

**SRCL Ireland Limited**

Licence Register No. W0055-02

Annual Environmental Report 2008

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## 1. Introduction

This report covers the period from the 1 January 2008 to 31 December 2009.

SRCL Ireland Limited is involved in the collection and treatment of clinical waste under Waste licence No. W0055-02 issued on 24 January 2006 by the Environmental Protection Agency.

The waste management facilities at 420 and 430 Beech Road, Western Industrial Estate, Naas Road, Dublin 12 are authorised to carry out the following activities (Schedule A.1):

- Shredding of waste
- Sterilisation of waste
- Repackaging processes\*
- Storage of waste
- Recovery of paper, plastics, textiles and metals from treated waste\*

\* Not currently in operation

Under Schedule A.2, handling of the following EWC codes and waste quantities is authorised:

Waste Type	EWC codes	Maximum Annual tonnage
Hazardous Waste for Treatment	180101-04	15,000
	180201-03	
Hazardous Waste for Transfer only	180102, 03	2,000
	180106-09	
	180202,	
	180205-08	
Non-hazardous waste	150102	1,000

## 2. Waste Quantities

Amounts of waste received, processed and subsequently sent to landfill during the year 2008 were:

**Quantity of Waste Treated = 8,386.20 tonnes**

**Quantity of Process Residues to Landfill = 9,633.95 tonnes**

## 3. Monitoring of Emissions

### 4. Emissions to Sewer

Effluent discharge results for January-December 2008 have been reviewed respectively. All required reports have been made to the EPA; with Non-compliant readings being notified to the EPA and the County Council as required. Overall compliance was good; with only a few issues with ELV's in Q1 of 2008.

### 5. Emissions to Air

Bacterial and VOC samples were taken in 2008 were generally compliant. A bacterial sample taken at the beginning of the year highlighted the need to change the carbon filter media in the air abatement plant. Subsequent sampling proved satisfactory.

## **6. Overall Emissions Compliance**

Overall emissions compliance during 2008 was good. Only a few pH and temperature readings exceeded the ELV. The data is derived from the quarterly reports to the EPA.

## **7. Resources**

Annual utilities usage and are shown below;

**8. Water Usage 2008 = 6132 m<sup>3</sup>**

**9. Gas Usage 2008 = 2436.24 MWh**

**10. Electricity Usage 2008 = 412 MWh**

## **11. Development**

### **12. Development Works Completed 2008**

- Upgrading of HEPA Filters to Hydrophobic HEPA Filters.
- Upgrading of parametric recording system on waste processing line 1 & 2 and the subsequent reduction in spore testing to daily (in house) with weekly off-site verification by an external laboratory as per Waste Licence Condition 8.14.1.
- Re-enforcement of perimeter wall surrounding Unit 430.
- Full CCTV Survey and Integrity testing of the site drainage system (foul sewer); and the completion of the repairs highlighted by the survey etc.

### **13. Development Works Scheduled for 2009**

- Upgrading of Line 1 Shredder and Auger.

## **14. Incidents and complaints, external and vendor audits**

### **Incidents.**

Incidents are defined in Waste Licence W0055-2 (Glossary) as:

1. an emergency
2. any emission which does not comply with the requirements of the licence
3. any exceedence of the duty capacity of the waste handling equipment
4. any trigger level specified in the licence which is attained or exceeded
5. any indication that environmental pollution has, or may have, taken place

On these criteria, the only incidents notified to the Regulator were;

- Minor effluent non-compliances.
- A failure in air sampling.
- Spurious readings caused by failure of effluent monitoring equipment.
- A grab sample contamination issue.

- Processing waste on a Sunday (due to operational issues).

### **External Audits**

The only external audit completed was by the EPA during May 2008. The audit report generated one non-compliance and five observations; all of which were addressed in the company's response in June 2008 and subsequently accepted.

Copies of the Audit Report and the SRCL response are in Appendix 1.

### **Supplier Audits**

Supplier audits were completed by Mr. Colm Harkin (Environmental Manager SRCL) or Dr Peter Cazalet (Consultant).

Audits conducted;

- Cruinn Technologies (Dr. Peter Cazalet); October 2007
- KTK Landfill (Mr.C.Harkin); December 2007
- Rilta (Mr.C.Harkin); October 2007
- Ballynagran Landfill; November 2008

Copies of the Audit Reports (not already provided) are in Appendix 2. All were satisfactory.

**15. Environmental Objectives and Targets, 2007 / 2008**

Objective / target	Actions required to achieve objective/ target	Responsible person(s)	Target date	Date completed	Progress
Reduce non compliant waste / reduced plant downtime	Customer communications programme / Reduction in downtime 2006 Vs 2007	General Manager / Commercial Manager	July 2008		Extensive customer training has been carried out by the Commercial Manager; based on waste segregation etc. A programme of bin labelling has also been carried out; i.e. 'No Metal'. A notable increase in waste for export is evident; i.e. potentially problem wastes are being diverted for Incineration.
Quantify emissions to sewer / minimise emissions	Record effluent data / compare 2006 Vs 2007	General Manager / Plant Manager / Environmental Manager	July 2008		An increase in effluent has been noted and is symptomatic of increased production at the site.
Minimise consumption / reduce from 07 Vs 08	Review treatment process for potential inefficiencies / % reductions in use	General Manager / Environmental Manager	July 2009		Figures have yet to be collated for the AER for 2007. A refurbishment of Line 1 is planned for early 2008; it is hope that this will reduce steam loss.

Review odours from operation / minimise	Develop assessment criteria	General Manager / Environmental Manager	July 2008		An assessment of the odour abatement kit has been conducted by Tony Hutchence (SRCL Engineer). An upgrade of the extraction/abatement system is planned for early 2008.
Reduce diesel fuel use / Move towards renewable fuels	Review market alternatives / % increase in use of renewable fuel	General Manager / Environmental Manager	July 2008		A Pure Plant Oil vehicle fuel trial has been ongoing since December 2007. This is due for review June/July 2008.
Investigate emissions abatement from treatment process / achieve BAT	Review technologies / compare and contrast	Environmental Manager	July 2009		An assessment of the odour abatement kit has been conducted by Tony Hutchence (SRCL Engineer). An upgrade of the extraction/abatement system is planned for early 2008.
Review waste and raw material use / minimise use	Audits to achieve data / improved practices	General Manager / Environmental Manager	July 2008		CH is to conduct an audit of raw materials and waste at a site level.
Investigate yard run off / minimise potential pollutants	Random sampling of run-off / achieve data	General Manger / Plant Manager / Environmental Manager	July 2008		Sampling of yard run off to be Conducted early 2008.



## **16. Environmental Management Programme**

The programmes in place to achieve the EMS Objectives and Targets (above) are reviewed as part of the EMS Management Review Procedure. The management programmes in place for each Objective/Target are detailed as follows;

**Ob 1** – Ongoing data collection for ‘process’ waste. Eco-Safe non compliant ‘export’ waste is to be added to this Objective for 2009. This is currently being tracked and recorded by FD.

**Ob 2** – This will continue to be monitored with a view to looking into reduction. JJ has stated that production is showing a 13% increase for 2008 due to waste being transferred from Eco-Safe site. 2009 figures will allow improvements to be better noted.

**Ob 3** – Figures collated for the AER for 2007. Gas has been purchased for the next 3 years. Production increase 13% for 2008 due to waste being transferred from Eco-Safe site. 2009 figures will allow improvements to be better noted. A poster and e-mail campaign has been utilised with a review to cutting energy use; results may be seen in the year end figures. Refurbishment of Line 1 has been postponed until 2009; it is hoped that this will reduce steam loss.

**Ob 4** – An assessment of the odour abatement kit has been conducted by Tony Hutchence (SRCL Engineer). An upgrade of the extraction/abatement system has been postponed till 2009.

**Ob 5** – A Pure Plant Oil vehicle fuel trial has been ongoing since December 2007. Trials of this product have been successful; with two new vehicles on order. The installation of a larger capacity tank has been successful (10,000 Litres).

**Ob 6** - An assessment of the odour abatement kit has been conducted by Tony Hutchence (SRCL Engineer). An upgrade of the extraction/abatement system has been postponed till 2009.

**Ob 7** – CH is to conduct an audit of raw materials usage and waste at a site level by Q4 2008.

**Ob 8** – Sampling of yard run off to be Conducted early 2008 and end of 2008.

## **17. New Procedures**

A revised Environmental Management System (branded; SRCL Ireland Limited) was issued during 2008. This has been certified to the ISO14001 standard by SGS Ireland.

## **18. Noise**

The annual noise monitoring for 2008 was completed at boundary points B1 (front of plant, right hand side) and B2 (rear of plant, left hand side) on 12 February 2008.

Although readings exceed the Guidance Limits for daytime and night-time noise levels of 55 and 45dB(A) respectively, the company does not consider that they amount to any significant impairment of, or interference with, amenities beyond the site boundary as specified in condition 7.3 of the Waste Licence. The breaches noted are due to traffic and not to waste treatment operations.

The subcontractors report is available as Appendix 3.

### **19. Bund, Tank and Pipe Inspections**

There are no separate above ground tanks or other areas requiring bunding. A self-bunded tank has been installed on site for the storage of Bio-fuel. All chemicals such as bin-cleaning detergents, diesel and lubricating oil are kept on bund-trays and a bund cabinet. While these items are recorded on a test schedule; none of these items have required testing as yet as they are all under 3 years old.

Underground pipes (drains) were inspected due to the unavailability of a previous report for 2006. An independent inspection by Dyno-rod was conducted during 2008 and subsequent drainage repairs were conducted. A final Integrity Test report was completed during 2009; therefore this will not be required again until 2014.

### **20. Financial Provision, Management Structure and Public Information**

#### **21. Financial Provision**

The Company is covered by Marsh Insurances for liabilities totalling €13m each for Employers Liability and Public Liability. Copies of Insurances are to be found in Appendix 4.

#### **22. Management Structure**

The present Management Structure at the site is detailed in Appendix 5.

Details of the responsibilities are as follows:

#### **General Manager**

The overall responsibility of the General Manager is to oversee the effective and efficient running of the SRCL Plant at all times and to ensure conformity with licence conditions. In the absence of the General Manager these duties will fall to Plant Manager.

- The General Manger is responsible for communication with suppliers.
- The General Manger has overall responsibility for finance.
- The General Manger is responsible for the allocation of resources.
- The General Manager is the named point of contact for the Environmental Regulator, the Sanitary Authority and the HSE.
- The General Manager Reports directly to the Operations Director.

#### **Plant Manager**

- The Plant Manager is responsible for the day to day operations on the shop floor.

- The Plant Manager reports directly to the General Manager.

### **Commercial Manager**

- The Commercial Manager is responsible for external complaints & queries.
- The Commercial Manager is responsible for dealing with customer declarations and contracts.
- The Commercial Manager is responsible for liaisons with SRCL customers in terms of services.
- The Commercial Manager reports directly to the general manager.

### **Financial Manager**

- The Financial Manager is responsible for the control of finance within SRCL.
- The Financial Manager is responsible for the IT Department.
- The Financial Manager reports directly to the General Manager.

### **Transport Manager**

- The Transport Manager is responsible for the day to day transport operations of SRCL.

### **Operations Manager SQ (Transport)**

- The Operations Manager SQ is responsible for the Small Quantity operations; formerly known as Transafe.

### **Offsite Management (Not based at site/ Corporate Resources)**

### **Senior Management (Chief Executive Officer, Operations Director, Operations Manager, Head of Compliance)**

- The Operations Director is responsible for overseeing the efficient operation of the SRCL Plant.
- The Operations Director shall oversee the implementation of the management system for the facility in the absence of the General Manager.
- The Operations Director is the named contact person for communications with the Regulator / Sanitary Authority in the absence of the General Manager.
- The Operations Director shall conduct performance appraisals for key management staff on an annual basis.
- The Operations Director is responsible for communication with major customers.
- The Operations Director is responsible for Allocation of resources.
- The Operations Manager reports to the Operations Director.
- The Operations Director reports to the CEO.
- The Head of Compliance is responsible for Health and Safety and Environmental Issues; and reports to the CEO.

### **Environmental Manager**

- The Environmental Manager will be responsible for the promotion of Environmental Compliance at SRCL. The Environmental Manager must be aware of and adhere to legal requirements in relation to Environmental Management and related topics.
- The Environmental Manager Reports to the Head of Compliance.

### **Health & Safety Manager**

- The Health and Safety Manager will be responsible for the promotion of H&S Compliance at SRCL. The Environmental Manager must be aware of and adhere to legal requirements in relation to H&S and related topics.
- The Health and Safety Manager Reports to the Head of Compliance.

### **Human Resources Manager**

- The Human Resources Manager will be responsible HR within SRCL. The Human Resources Manager must be aware of and adhere to legal requirements in relation to HR and related topics.
- The Human Resources Manager reports to the

### **All Personnel**

- All Company employees are required to have an awareness of the possible environmental consequences of their actions, and are encouraged to report any adverse conditions and suggest improvements; and to operate the EMS and associated Procedures as appropriate.

### **23. Public Information**

Public information is displayed on the Site Notice Board according to condition 3.2.1 and 3.2.2 of the Waste Licence. Certain documents are available on request at the site during normal office hours.

### **24. Boiler Efficiency Testing**

Boiler testing was completed during 2008. Under normal steam conditions operation was seen to be as per design.

### **25. Use of Quarantine Store**

Unintentional submissions of waste are recorded. An 'Inappropriate Waste report' is completed in each case and the customer contacted. There were a total of 50 cases reported at the site for 2008. These were quarantined and either returned to source or sent to the contracted waste transfer station for ultimate disposal via Incineration (on receipt of a covering C1 from the source institution).

### **26. Process Efficacy**

The routine monitoring of the process shows that biological inactivation by the steam Disinfection process currently used by STI is very effective. All results for

2008 have been reported to the EPA on a Quarterly basis; as required by the Waste Licence. There were no test failures during 2008.

A review of the need to carry out these numerous and complex tests was requested in 2003, supported by a report by Dr. Malcolm Holliday, a leading UK microbiologist. In his view, parametric monitoring coupled with microbiological testing was sufficient verification of the effectiveness of the process; as the technology is already proven.

Parametric monitoring and Recording systems have been installed and are fully functional on both Treatment Lines.

As per the provisions of Waste Licence Condition 8.14.8 / SCHEDULE C4 - NOTE 2; the following test method has been proposed:

Challenge testing using *Bacillus Atrophaeus* (formally *Bacillus subtilis* var. *niger*) as the indicator organism, testing to 6 Log<sup>10</sup> reduction; conducted 3 times per week (jn house) with monthly off-site verification by an external laboratory.

An agreement on reduced challenge testing frequency (outside laboratory validation) has been achieved during 2008. Challenge testing is now conducted daily, in-house and weekly, by an external laboratory.

#### **27. Process Verification Report**

The routine monitoring of the process shows that biological inactivation by the steam disinfection process currently used by STI is very effective.

There is also a schedule of far more extensive annual tests; it has so far been impossible to source laboratories which can handle all or even most of them.

The Licence Review Application has again requested a decision about this from the EPA; however, no decision has been handed down to this date.

#### **28. Residuals Management Plan**

This has been provided in Appendix 6 (Site Closure Plan). This does not require any additional information from the 2008 document.

#### **29. Measures to Prevent Environmental Damage**

STI operates an Environmental Management System that has been accredited to the ISO14001 standard during 2007; and is routinely audited by SGS Ireland. This system ensures compliance with environmental regulations and promotes good environmental practices while aiming for continual improvement.

#### **30. Environmental Liability Risk Assessment**

This does not require any additional information. See 28.