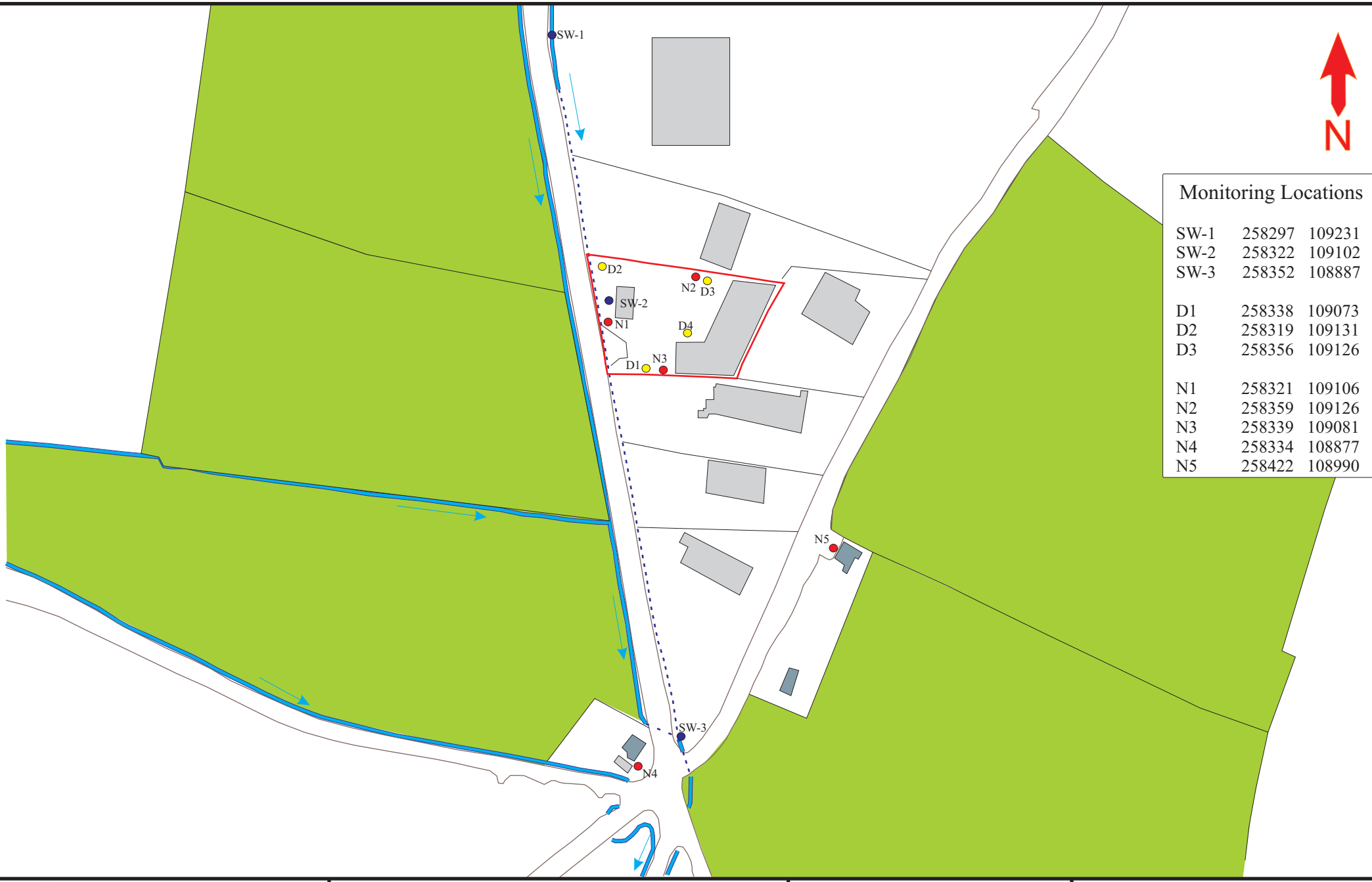
Specific L_{Aeq}: Level considered attributable to source under consideration, determined using real time assessment, field notes, time history profiles, statistical analysis, frequency spectra, spectral statistics and near field correction if applicable.

Audibility scale: Inaudible; faintly audible; slightly audible; audible at low level; quite audible; clearly audible; dominant; intrusive; excessive.

Table 3.5 Noise Monitoring Results December 2016

Station	Date	Time	Wind vector	$L_{Aeq\ 30\ min}$ dB	$L_{AF10\ 30\ min}$ dB	$L_{AF90\ 30\ min}$ dB	Specific $L_{Aeq\ 30\ min}$ dB
N1	01.12.16	0946-1016	0	52	53	50	<<50
	Facility: No emissions. **Extraneous**: Occasional loader activity at premises outside boundary clearly audible and significant when present. Road traffic to N and NW also significant. Sporadic activity on local access road clearly audible when present. Crow calls. Sporadic vehicle and reversing alarm noise clearly audible at adjacent premises to S. **Specific $L_{Aeq\ T}$ determination**: No emissions, thus <<L90.						
N2	01.12.16	0912-0942	0	52	53	50	<<50
	Facility: No emissions. **Extraneous**: Occasional loader activity at premises outside boundary clearly audible and significant when present. Road traffic to N and NW also significant. Sporadic activity on local access road clearly audible when present. Crow calls. Occasional bangs clearly audible at premises to S (dropping wood). **Specific $L_{Aeq\ T}$ determination**: No emissions, thus <<L90.						
N3	01.12.16	0922-0952	0	56	58	52	<<52
	Facility: No emissions. **Extraneous**: Occasional loader activity at premises outside boundary clearly audible and significant when present. Road traffic to N and NW also significant. Sporadic activity on local access road clearly audible when present. Crow calls. More frequent activity for a time at adjacent premises, including occasional bangs. **Specific $L_{Aeq\ T}$ determination**: No emissions, thus <<L90.						
N4	01.12.16	1026-1056	+	62	59	52	<<52
	Facility: No emissions. **Extraneous**: Intermittent road traffic through adjacent junction dominant when present. Road traffic also continuously audible to N and NW. Bird song/calls, aircraft. Reversing alarm occasionally audible at low level at premises to N. **Specific $L_{Aeq\ T}$ determination**: No emissions, thus <<L90.						
N5	01.12.16	1100-1130	+	66	68	49	<<49
	Facility: No emissions. **Extraneous**: Intermittent passing traffic dominant when present. Road traffic continuously clearly audible to N, NE and NW. Bird song/calls, aircraft. Air handling system continuously audible at low level at nearby premises. **Specific $L_{Aeq\ T}$ determination**: No emissions, thus <<L90.						

Wind vector: See final appendix. **Specific L_{Aeq}**: Level considered attributable to source under consideration, determined using real time assessment, field notes, time history profiles, statistical analysis, frequency spectra, spectral statistics and near field correction if applicable. **Audibility scale**: Inaudible; faintly audible; slightly audible; audible at low level; quite audible; clearly audible; dominant; intrusive; excessive.



Monitoring Locations

SW-1	258297	109231
SW-2	258322	109102
SW-3	258352	108887
D1	258338	109073
D2	258319	109131
D3	258356	109126
N1	258321	109106
N2	258359	109126
N3	258339	109081
N4	258334	108877
N5	258422	108990

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CLIENT

Greenstar

TITLE

Monitoring Locations
Waterford

LEGEND

- Commercial/Industrial unit
- Private Dwelling
- Agricultural Land
- Surface Water Monitoring Point
- Dust Monitoring Point
- Noise Monitoring Point

FIGURE NUMBER

3.1

Scale

Not To Scale

Revision

A

3.3 Dust Monitoring

Dust monitoring was carried out on two occasions at three on-site locations (D1, D2 and D3) in June and July 2016. The results of the monitoring are included on Table 3.6. The dust levels at D2 exceeded the limit on both occasions. D2 is located at the corner of the facility adjacent to the roadway and to a loading area associated with a neighbouring waste installation.

During the reporting period there was no waste processing at the installation. The installation was solely used for limited storage and transfer of dry recyclable material. This activity is not considered to be the source of excessive dust measured at the boundary location, D2. No complaints relating to dust were received from neighbouring premises during the reporting period.

Table 3.6 Dust Monitoring Results 2016

Dust Emission ($mg/m^2/day$)	**June**	**July**	**Emission Limit**
Sample Location	**(30 days)**	**(30 days)**	**($mg/m^2/day$)**
D1	83	158	350
D2	653	1,215	350
D3	123	258	350

4. SITE DEVELOPMENT WORKS

4.1 Specified Engineering Works

There were a no specified engineering works undertaken in 2016.

4.2 Summary of Resource & Energy Consumption

Table 4.1 presents an estimate of the resources used on-site during the reporting period and in 2015.

Table 4.1 Estimate of Resources Used On-Site in 2016

Resources	Quantities 2015	Quantities 2016
Diesel (green)	14,633 litres	0 litres
Electricity	70,620 kWh	13,560 kWh
Hydraulic Oil	0 litres	0 litres
Odour Neutraliser	450 litres	0 litres

4.3 Bund Integrity Test

Condition 6.9 of the licence requires that the integrity and water tightness of all underground pipes, tanks, bunding structures and containers and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee. It further states that this testing shall be carried out by the licensee at least once every three years and reported to the Agency on each occasion. This testing shall be carried out in accordance with any guidance published by the Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.

Integrity testing was carried out in February 2014 and the interceptors and drainage lines were passed fit for purpose. The reports are retained at the installation for Agency inspection.

5. WASTE RECEIVED AND CONSIGNED FROM THE INSTALLATION

The installation stopped accepting waste in October 2010 and no wastes were accepted in 2012 or 2103. The installation recommenced waste activities in January 2014.

Table 5.1 shows the total quantities of waste received and consigned from the installation in 2016. The total amount of waste accepted and consigned in the past five years is shown on Table 5.2. A breakdown of the waste types is provided in accordance with the European Waste Catalogue and Hazardous Waste list. A more detailed description of the wastes accepted and consigned is provided in the PRTR return in Appendix 1.

The total quantity of waste received was 7,275 tonnes. The total waste consigned was 6,792 tonnes. More waste was received than consigned this was waste which remained onsite at the end of 2016 and will be consigned in 2017. All the wastes consigned went to authorised recovery and disposal facilities approved by the Agency.

Table 5.1 Waste Received & Consigned 2016

EWC	Description	Waste In	Waste Out
15 01 01	Cardboard Packaging	1.84	
15 01 02	Plastic Packaging	0.704	
19 12 10	Solid Recovered Fuel	26	
19 12 12	MSW Municipal Mixed	3,202.5	1,060.82
20 01 39	Plastic	2.34	
20 03 01	MSW Municipal Mixed	4,037.75	5,731.574
20 03 07	C&I Dry Mixed	3.6	
Total Received		**7,274.734**	
Total Consigned			**6,792.394**
Recovery			**6,792.394**
Disposal			**0**
Recovery Rate			**Approximately 100%**

Table 5.2 – Waste Received and Consigned since 2009

	2015	2014	2013	2012	2011	2010	2009
Total Received	19,835	34,980	0	0	714.00	14,151	22,366
Total Consigned	20,922	33,420	0	0	673.68	13,869	22,651
Recovery Rate	100%	100%	N/A	N/A	100%	100%	95.5%

NA-Not Applicable

6. ENVIRONMENTAL INCIDENTS AND COMPLAINTS

6.1 Incidents

There were no reportable incidents at the installation in 2016.

6.2 Register of Complaints

SEHL maintains a register of complaints received at the installation offices. There were no complaints received in 2016.

7. ENVIRONMENTAL DEVELOPMENT

7.1 Environmental Management Programme Report

SEHL 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. SEHL 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 installation is accredited to both standard and this accreditation was retained following an audit in July 2014.

The schedule of Objectives and Targets, including their status for 2016 (Table 7.1), as well as the proposed Objectives and Targets for 2017 (Table 7.2) are presented below. An index of procedures used at the installation is included in Appendix 2.

7.1.1 Site Management Structure

Management and Staffing structure: -

Name: Tom Walsh
Responsibility: Operations Manager
Experience: Over 10 years experience waste management experience; has completed the FÁS waste management course.

Name: Ivan Cummins
Responsibility: Yard Supervisor
Experience: 30 years experience waste management experience.

Name: Robertas Zemaitaitis
Responsibility: General Yard Operative
Experience: Over 5 years waste management experience; has completed the Patel Tonra (CIWM accredited) Waste Management Course

Name: Stephanie Pietercelie
Responsibility: Operations & Environmental
Experience: Over 5 years waste management experience; has completed the Patel Tonra (CIWM accredited) Waste Management Course

7.1.2 Staff Training

Environmental training is carried out for any new staff employed at the installation as required. Copies of all training records are held in the installation office.

7.2 Environmental Management Programme

7.2.1 Schedule of Objectives 2016

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

7.2.2 Schedule of Objectives 2017

The schedule of targets and objectives for 2017 are presented in Table 7.1.

7.3 Communications Programme

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

To this end SEHL has drawn up a Communications Programme, which details how members of the public are facilitated in accessing and viewing environmental information at the installation. Members of the public who wish to inspect these files may do so at any reasonable time by making an appointment with the Operations Manager using the telephone number posted on the main installation entrance sign.

Table 7.1 Schedule of Objective and Targets 2016

No.	Objective	Target	Timescale	Responsibility	Status
1	**Increase awareness of Odour Management on site group wide**	Specify Odour detection in Site Inspection Database (EF-10A) on a daily basis and generate actions as appropriate	Q1-Q2	Site Management/EHS	Completed
2	**Waste storage practices**	Review waste storage practices on each site to ensure that they are in line with licence conditions, fire prevention and insurance recommendations	Q2	Site Management/EHS	Ongoing
3	**Emergency response procedures - ER pack update**	Review the Emergency Response Pack on each site and ensure that all information & equipment required in case of an emergency is available. Confirm that relevant staff training adequately addresses.	Q2	Site Management/EHS	Ongoing
4	**CRAMP, ELRA & Financial Provision**	CRAMP, ELRA & Financial Provision to be reviewed	Q2/Q3	EHS team	2017
5	**Waste acceptance, classification & records**	EWC training for all weighbridge ops. Centralisation of all licences & permits inc NWCPs for hauliers.	Q2/Q3	EHS team	Ongoing

Table 7.2 Schedule of Objective and Targets 2017

No.	Objective	Target	Timescale	Responsibility
1	**Odour management**	Ensure odour management plans are followed and potential new sources of odour are identified	Q1 - Q4	Site management
2	**Fire prevention**	Implement recs from Fire Risk Assessments Update ERP & APP Maintain fire detection equipment	Q1 - Q4	Site management/EHS team
3	**Waste storage**	Review waste storage practices on each site to ensure that they are inline with licence conditions, fire prevention and insurance recommendations	Q1 - Q4	Site management/EHS team
4	**Waste acceptance, classification & records**	EWC training for all weighbridge ops. Centralisation of all licences & permits inc NWCPs for hauliers.	Q1 - Q4	EHS team
5	**CRAMP, ELRA & Financial Provision**	CRAMP, ELRA & Financial Provision to be reviewed	Q2	EHS team
6	**Lighting in MRF buildings**	Clean & upgrade where required all light fittings in MRF buildings	Q3	Site management
7	**NWCP exemptions**	Implement NWCP exemption declarations	Q1 - Q4	Site management
8	**Pipeline integrity Testing**	Complete pipeline integrity testing	Q1/Q2	Site management

7.4 Report Financial Provision

A Closure and Decommissioning Plan and an Environmental Liabilities Risk Assessment (ELRA) including Financial Provision (FP) were submitted to the Agency as part of the transfer of the licence which occurred in Q1 2014. Financial provision was approved by the Agency prior to completion of the Licence transfer in March 2014.

The installation has an Integrated Management System (IMS) in place and the site has achieved external accreditation for its implementation of ISO 14001 and OHSAS 18001, environmental and health and safety management systems. Effective implementation of these systems is the most appropriate way to ensure that mitigation measures achieve the required risk reduction on site. The IMS serves as a guidance document for installation staff and describes operational control and management practices that are applied at the installation. The IMS is designed to ensure that management of site activities complies with regulatory requirements and best practice. The IMS includes a detailed Emergency Response Procedure which sets out the steps to be taken in the event of an incident at the installation with the potential to cause environmental damage. SEHL also implements a comprehensive monitoring programme which will highlight any potential environmental incidents with the potential to cause environmental damage.

7.5 Nuisance Controls

SEHL has contracted a vermin control company to carry out nuisance control at the installation. Prevent a Pest provide pest control at the installation and also provide for the treatment of insects at the installation if necessary. Daily litter picks and road-sweeping are carried out by yard operators during the course of their daily duties.

An odour control system (de-odouriser spray system) is in place that can be operated automatically or manually by the Environmental Officer and Operations Supervisor as needed. In general, during operations the deodorizer is on full time. Outside operations it is set on a timer to spray for 10 minutes every hour.

A site inspection is carried out daily and recorded on the facilities inspection log which is controlled as part of the current Integrated Management System. During 2016, weekly odour impact assessments of the installation and the vicinity were carried out and records are available on-site. These assessments were carried out in a manner consistent with the Agency Guidance Note for EPA Licensed Sites (AG5).

7.6 Foul water Volume Transported Off-Site

No wastewater was removed from site in 2016.

8. OTHER REPORTS

8.1 European Pollutant Release and Transfer Register Regulation

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

APPENDIX 1

European Pollutant Release and Transfer Register

| PRTR# : W0116 | Facility Name : Starrus Eco Holdings Limited (Butlerstown) | Filename : W0116_2016.xls | Return Year : 2016 |

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2016

1. FACILITY IDENTIFICATION

Parent Company Name	Starrus Eco Holdings Limited
Facility Name	Starrus Eco Holdings Limited (Butlerstown)
PRTR Identification Number	W0116
Licence Number	W0116-02

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Six Cross Roads
Address 2	Carriganard
Address 3	Butlerstown
Address 4	
	Waterford
Country	Ireland
Coordinates of Location	-7.145867687 52.23057934
River Basin District	IESE
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Sara Smyth
AER Returns Contact Email Address	sara.smyth@greenstar.ie
AER Returns Contact Position	Environmental Engineer
AER Returns Contact Telephone Number	01 2746236
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	3
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

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

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

Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4. 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) ?	

4.1 RELEASES TO AIR

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used					
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 AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used					
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 AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used					
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

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: Starrus Eco Holdings Limited (Butlerstown)

Please enter summary data on the quantities of methane flared and / or utilised	T (Total) kg/Year	M/C/E	Method Used: Method Code	Method Used: Designation or Description	Facility Total Capacity m3 per hour	
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

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
			Method Used					
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					QUANTITY			
			Method Used					
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					QUANTITY			
			Method Used					
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

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			
			Method Used					
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 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			
			Method Used					
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

4.4 RELEASES TO LAND

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

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

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

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

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

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

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 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 12	No	1060.82	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holding Ltd.,W0136-03	Sarsfieldcourt Industrial Estate,Glanmire,Co. Cork,,Ireland		
Within the Country	20 03 01	No	762.05	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Dublin City Council,W0238-01	Merrywell Industrial Estate,Ballymount Road Lower,Ballymount ,Dublin 12,Ireland		
Within the Country	20 03 01	No	1122.68	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Killarney Waste Disposal,W0217-01	Aughacurreen,Killarney ,Co. Kerry,,Ireland		
Within the Country	20 03 01	No	2216.984	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Quality Recycling Ltd.,WFP-TS-08-0079-01	Ballylynch,Carrick-on-Suir,Co. Tipperary,,Ireland		
Within the Country	20 03 01	No	1629.86	mixed municipal waste	R13	M	Weighed	Offsite in Ireland	Starrus Eco Holding Ltd.,W0136-03	Sarsfieldcourt Industrial Estate,Glanmire,Co. Cork,,Ireland		

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

APPENDIX 2

Procedures List

Integrated Procedures - IP		
IP-01	Document & Record Control Procedure	Rev 01, 28/04/14
IP-02	Health & Safety Risk Assessment Procedure	Rev 01, 28/04/14
IP-03	Environmental Aspects & Impacts Procedure	Rev 01, 28/04/14
IP-04	Legal & Regulatory Requirements Procedure	Rev 01, 28/04/14
IP-05	Objectives, Targets & Management Programmes Procedure	Rev 02, 21/01/16
IP-06	Competence, Training & Awareness Procedure	Rev 01, 28/04/14
IP-07	Communication & Consultation Procedure	Rev 02, 21/01/16
IP-08	Monitoring, Measurement & Improvement Procedure	Rev 01, 28/04/14
IP-09	Evaluation of Compliance Procedure	Rev 01, 28/04/14
IP-10	Non Conformances, Corrective/Preventive Actions Procedure	Rev 01, 28/04/14
IP-11	Internal Audit Procedure	Rev 01, 28/04/14
IP-12	Management Review Procedure	Rev 02, 21/01/16
IP-13	Control of Contractors/Visitors Procedure	Rev 01, 28/04/14
IP-14	Health & Safety & Environmental Monitoring	Rev 01, 28/04/14
IP-15	Emergency Preparedness & Response Procedure	Rev 01, 28/04/14
IP-16	Fire Prevention Procedure	Rev 01, 28/04/14
IP-17	Bin Washing Procedure	Rev 01, 28/04/14
IP-18	Accident Prevention Procedure	Rev 02, 14/11/16
IP-19	Fuel Procedure for Tanks & Mobile Plant	Rev 01, 11/01/17

Safety Procedures - SP		
SP-01	Permit to Work Procedure	Rev 01, 28/04/14
SP-02	Maintenance & Calibration Procedure	Rev 01, 28/04/14
SP-03	Mobile Plant Procedure	Rev 01, 28/04/14
SP-04	Fork Truck Procedure	Rev 01, 28/04/14
SP-05	Operation of Fixed Plant Procedure	Rev 01, 28/04/14
SP-06	Lock Out / Tag Out Procedure	Rev 01, 28/04/14
SP-07	Health & Safety Notification Procedure	Rev 01, 28/04/14
SP-08	MSW Shredder routine Maintenance & Clearing of Blockages Procedure (SCGT)	Rev 01, 28/04/14
SP-09	Weighbridge & Tipping Procedure (SCGT)	Rev 01, 28/04/14
SP-10	Cleaning of Washing Bay (Greenogue)	Rev 01, 28/04/14

Environmental Procedures - EP		
EP-01	Office Waste & Energy Management Procedure	Rev 01, 28/04/14
EP-02	Decommissioning and Aftercare Procedure	Rev 01, 28/04/14
EP-03	Environment Communications Procedure	Rev 01, 28/04/14
EP-04	Waste Permits & Licences Procedure	Rev 01, 28/04/14
EP-05	Waste Acceptance Procedure	Rev 01, 28/04/14
EP-06	Unacceptable Waste Procedure	Rev 01, 28/04/14
EP-07	Waste & Material Storage Procedure	Rev 01, 28/04/14
EP-08	Waste Processing Procedure	Rev 01, 28/04/14
EP-09	Site Infrastructure Procedure	Rev 02, 06/05/15
EP-10	Nuisance Management Procedure (Site Specific)	(Site Specific) Rev 01, 28/04/14
EP-11	Civic Amenity Site Procedure	Rev 01, 28/04/14

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

Date	Amendment No.	Procedure No:	Revision No:	Comment	Authorised By
30/06/13	25	IP-16	01	Inclusion of new procedure	M.D.
09/09/13	26	IP-03	02	Use of Scannell Software Solutions (EnviroManager) instead of IF-03A	M.D & O.C
09/09/13	27	IP-04	30	Use of Scannell Software Solutions (EnviroManager) instead of IF-03A	M.D & O.C
09/09/13	28	IP-05	02	Use of Scannell Software Solutions (EnviroManager) instead of IF-03A	M.D & O.C
16/10/13	29	EP-03	03	Introduction of EPA ALDER Portal	K.B
28/04/14	30	All EP's & IP's	01	Change of Company name and review of all Integrated and Env procedures	M.D & O.C
28/04/14	31	SP's	01	Change of Company name and review of all safety procedures including re-numbering & deletion of Motor Claim Notification Procedure – SP 08	O.C
06/05/15	32	EP-09	02	Ref to new form EF-11 added	SS
21/01/16	33	IP-05/IP-07/IP-12	02	Meeting frequency refs updated	SS
14/11/16	34	IP-18	02	Amended as per EPA instruction	SS
11/01/17	35	IP-19	01	New addition	SS

Circulation List

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