



2013 Annual Environmental Report

For

**TopChem Pharmaceuticals Limited,
Ballymote Business Park,
Carrownanty,
Ballymote,
Co Sligo.**

License Number: PO828-01


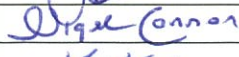
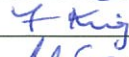

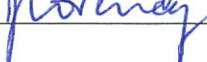
<u>Name</u>	<u>Title</u>	<u>Signature</u>	<u>Date</u>
Dr Steven Alley	Manufacturing Support / Development Manager		06/03/2014
Nigel Cannon	General Manager	 Nigel Cannon	06/03/2014
Frances King	QA Manager	 F King	06/03/2014
Margaret Garry	Production Manager	 M Garry	06/03/2014
Dr Donal Coveney	Managing Director	 D Coveney	06/03/2014

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1.0 Introduction

As per condition 11.8 of the TopChem Pharmaceuticals Limited Integrated Pollution Prevention & Control License, License Register Number P0828-01, attached is the Annual Environmental Report for the site covering period January 1st 2013 to December 31st 2013.

1.1 Company Details

TopChem Pharmaceuticals Limited is located in the Ballymote Business Park, Carrownanty, Ballymote, Co Sligo (National Grid Reference - 565818, 815634) where it is operating from a building leased from Ballymote Community Enterprise Limited. On February 20th 2008, TopChem Pharmaceuticals was granted an Integrated Pollution Prevention & Control (IPPC) license from the Environmental Protection Agency.

1.2 Activities

The IPPC License authorises TopChem Pharmaceuticals Limited to carry out the following activity at the site;

*The use of a chemical or biological process for the production
Of basic pharmaceutical products.*

NACE Code - 2120

RBME Risk Category – P-C2

To date TopChem Pharmaceuticals has been involved in the manufacture of the following products at the facility;

- Malathion
- Benzyl Benzoate
- PGX-17
- Bretylium Tosylate
- Salicylic Acid
- 2,4 Dichlorobenzyl Alcohol
- Thiamine Hydrochloride
- Ethacrynic Acid
- Piribedil
- Tolcapone

There was no production in 2013 for Malathion, Salicylic Acid, 2,4 Dichlorobenzyl Alcohol and PGX-17 due to no customer demand for these products. Benzyl Benzoate & Thiamine Hydrochloride production were down on 2012 figures, again due to customer demand. Bretylium Tosylate production increased YoY, an order for 8Kgs of Ethacrynic Acid was started in production and Tolcapone was successfully developed & brought through production. In addition, processes for Selenious Acid, Myristyl Gamma Picolinium Chloride & Liothyronine were worked on at the site during 2013.

There were no changes implemented to the facility during 2013.

1.3 Environmental Policy

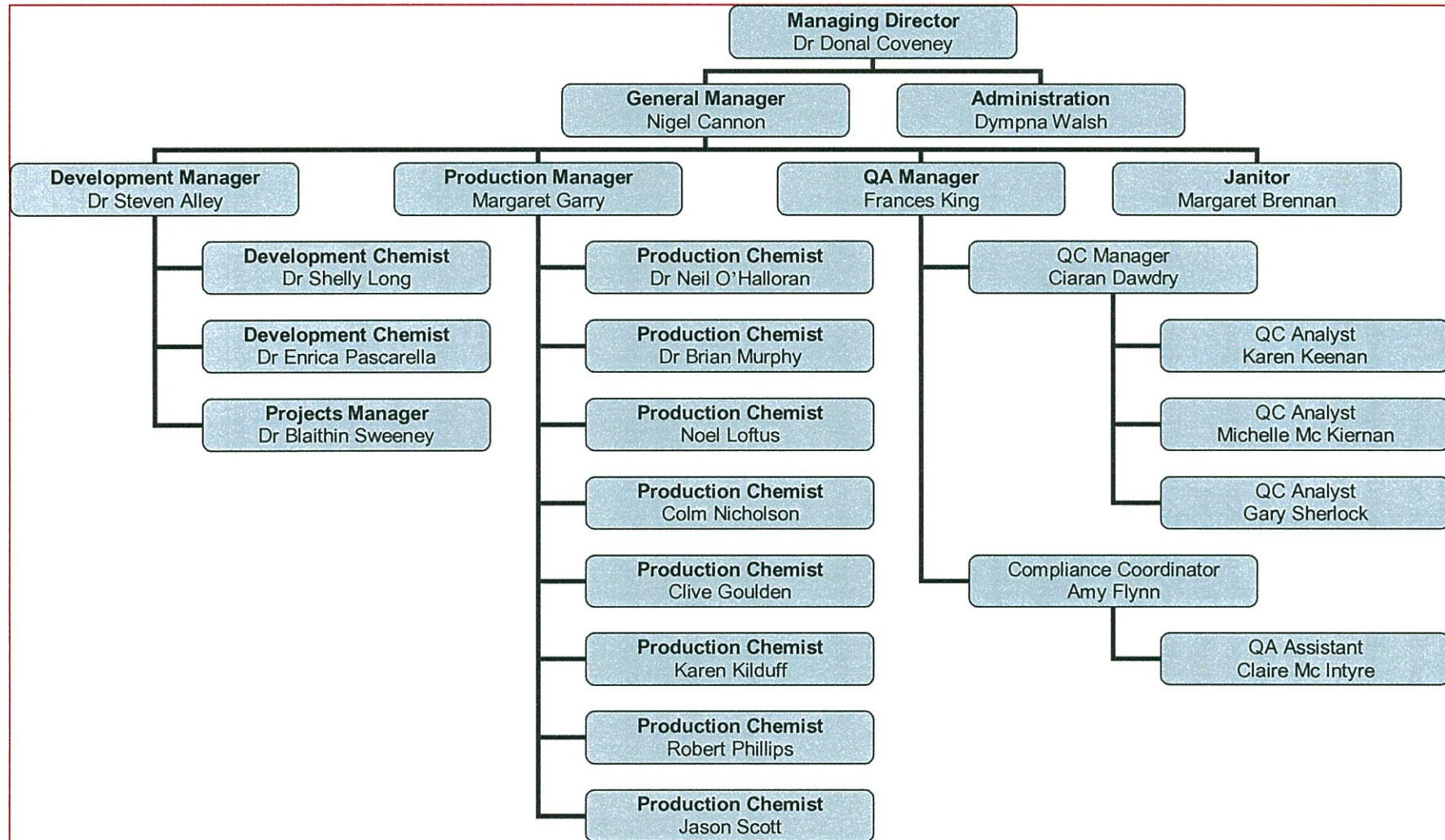
At TopChem Pharmaceuticals we continually assess all the environmental impacts associated with our activities. We aim to improve our management of the environment on a continuous basis. It is essential that all employees, visitors and contractors abide by all aspects of the environmental policy.

1.4 Environmental Management of the Company / Company Structure

Responsibility for the Environmental Management System at TopChem Pharmaceuticals currently falls under the remit of the General Manager. Under this present arrangement, the Production Manager acts as the deputy EHS Officer.

Environmental Management at the facility is co-ordinated through monthly EHS meetings, which involve participation from each of the core functions. i.e. Production, Quality and Development.

Management and Reporting Structure:



Each department has appointed an EHS representative so that issues identified at a departmental level can be addressed in a timely manner.

There is an EHS Storyboard installed on the first floor overlooking the Reception area. This is updated weekly and displays the following information;

- Metric - Incidents and Accident Reporting,
- Metric - Corrective Actions,
- Metric - Housekeeping Inspections,
- Metric - Hours Lost,
- Metrics - EHS Meetings, Fire Alarm checks, Fire Drills,
- EHS Goals and Objectives

There is also an Energy Management Notice Board installed, which is updated monthly and displays the following information;

- Energy Management Policy
- Green Team members
- Metric – Electricity usage on site
- Metric – Electricity Usage expressed per Employee
- Awareness information
- Energy Management / Green Goals and Objectives

2.0 Resource Information

2.1 Resource Consumption

This section covers details on Electricity usage and Raw Materials consumed in our Production Laboratory for the review period January 1st 2013 to December 31st 2013.

2.1.1 Electricity

Electricity is the only source of energy used at TopChem Pharmaceuticals.

Bord Gais is the provider for electricity in Units 2 - 4 at the site.

Unit 1 is serviced by Electric Ireland.

In summary the Electricity Units consumed at the facility for the period under review are as documented in Table 1 overleaf;

Table 1:

Provider	Unit #	Consumption period	Usage (KWH)	Comment
Electric Ireland	1	19/1/13 – 20/1/14	1011	27% increase YoY
Bord Gais	2	20/1/13 – 21/1/14	870	14% increase YoY
Bord Gais	3 & 4	9/1/13 – 9/1/14	197,950	8% increase YoY

TopChem Pharmaceuticals is currently leasing a block of 4 units in the Ballymote Business Park.

Units 3 & 4 are used for Manufacturing and all related support functions for the business.

Unit 1 & Unit 2 are used for storage purposes only.

The following change resulted in increased electricity usage in 2013;

- 120 Hour working week introduced in the Production Laboratory in July 2012 was also operational throughout 2013, hence the 8% increase in electricity usage in this unit compared with 2012.

2.1.2 Raw Materials

Details of Process related Raw Materials, Intermediates, Products used / generated at the site during 2013 are as follows;

Table 2:

Product	Material	2013 Process Usage
Benzyl Benzoate	Benzyl Benzoate (Crude)	63L
	Acetone	126Kg
	Benzyl Benzoate (Product)	44Kg
Bretylum Tostylate	2-Bromobenzyl Bromide	145.2Kg
	Hydrochloric Acid (37%)	145.2L
	Methyl Butyl Ether (MTBE)	396L
	Purified Water	96.8L
	Ethyl-p-Toluenesulphonate	180.6Kg
	Acetone GPR Grade	2904.6L
	Ethyl Acetate	3872.8L
	Sodium Hydroxide 20%	178.5Kg
	Dimethylamine Solution 40%	261.3Kg
	Bretylum Tosylate (Product)	163.2Kg
Thiamine Hydrochloride	Purified Water	366L
	Thiamine Hydrochloride USP	427Kg
	Isopropyl Alcohol	2562L
	Thiamine Hydrochloride (Product)	371.5Kg
Ethacrynic Acid	Hydrochloric Acid (37%)	38.8L
	Toluene	270L
	Purified Water	587.6L
	Ethyl Acetate	551.4L
	Dimethylamine Hydrochloride	16.3Kg
	tert-Butyl methyl ether	162L
	Acetic Acid	57.5L
	Paraformaldehyde	6.7Kg
	Isopropyl Alcohol	78L
	(4-butanoyl-2,3 Dichlorophenoxy) acetic acid	57.5Kg
	Potassium Pyrophosphate	72Kg
	Ethacrynic Acid (Product)	9.4Kg

Table 2: continued

Product	Material	2013 Process Usage
Piribedil	1-PP	21.6Kg
	2-CP	11.8Kg
	Potassium Carbonate	27.1Kg
	Xylenes	100.8L
	Isopropyl Alcohol	141L
	Water	129.6L
	Piribedil (Product)	13.9Kg
Tolcapone	Hydrochloric Acid	33.9L
	Purified Water	286L
	Acetic Acid	61L
	Acetone GPR Grade	89.7L
	Nitric Acid	8.25L
	Aluminium Trichloride	11.43Kg
	Pyridine	23.4L
	TOL-4	26.4Kg
	Ethanol GPR	255.6L
	Tolcapone (Product)	18.2Kg

2.2 Waste

There are four types of wastes generated at TopChem Pharmaceuticals which are as follows;

- Domestic Waste
- Mixed Recyclable Waste
- Hazardous Solid Waste
- Hazardous Liquid Waste

For Domestic & Mixed Recyclable waste, Barna Waste Disposal & Recycling is the approved waste disposal contractor.

For Hazardous waste (Solid & Liquid), Soltec Ireland Limited and SRCL, trading as ECO Safe Systems are the approved waste disposal contractors.

The following is a summary of the quantity of waste collected from TopChem Pharmaceuticals during the review period Jan 2013 – Dec 2013.

Table 3:

Waste Type	Quantity
Domestic Waste	0.56 Tonnes
Mixed Recyclables	2.00 Tonnes

The mixed recyclables collected by Barna Waste Disposal & Recycling are delivered to its facility in Carrowbrowne, Galway. Mixed recyclables are fed into their picking station where they are sorted into their individual waste fractions by a combination of machine (called a ballistic separator) and manual picking. Once separated materials are baled, stored and transferred off site to approved brokers for recycling.

Note:

- 1100Liter Mixed Recyclable bin = 80kg (this is the standard weight used by Barna Waste Disposal & Recycling in 2013 as they have no weighing system installed on their lorries as yet).
- The 240 Litre Domestic Bins is weighed by Barna Waste Disposal & Recycling.

The domestic waste quantity has decreased from 0.66 Tonnes in 2012 to 0.56 Tonnes in 2013 i.e. 15% decrease. The volume of mixed recyclables generated from the facility decreased from 2.16 Tonnes in 2012 to 2.00 Tonnes in 2013 which is reflective of a decrease in Production output.

Hazardous Waste Disposal 2013:

Table 4:

Solid Waste: (Total 2182Kgs)

Month	Date	Provider	C1 Number	Quantity (Kgs)	Quantity (L)	Chemical Composition of Waste	Waste Stream	C1 Number Off-site	Liquid waste Secondary Recovery location	Use for Residue waste
Mar-13	05/03/2013	ECO Safe Systems	SO000739	110	1000	Solid Flammable Waste	Toluene contaminated rags	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	109	1000	Solid Flammable Waste	Toluene contaminated rags	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	122	1000	Solid Flammable Waste	Toluene contaminated rags	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	115	1000	Solid Flammable Waste	Toluene contaminated rags	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	119	1000	Solid Flammable Waste	Toluene contaminated rags	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	126	1000	Solid Flammable Waste	Toluene contaminated rags	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel

Month	Date	Provider	C1 Number	Quantity (Kgs)	Quantity (L)	Chemical Composition of Waste	Waste Stream	C1 Number Off-site	Liquid waste Secondary Recovery location	Use for Residue waste
May-13	17/05/2013	ECO Safe Systems	SO001048	72	Pallet	Contaminated Glassware	Glassware	IE 314830	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belgium. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	64	Pallet	Contaminated Steel & Plastic Drums	Waste Packaging	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belgium. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	116	Pallet	Contaminated Steel & Plastic Drums	Waste Packaging	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belgium. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	136	Pallet	Contaminated Steel & Plastic Drums	Waste Packaging	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belgium. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Jul-13	23/07/2013	ECO Safe Systems	SO001070	143	1000	Solid Flammable Waste	Toluene contaminated rags	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belgium. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Jul-13	23/07/2013	ECO Safe Systems	SO001070	145	1000	Solid Flammable Waste	Toluene contaminated rags	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belgium. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Jul-13	23/07/2013	ECO Safe Systems	SO001070	137	Pallet	Contaminated Steel & Plastic Drums	Waste Packaging	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belgium. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel

Month	Date	Provider	C1 Number	Quantity (Kgs)	Quantity (L)	Chemical Composition of Waste	Waste Stream	C1 Number Off-site	Liquid waste Secondary Recovery location	Use for Residue waste
Jul-13	23/07/2013	ECO Safe Systems	SO001070	56	Pallet	Contaminated Steel & Plastic Drums	Waste Packaging	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Oct-13	24/10/2013	ECO Safe Systems	SO001363	142	1000	Solid Flammable Waste	Toluene contaminated rags	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Oct-13	24/10/2013	ECO Safe Systems	SO001363	134	1000	Solid Flammable Waste	Toluene contaminated rags	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Oct-13	24/10/2013	ECO Safe Systems	SO001363	128	1000	Solid Flammable Waste	Toluene contaminated rags	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Oct-13	24/10/2013	ECO Safe Systems	SO001363	104	Pallet	Contaminated Steel & Plastic Drums	Waste Packaging	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Oct-13	24/10/2013	ECO Safe Systems	SO001363	104	Pallet	Contaminated Steel & Plastic Drums	Waste Packaging	IE 314888	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel

Table 5:

Liquid Waste: (Total 12,682Kgs)

Month	Date	Provider	C1 Number Pickup	Quantity (Kgs)	Quantity (L)	Chemical Composition of Waste	Waste Stream	C1 Number Off-Site	Solid waste Secondary Recovery location	Use for Residue waste
Mar-13	05/03/2013	ECO Safe Systems	SO000739	200	210	Solvent Liquid Waste	Non Chlorinated	IE 314511	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	200	210	Solvent Liquid Waste	Non Chlorinated	IE 314511	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	200	210	Solvent Liquid Waste	Non Chlorinated	IE 314511	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	200	210	Solvent Liquid Waste	Non Chlorinated	IE 314511	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel

Month	Date	Provider	C1 Number Pickup	Quantity (Kgs)	Quantity (L)	Chemical Composition of Waste	Waste Stream	C1 Number Off-Site	Solid waste Secondary Recovery location	Use for Residue waste
Mar-13	05/03/2013	ECO Safe Systems	SO000739	209	210	Solvent Liquid Waste	Non Chlorinated	IE 314511	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	209	210	Solvent Liquid Waste	Non Chlorinated	IE 314511	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	209	210	Solvent Liquid Waste	Non Chlorinated	IE 314511	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	209	210	Solvent Liquid Waste	Non Chlorinated	IE 314511	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	207	210	Solvent Liquid Waste	Non Chlorinated	IE 314511	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel

Month	Date	Provider	C1 Number Pickup	Quantity (Kgs)	Quantity (L)	Chemical Composition of Waste	Waste Stream	C1 Number Off-Site	Solid waste Secondary Recovery location	Use for Residue waste
Mar-13	05/03/2013	ECO Safe Systems	SO000739	207	210	Solvent Liquid Waste	Non Chlorinated	IE 314511	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	208	210	Solvent Liquid Waste	Non Chlorinated	IE 314511	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	207	210	Solvent Liquid Waste	Non Chlorinated	IE 314511	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	201	210	Water	Basic Aqueous	IE 314829	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belgium. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	201	210	Water	Basic Aqueous	IE 314829	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belgium. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	201	210	Water	Basic Aqueous	IE 314829	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belgium. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel

Month	Date	Provider	C1 Number Pickup	Quantity (Kgs)	Quantity (L)	Chemical Composition of Waste	Waste Stream	C1 Number Off-Site	Solid waste Secondary Recovery location	Use for Residue waste
Mar-13	05/03/2013	ECO Safe Systems	SO000739	201	210	Water	Basic Aqueous	IE 314829	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Mar-13	05/03/2013	ECO Safe Systems	SO000739	201	210	Water	Basic Aqueous	IE 314829	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belguim. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	200	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	200	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	200	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	202	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	202	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel

Month	Date	Provider	C1 Number Pickup	Quantity (Kgs)	Quantity (L)	Chemical Composition of Waste	Waste Stream	C1 Number Off-Site	Solid waste Secondary Recovery location	Use for Residue waste
May-13	17/05/2013	ECO Safe Systems	SO001048	202	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	202	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	205	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	206	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	206	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	206	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel

Month	Date	Provider	C1 Number Pickup	Quantity (Kgs)	Quantity (L)	Chemical Composition of Waste	Waste Stream	C1 Number Off-Site	Solid waste Secondary Recovery location	Use for Residue waste
May-13	17/05/2013	ECO Safe Systems	SO001048	220	210	Water	Basic Aqueous	IE 314829	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belgium. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	220	210	Water	Basic Aqueous	IE 314829	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belgium. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	238	210	Chlorinated	Chlorinated	IE 314827	Umweltservice Lindenschmidt KG, Krombacher Strabe 42 - 46, 57223. Kreuztal - Krombach Germany. License Number is E97095037	Secondary Fuel
May-13	17/05/2013	ECO Safe Systems	SO001048	220	210	Water	Basic Aqueous	IE 314829	Recyfuel B4480 Zoning, Industriel D'Ehein, Engis, Belgium. License D3200 / 61080 / RGPED / 2008 / 2 / AP	Secondary Fuel
Jul-13	23/07/2013	ECO Safe Systems	SO001070	200	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Jul-13	23/07/2013	ECO Safe Systems	SO001070	200	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Jul-13	23/07/2013	ECO Safe Systems	SO001070	200	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel

Month	Date	Provider	C1 Number Pickup	Quantity (Kgs)	Quantity (L)	Chemical Composition of Waste	Waste Stream	C1 Number Off-Site	Solid waste Secondary Recovery location	Use for Residue waste
Jul-13	23/07/2013	ECO Safe Systems	SO001070	200	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Jul-13	23/07/2013	ECO Safe Systems	SO001070	196	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Jul-13	23/07/2013	ECO Safe Systems	SO001070	196	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
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Jul-13	23/07/2013	ECO Safe Systems	SO001070	194	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Jul-13	23/07/2013	ECO Safe Systems	SO001070	223	210	Water	Basic Aqueous	IE 3154811	SAVA Gmbh & Co KG, Niederlassung, Rostock, Germany. Permit Number 12HRO03010	Secondary Fuel
Jul-13	23/07/2013	ECO Safe Systems	SO001070	29	25	Hydrochloric Acid	Acidic	IE 314827	Umweltservice Lindenschmidt KG, Krombacher Strabe 42 - 46, 57223. Kreuztal - Krombach Germany. License Number is E97095037	Secondary Fuel
Jul-13	23/07/2013	ECO Safe Systems	SO001070	29	25	Hydrochloric Acid	Acidic	IE 314827	Umweltservice Lindenschmidt KG, Krombacher Strabe 42 - 46, 57223. Kreuztal - Krombach Germany. License Number is E97095037	Secondary Fuel
Jul-13	23/07/2013	ECO Safe Systems	SO001070	29	25	Hydrochloric Acid	Acidic	IE 314827	Umweltservice Lindenschmidt KG, Krombacher Strabe 42 - 46, 57223. Kreuztal - Krombach Germany. License Number is E97095037	Secondary Fuel
Jul-13	23/07/2013	ECO Safe Systems	SO001070	28	25	Hydrochloric Acid	Acidic	IE 314827	Umweltservice Lindenschmidt KG, Krombacher Strabe 42 - 46, 57223. Kreuztal - Krombach Germany. License Number is E97095037	Secondary Fuel

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Jul-13	03/07/2013	Soltec Ireland Ltd	SO001166	200	200	Solvent Liquid Waste	Non Chlorinated	Not Applicable	Soltec Ireland Ltd, Zone A Mullingar Business Park, Mullingar, Co Westmeath. WO115-01. CW058	Paint Thinners
Jul-13	03/07/2013	Soltec Ireland Ltd	SO001166	200	200	Solvent Liquid Waste	Non Chlorinated	Not Applicable	Soltec Ireland Ltd, Zone A Mullingar Business Park, Mullingar, Co Westmeath. WO115-01. CW058	Paint Thinners
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Jul-13	03/07/2013	Soltec Ireland Ltd	SO001166	200	200	Water	Basic Aqueous	WH001508	Afvalstoffen Terminal Moerdijk B.V. Industrieterrein, Seaport M 152, Vlasweg 12, NL 4752 PW Moerdijk, The Netherlands.	Secondary Fuel
Jul-13	03/07/2013	Soltec Ireland Ltd	SO001166	200	200	Water	Basic Aqueous	WH001509	Afvalstoffen Terminal Moerdijk B.V. Industrieterrein, Seaport M 152, Vlasweg 12, NL 4752 PW Moerdijk, The Netherlands.	Secondary Fuel
Oct-13	24/10/2013	ECO Safe Systems	SO001363	201	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Oct-13	24/10/2013	ECO Safe Systems	SO001363	200	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
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Oct-13	24/10/2013	ECO Safe Systems	SO001363	210	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel

Month	Date	Provider	C1 Number Pickup	Quantity (Kgs)	Quantity (L)	Chemical Composition of Waste	Waste Stream	C1 Number Off-Site	Solid waste Secondary Recovery location	Use for Residue waste
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Oct-13	24/10/2013	ECO Safe Systems	SO001363	197	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
Oct-13	24/10/2013	ECO Safe Systems	SO001363	197	210	Solvent Liquid Waste	Non Chlorinated	IE 315164	Avanti Environmental Group Ltd, Avanti Treatment & Transfer Station, Charley Wood Road, Knowsley Ind Est, Liverpool, Merseyside L33 7SG.	Secondary Fuel
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Oct-13	24/10/2013	ECO Safe Systems	SO001363	230	210	Water	Basic Aqueous	IE 315481	SAVA Gmbh & Co KG, Niederlassung, Rostock, Germany. Permit Number 12HRO03010	Secondary Fuel
Oct-13	24/10/2013	ECO Safe Systems	SO001363	230	210	Water	Basic Aqueous	IE 315481	SAVA Gmbh & Co KG, Niederlassung, Rostock, Germany. Permit Number 12HRO03010	Secondary Fuel

Month	Date	Provider	C1 Number Pickup	Quantity (Kgs)	Quantity (L)	Chemical Composition of Waste	Waste Stream	C1 Number Off-Site	Solid waste Secondary Recovery location	Use for Residue waste
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2012 & 2013 Hazardous Waste Disposal Comparison:

Table 6:

Waste Stream	2012 Qty	2013 Qty	Variance	Comment
Solid Waste	1781 Kgs	1393Kgs	-21.5%	Related to no PGX production in 2013
Contaminated Glassware	161Kgs	72Kgs	-55.3%	
Contaminated Steel & Plastic Drums	0kgs	668kgs	+100%	New waste stream
Non Chlorinated Waste	8000 Litres	11090 Litres	+38.6%	Associated with the nature of 2013 production processes
Chlorinated Waste	1200 Litres	210 Litres	-82.5%	Related to no PGX production in 2013
Basic Aqueous Waste	2400 Litres	3340 Litres	+39.2%	Associated with the nature of 2013 production processes
Mercury Waste	0 Litres	0 Litres	-	No change Year on Year
Acidic Waste	0 Litres	225 Litres	+100%	Historically acidic waste was neutralised and discarded to basic aqueous waste stream

2.3 Energy & Water Usage

Electricity is the only source of energy used in TopChem Pharmaceuticals.

Refer to section 2.1 for consumption details for the period under review.

As regards Water Usage at the site, any water required in the Production Process is purchased as a raw material. All remaining water requirements at the facility are for domestic purposes only, i.e. Toilets, Kitchen. Water is also used in the Production Laboratory for equipment cooling but this is non-process contacting.

During the period under review TopChem Pharmaceuticals purchased 8000L of Purified Water from Ultra-Pure Laboratories, Foxford, Co Mayo for use in the Production Process.

2.4 Environmental Incidents & Complaints

During the review period January 1st 2013 to December 31st 2013, no environmental complaints were received by TopChem Pharmaceuticals Limited.

There were no incidents at the TopChem Pharmaceuticals site which required reporting to the Environmental Protection Agency.

There was one Environmental incident reported within TopChem Pharmaceuticals during the period Jan 1st 2013 – Dec 31st 2013 where Acidic waste was added to a Basic Waste Stream in error. The pH was adjusted and there was no impact on the environment.

3.0 Environmental Management of Activity

3.1 Environmental Objectives & Targets

Table 7 below is an update on each of the Objectives agreed for the period Jan 1st 2013 – Dec 31st 2013.

Table 7:

Objective	Status
Install system to collect rain water for servicing Toilets	Not completed. On the list of tasks to be completed in 2014.
Assess the economic and environmental benefits of a continuous supply of hot water in the kitchen.	Assessment complete. Economic output outweighs benefit.
Install light sensors in the Employee Entrance, landing over reception, main office in admin, Visitor toilet and Units 1 & 2.	To be completed in 2014
Assess if the photocopier / scanner / printer / fax can revert to Hibernate mode when not in use.	Photocopier / scanner / printer / fax reverts to 'hibernate' mode when not in use.
Implement 'red card' system which acts as a reminder for employees to switch their computer to hibernate mode when not required.	'Red Card' system implemented which is located beside each computer user.
Implement Paper Reduction Initiative.	Documents printed on double sides, Standard Operating Procedures only allocated to necessary areas. Projector used at meetings to review documents instead of printing multiple copies of documents.

3.2 Environmental Management Report

The key environmental objective for the company in 2013 was to continue to track all conditions in the company's IPPC License (P0828-01) and ensure that the high level of environmental compliance achieved in previous years was maintained.

With this in mind the following is an overview of the environmental accomplishments for the facility during 2013,

- The company received no environmental complaints during the Year.
- Approval received from the EPA for Tolcapone (25/2/13), Piribedil (20/5/13), Myristyl Gamma Picolinium Chloride (22/10/13), Liothyronine Hydrochloride (19/12/13) and Selenious Acid (20/12/13).
- All mobile bunds used at TopChem Pharmaceuticals were inspected on a regular basis and all were found to be satisfactory.
- The bund in the Chemical Store was certified on the 19/7/13 by Chemstore, Clondrinagh Industrial Estate, Ennis Road, Limerick. The water used in the certification process was collected by Thornton's Tanker Services, Unit 53B, Parkwest Business Park, Dublin 10 and sent for treatment.
- An Environmental Noise Survey was completed by Allegro Acoustics Ltd, Unit 2A Riverside, Tallaght Business Park, Tallaght, Dublin 24, ref Report DC 1216-02 on 4th July 2013. The noise monitoring was undertaken to verify compliance or otherwise with the Noise Emission Limits as in accordance with the guidelines as set out in guidance note for noise. It was observed that the specific noise level from the facility at all measurement locations was significantly below the relevant limits for day, evening and night time, hence no non-conformances were noted.
- The company's EHS Goals & Objectives and associated key performance indicators were updated on a weekly basis and results posted on a dedicated Environmental Health & Safety notice board.
- On site environmental communications were maintained with employees through planned EHS Meetings.
- The company continued to use approved waste disposal contractors for disposal of hazardous, domestic and recyclable waste streams generated on site.
- The company continued to facilitate EHS training on site in areas such as basic chemical awareness, use of spill kits, manual handling and fire safety training.
- Monthly Housekeeping Inspections were conducted on site.

Overall, the company continued to display high levels of control & employee awareness on environmental health and safety matters during 2013.

3.3 Environmental Management Proposals for 2014

Table 8:

Objective	Responsibility	How objective will be achieved	Timeframe
Install system to collect rain water for servicing Toilets	EHS Officer	Identify Service Contractor and implement accordingly	Q1- Q4 2014
Review Lighting across the facility with a view to reducing costs	EHS Officer	Reduce the # of bulbs per fitting	Q1 – Q4 2014
Install light sensors in the employee entrance, landing over reception, main office in admin, Visitor Toilet, Unit 1 & Unit 2.	EHS Officer	Identify Service Contractor and implement accordingly	Q2 2014
New Product Introductions to review scope for waste reduction	Project Team	Review by Project team during Development	Q1 – Q4 2014
Continue to implement Paper Reduction Initiatives	QA	New process for annual and biennial document review whereby no reprint required	Q1 – Q4 2014
Assess the viability and benefit of introduction of a “bike to work scheme”	QA	Gather information on process and level of interest within the company	Q1 – Q4 2014

4.0 Financial Provision

TCP Ltd make allowances for financial provision as required under Condition No. 12 of licence no. P0828-01. Details of same can be referenced in the ELRA Report submitted to the Agency in March 2014.

5.0 Licence Specific Reports

5.1 PRTR

Attached are the following AER / PRTR files which were submitted to the Agency in March 2014.

- Facility ID and Activities sheet
- Releases to Air – nothing reported given TCP has no emissions to Air other than minor fugitive emissions.
- Releases to Water – Nothing reported given TCP has no emissions to Water.
- Releases to Waste Water or Sewer – Nothing recorded given TCP has no emissions to sewer other than wastes from Toilet and kitchen facilities and purified water from heating and cooling baths which are non-product contacting.
- Releases to Land – Nothing reported given TCP has no emissions to Land.
- Treatment of Transfers of Waste

5.2 Residual Management Plan

Details can be referenced in the Residual Management Plan submitted to the Agency in March 2014.

5.3 Solvent Management Plan

As per condition 6.11.1, TCP must report on the use of solvents per each calendar Year as part of its AER.

As advised in the Solvent Management Plan submitted to the Agency in March 2014, due to the scale of the operation at TopChem Pharmaceuticals, only small volumes of solvents are used, hence there is no requirement for fugitive emissions monitoring or a solvent reduction plan.

The procurement, disposition and disposal of solvents are monitored on an on-going basis under the auspices of our internal quality control and environmental health and safety systems.

The Table overleaf summarises Solvents consumed at TCP for the period January 1st 2013 – December 31st 2013.

Solvents & Water Usage in litres at TCP from January 1st 2013 to December 31st 2013

Table 9:

Month	Acetone	Methanol	MeCN	Etoac	Hexane	Heptane	THF	DCM	MTBE	EtOH	Toluene	IPA	Water*
Stock carried over 2012 (L)	257.5	110	15	12.5	4	5	10	42.5	255	22.5	27.5	252.5	1015
Solvents ordered 2013 in Litres (L)													
Jan-13	1200	220	30	575		5			575		100		
Feb-13	490	20	25				20						1600
Mar-13	40			500			20			50		600	1600
Apr-13	500	15	35						35	210	110	10	
May-13	750	100										600	
Jun-13	150	50	50	357.5								7.5	1600
Jul-13	165	100		275								840	1600
Aug-13	640	40	40	275						10			
Sep-13	230	100	30	150					50		50		
Oct-13	340		40	50									1600
Nov-13	320	100	40									600	
Dec-13												800	
Total Ordered (L)	4825	745	290	2182.5	0	5	40	0	660	270	260	3457.5	8000
Total In-house (L)	5082.5	855	305	2195	4	10	50	42.5	915	292.5	287.5	3710	9015
Remaining Stocks End 2013 (L)	475	94.5	35	10.5	4	10	10	5	56	76	40	835	220
Total Usage (L)	4607.5	760.5	270	2184.5	0	0	40	37.5	859	216.5	247.5	2875	8795

MeCN = Acetonitrile
 EtoAC = Ethyl Acetate
 THF = Tetrahydrofuran

IPA = Isopropyl Alcohol
 EtOH = Ethanol
 MTBE = Methyl-tert-Butyl-Ether

DCM = Dichloromethane

Table 10 below provides an overview of the total solvents procured by TCP during the review period January 1st 2013 – December 31st 2013.

It also illustrates the opening and closing balances on site for 2013 together with new waste produced, shipped and a volume balancing result.

Table 10:

Item	Unit	Quantity
Solvent Usage	Litres	12,098
Opening Waste balance Jan 2013		740
Non Chlorinated solvent waste -		555
Chlorinated solvent Waste -		21
Basic Aqueous –	Litres	164
Acidic –		0
Mercury -		0
Net waste Recorded Jan 2013 – Dec 2013		15841.5
Non Chlorinated solvent waste -		11645
Chlorinated solvent Waste -	Litres	216
Basic Aqueous –		3765.5
Acidic –		215
Mercury -		0
Closing Waste balance Dec 2013		2312.5
Non Chlorinated solvent waste -		1498
Chlorinated solvent Waste -		63.5
Basic Aqueous –	Litres	751
Acidic –		0
Mercury -		0
Waste shipped Jan 2013 – Dec 2013		14865
Non Chlorinated solvent waste -		11090
Chlorinated solvent Waste -		210
Basic Aqueous –	Litres	3340
Acidic –		225
Mercury -		0
Volume Balancing Result (Solvent Usage V's Waste Shipped & Closing Balance at Year End)*	%	142%

In summary, the volume of waste solvent produced exceeded the volume of solvent purchased by 42%. The reason for this is that a number of waste streams are diluted with purified water which is occasionally used as a manufacturing material.

8795L of Purified water was consumed within TCP in 2013. However, Purified water is not included in the overall solvent usage. Approximately 40% of the material purchased is used as a manufacturing material and in analytical testing in our QC laboratory. The remainder is consumed in cooling and heating baths.

5.4 ELRA:

The ELRA Report was updated and submitted to the Agency in March 2014.

During 2013, the following changes, as previously advised to the Agency, were implemented on site;

- Five new products were introduced to the site in 2013 namely Tolcapone, Piribedil, Myristyl Gamma Picolinium Chloride, Liothyronine Hydrochloride and Selenious Acid.
- Of the five products, only two were actually implemented in production – Tolcapone & Piribedil.



Environmental Protection Agency

(PRTR#: P0828 | Facility Name: TopChem Pharmaceuticals Limited | Filename: P0828_2013.xls | Return Year: 2013)

[Guidance to completing the PRTR workbook](#)

AER Returns Workbook

Version 1.1.18

REFERENCE YEAR	2013
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1. FACILITY IDENTIFICATION

Parent Company Name	TopChem Pharmaceuticals Limited
Facility Name	TopChem Pharmaceuticals Limited
PRTR Identification Number	P0828
Licence Number	P0828-01

Waste or IPPC Classes of Activity

No.	class name
5.16	The use of a chemical or biological process for the production of basic pharmaceutical products.

Address 1	Ballymote Business Park
Address 2	Carrownanty
Address 3	Ballymote
Address 4	County Sligo
	Sligo
Country	Ireland
Coordinates of Location	-8.52186 54.0885
River Basin District	IEWE
NACE Code	2120
Main Economic Activity	Manufacture of pharmaceutical preparations
AER Returns Contact Name	Nigel Cannon
AER Returns Contact Email Address	nigel@topchempharma.com
AER Returns Contact Position	General Manager
AER Returns Contact Telephone Number	071 91 89685
AER Returns Contact Mobile Phone Number	087 9162685
AER Returns Contact Fax Number	071 9197864
Production Volume	620.0
Production Volume Units	Kg
Number of Installations	1
Number of Operating Hours in Year	6000
Number of Employees	24
User Feedback/Comments	N/A
Web Address	www.topchempharma.com

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
4(e)	Installations using a chemical or biological process for the production on an industrial scale of basic pharmaceutical products

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

Is it applicable?	No
Have you been granted an exemption ?	No
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	Not applicable
Is the reduction scheme compliance route being used ?	Not applicable

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) ?	No
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4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

2019-2020 (by Pollutant) - Total for Prater Pharmaceuticals (Emissions) - 2019-2020 (by Pollutant) - 2019-2020

15/10/2024

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

POLLUTANT		METHOD			Please enter all quantities in this section in KGs			
No. Annex II	Name	M/C/E	Method Used		Emission Point 1	QUANTITY		
			Method Code	Designation or Description		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

POLLUTANT		METHOD			Please enter all quantities in this section in KGs			
No. Annex II	Name	M/C/E	Method Used		Emission Point 1	QUANTITY		
			Method Code	Designation or Description		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)

POLLUTANT		METHOD			Please enter all quantities in this section in KGs			
Pollutant No.	Name	M/C/E	Method Used		Emission Point 1	QUANTITY		
			Method Code	Designation or Description		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:

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# 41529 Facility Name: TopChem Pharmaceuticals Limited | Reporting Period: 2013-01-01 to 2014-12-31

11/15/2014 10:40

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

POLLUTANT				RELEASES TO WATERS				Please enter all quantities in this section in KGs			
No. Annex II	Name	M/C/E	Method Code	Method Used		QUANTITY					
				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	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				RELEASES TO WATERS				Please enter all quantities in this section in KGs			
No. Annex II	Name	M/C/E	Method Code	Method Used		QUANTITY					
				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	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				RELEASES TO WATERS				Please enter all quantities in this section in KGs			
Pollutant No.	Name	M/C/E	Method Code	Method Used		QUANTITY					
				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	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](#)

11/RE/17 19/26 Licence Name: Top Green Pharmacy (Retail) (Retail) Licence: 11/02/2012-06/18/18 11/03/2014 16:22

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 Code	Method Used 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			
Pollutant No.	Name	M/C/E	Method Code	Method Used 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](#)

[PRTR] - [Pollutant] Name: [Pollutant Name] [Licence] [Region] [Year] [Year]

11/11/2014 10:32

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND				Please enter all quantities in this section in KGs		
POLLUTANT		METHOD		QUANTITY		
No. Annex II	Name	M/C/E	Method Used 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		
Pollutant No.	Name	M/C/E	Method Used 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

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 - Name and Licence/Permit No of Recover/Disposer	Haz Waste - Address of Next Destination Facility	Name and License / Permit No. and Address of Final Receiver / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination (i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY))
						M/C/E	Method Used		Not	Non Haz Waste	Address of Recover/Disposer		
To Other Countries	15 02 02	Yes	1,393	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	R1	M	Weighed	Abroad	ECO Safe Systems Limited,54-2 WCP-DC-09-1203-01	Unit 1A,Allied Industrial Estate,Kylemore Road Ballyfermot,Dublin 10,Ireland	Recyfuel B4480 Zoning,D3200 / 61080 / RGPED / 2008 / 2 / AP,Recyfuel B4480 Zoning,Industriel D'Ehein,Engis,..Belgium	Recyfuel B4480 Zoning,Industriel D'Ehein,Engis,..Belgium	
To Other Countries	15 01 10	Yes	0,717	packaging containing residues of or contaminated by dangerous substances	R1	M	Weighed	Abroad	ECO Safe Systems Limited,54-2 WCP-DC-09-1203-01	Unit 1A,Allied Industrial Estate,Kylemore Road Ballyfermot,Dublin 10,Ireland	Recyfuel B4480 Zoning,D3200 / 61080 / RGPED / 2008 / 2 / AP,Recyfuel B4480 Zoning,Industriel D'Ehein,Engis,..Belgium	Recyfuel B4480 Zoning,Industriel D'Ehein,Engis,..Belgium	
To Other Countries	07 05 13	Yes	0,072	solid wastes containing dangerous substances	R1	M	Weighed	Abroad	ECO Safe Systems Limited,54-2 WCP-DC-09-1203-01	Unit 1A,Allied Industrial Estate,Kylemore Road Ballyfermot,Dublin 10,Ireland	Recyfuel B4480 Zoning,Industriel D'Ehein,Engis,..Belgium	Recyfuel B4480 Zoning,Industriel D'Ehein,Engis,..Belgium	
To Other Countries	07 05 04	Yes	9,912	other organic solvents, washing liquids and mother liquors	R1	M	Weighed	Abroad	ECO Safe Systems Limited,54-2 WCP-DC-09-1203-01	Unit 1A,Allied Industrial Estate,Kylemore Road Ballyfermot,Dublin 10,Ireland	Advanti Environmental Group Ltd,EPRX/P3038HX,Charley Wood Road,Knowsley Industrial Park,Merseyside L33 7SG,United Kingdom	Charley Wood Road,Knowsley Industrial Park,Merseyside L33 7SG,United Kingdom	
To Other Countries	07 05 03	Yes	0,238	organic halogenated solvents, washing liquids and mother liquors	R1	M	Weighed	Abroad	ECO Safe Systems Limited,54-2 WCP-DC-09-1203-01	Unit 1A,Allied Industrial Estate,Kylemore Road Ballyfermot,Dublin 10,Ireland	Umweltservice Lindenschmidt KG,E97095037,Umweltservice Lindenschmidt KG,Krombacher Strabe 42 - 46,57223 Kreuztal,Krombach,Germany	Umweltservice Lindenschmidt KG,Krombacher Strabe 42 - 46,57223 Kreuztal,Krombach,Germany	
To Other Countries	07 05 01	Yes	1,665	aqueous washing liquids and mother liquors	R1	M	Weighed	Abroad	ECO Safe Systems Limited,54-2 WCP-DC-09-1203-01	Unit 1A,Allied Industrial Estate,Kylemore Road Ballyfermot,Dublin 10,Ireland	Recyfuel B4480 Zoning,Industriel D'Ehein,Engis,..Belgium	Recyfuel B4480 Zoning,Industriel D'Ehein,Engis,..Belgium	
To Other Countries	07 05 01	Yes	1,34	aqueous washing liquids and mother liquors	R1	M	Weighed	Abroad	ECO Safe Systems Limited,54-2 WCP-DC-09-1203-01	Unit 1A,Allied Industrial Estate,Kylemore Road Ballyfermot,Dublin 10,Ireland	SAVA GmbH & Co. KG,12HR003010,Ostertwete,1,Brunsbüttel 25541,Germany	Ostertwete,1,Brunsbüttel 25541,Germany	
To Other Countries	06 01 02	Yes	0,255	hydrochloric acid	R1	M	Weighed	Abroad	ECO Safe Systems Limited,54-2 WCP-DC-09-1203-01	Unit 1A,Allied Industrial Estate,Kylemore Road Ballyfermot,Dublin 10,Ireland	Umweltservice Lindenschmidt KG,E97095037,Umweltservice Lindenschmidt KG,Krombacher Strabe 42 - 46,57223 Kreuztal,Krombach,Germany	Umweltservice Lindenschmidt KG,Krombacher Strabe 42 - 46,57223 Kreuztal,Krombach,Germany	

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Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non-Haz Waste: Name and Licence/Permit No of Receiver/Disposer	Haz Waste : Address of Next Destination Facility Non-Haz Waste: Address of Receiver/Disposer	Name and License / Permit No. and Address of Final Receiver / 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	07 05 04	Yes	0.8	other organic solvents, washing liquids and mother liquors	R2	M	Weighted	Offsite in Ireland	Soltec Ireland Limited,WO115-01 CW058	Zone A,Mullingar Business Park,Mullingar,Co Westmeath,Ireland	Soltec Ireland Limited,WO115-01 CW058,Zone A,Mullingar Business Park,Mullingar,Co Westmeath,Ireland	Zone A,Mullingar Business Park,Mullingar,Co Westmeath,Ireland
To Other Countries	07 05 01	Yes	0.4	aqueous washing liquids and mother liquors	R1	M	Weighted	Abroad	Soltec Ireland Limited,WO115-01 CW058	Zone A,Mullingar Business Park,Mullingar,Co Westmeath,Ireland	Afvalstoffen Terminal Moerdijk BV Industrieterrein ,S25215,Seaport M152,Viasweg 12 ,Moerdijk,4752PW,Netherland	Seaport M152,Viasweg 12,Moerdijk,4752PW,Netherlands

Select a new Transfer Method by clicking the Description of Waste then click the Search button