SOLTEC IRELAND LTD

WASTE LICENCE No: W0115-01

ANNUAL ENVIRONMENTAL REPORT

of

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1 Introduction

11.1 Annual Environmental Report

- **11.4.1** The Licence shall submit to the agency for its agreement within thirteen months from date of grant of the licence, and within one month of the end of each year. Thereafter an Annual Environmental Report (A.E.R)
- **11.4.2** The (A.E.R) shall include as a minimum the information specified in schedule G content of the Annual Environmental Report and shall be prepared in accordance with any relevant written guidance issued by the agency. Schedule G content of the annual environmental report.

Annual Environmental Report Findings.

- 1. Reporting Period (Page No 2)
- 2. Waste activities carried out at the facility. (Page No 2)
- 3. Quantity and composition of waste received, disposed of and recovered during the reporting period and each previous year. (Page Nos 3-7)
- 4. Quantity and nature of recovered solvent dispatched from the facility. (Page No 8)
- 5. Quantity and nature of wastes dispatched from the facility for recovery or disposal (Page No 9)
- 6. Summary reports on emissions. (Page No 10)
- 7. Summary of results and interpretations of environmental monitoring completed by Euro Environmental Services on Gas, Noise and Groundwater. (Filed after Page No 10)
- 8. Resource and energy consumption summary. (Page No 11)
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- 10. Report on development works undertaken during the reporting period and a time scale for those proposed during the coming year. (Page No 12)
- 11. Estimated annual and cumulative quantity of indirect emissions to groundwater. (Page No 12)
- 12. Report on the progress towards achievement of the environmental objectives and targets contained in previous year's report. (Page No 13)
- 13. Schedule of environmental objectives and targets for the forthcoming year. (Page No 14)
- 14. Full title and a written summary of any procedures developed by the licence in the year which relates to the facility operation (Page No 14)
- 15. Tank, pipeline and bund testing and inspection report. (Page No 15)
- 16. Reported incidents and complaints summaries. (Page No 15)
- 17. Reports on financial provision made under the Licence, management and staffing structure of the facility, and program for public information. (Page Nos 16/17)
- 18. Report on training of staff. (Page No 18)
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- 20. Any other items specified by the agency. (Page No 18)

1 Reporting period

- **1.1** Soltec was issued with waste Licence W0115- 01 on 21st June 2002.
- **1.2** This A.E.R is the sixth to be submitted by Soltec Ireland Ltd and covers the twelve-month period from 1st Jan 2008 to 31st December 2008.

2 Waste activities carried out at the facility.

2.1 The licensed activities carried out at Soltec's facility as per Waste Licence no. W0115- 01 are as follows:

Fourth, Schedule of the waste management act 1996.

Class 1: Solvent reclamation or regeneration.

This activity is limited to the distillation of waste solvent.

Conditions:

- **5.3.1** Storage of waste
- **5.3.3** No waste shall be stored at the facility for longer than six months.
- **5.8** Off site disposal and recovery.
- **5.8.1** Waste sent off- site for recovery or a waste contractor agreed by the E. P.A. shall only convey disposal.

3 Quantity and composition of waste received disposed of and recovered.

- **3.1** The types, quantities and destinations of waste handled by Soltec's waste transfer facility over the 12-month period 1/01/08 31/12/08 have been calculated using invoices and site waste records.
- **3.2** Table 1 summarizes the types, quantities and destinations of waste brought to Soltec's facility over the 12- month period 01/01/08-31/12/08.

Table 1. Waste Received/ Recycled /Disposed from Soltec's Ireland Ltd Facility.

Month	Solvent	Solvent	Solvent	Solvent
	Composition	Received	Recycled	Disposed
	_	(Kgs)	(Kgs)	(Kgs)
Jan 08	Mixed Waste Solvent	21700	20700	1000
	Solvent Liquid Sludge	9200	1400	7800
	Solvent Liquid Waste	43240	40900	2340
	Toluene/Isopropanol	12580	12056	524
	Toluene/Isopropanol/ Acetate/Hexane	21800	20800	1000
	Waste Acetone	4000	3000	1000
Sub- Total		112520	98856	13664
Feb 08	Mixed Waste Solvent	22800	21800	1000
200 00	Solvent Liquid Sludge	71760	57875	13885
	Waste Methanol	20400	20400	0
Sub Total		114960	100075	14885
Mar 08	Mixed Solvent Waste	23000	21400	1600
	Solvent Liquid Sludge	4600	0	4600
	Solvent Liquid Waste	45140	42044	3096
	Acetone	2050	1650	400
	Methanol	24850	24850	0
Sub -Total		99640	89944	9696
April 08	Casing Waste	1000	0	1000
	Liquid Waste Solvent	400	0	400
	Solvent Liquid Sludge	9000	400	8600
	Solvent Liquid Waste	63600	60400	3200
	Acetone	1600	1400	200
	Methanol	21000	21000	0
Sub Total		96600	83200	13400

Month	Solvent	Solvent	Solvent	Solvent
	Composition	Received	Recycled	Disposed
		(kgs)	(kgs)	(kgs)
May 08	Ethanol Solution	9600	9600	0
	Liquid Solvent Sludge	1000	600	400
	Mixed Solvent Waste	22600	21600	1000
	Solvent Liquid Sludge	5400	600	4800
	Solvent Waste	800	0	800
	Acetone	1800	1200	600
	Toluene/Isopropanol	5000	5000	0
Sub -Total		46200	38600	7600
June 08	Ethanol Solution	7200	7200	0
	Mixed Solvent Waste	25100	22700	2400
	Solvent Liquid Sludge	11400	6000	5400
	Solvent Liquid Waste	6400	3000	3400
	Waste Solvent	18780	0	18780
Sub – Total		68880	38900	29980
July 08	Aqueous Waste	800	0	800
<u> </u>	Butoxyethanol	100	0	100
	Mixed Solvent Waste	18800	17800	1000
	Solvent Liquid Sludge	25350	13350	12000
	Solvent Liquid Waste	2200	800	1400
	Acetone	3200	2800	400
	Waste Water	1000	2000	100
Sub – Total	THE	51450	34750	15700
Zun Ivui				1000 Still on
				site
Aug 08	Solvent Liquid Sludge	17800	3400	14400
1145 00	Solvent Liquid Waste	22180	19887	2293
	Solvent Waste Sludge	2600	0	2600
	Methanol	10000	10000	0
	Methanol/Ethanol	8600	8600	0
	Waste Paint	400	0	400
	Toluene/Isopropanol	5000	5000	0
Sub – Total	2 oraciic/ 250pi opunoi	66580	46887	19693
Sept 08	Aqueous Ink	24400	0	24400
•	Mixed Waste Solvent	27800	25000	2800
	Solvent Liquid Sludge	4800	2200	2200
	Solvent Liquid Waste	42900	39794	2306
	Solvent Sludge	5200	200	3000
	Acetone	2600	2600	0
Sub – Total		107700	69794	34706
				3200 still on
				site

Month	Solvent	Solvent	Solvent	Solvent
	Composition	Received	Recycled	Disposed
	· ·	(kgs)	(kgs)	(kgs)
Oct 08	Reemtsma	1000	0	1000
	Solvent Liquid Sludge	9185	800	3585
	Solvent Liquid Waste	27300	20500	6600
	Solvent Mixed Waste	23200	20600	2600
	Solvent Sludge	1100	400	700
	Acetone	800	400	700
	Waste Develop Solvent	200	0	200
	Methanol	9000	9000	0
		1600	0	1600
C. I. W. A. I	Waste Solvent			
Sub Total		73385	51300	16285
				5800 still
N I 00		10070		on site
Nov 08	Aqueous Ink	10860		5430
	Liquid Solvent sludge	200		
	Mixed Waste Solvent	46100	20500	3000
	Solvent Liquid Sludge	7200		2400
	Solvent Liquid Waste	63025	44145	
	Waste Methanol	7000	7000	
Sub Total		134385	71645	10830
				51910 still
				on site
Dec 08	Aqua Ink Waste	4000		4000
	Mixed Waste Solvent	22300		
	Solvent Liquid Sludge	1800		
	Solvent Liquid Waste	62780		
	Solvent Ink Waste	2000		
	Waste Water	1000		
Sub -Total	***************************************	93880		4000
2000		- 2000		89880 still
				on site
Total in				on site
Kgs		1,066,180	723,951	190,439
1180		1,000,100	720,501	151,790
				Still on site
Total				190.43
in		1066.18	723.95	Tonnes
Tonnes		Tonnes	Tonnes	151.79
				Tonnes
				Still on
				Site

Solid Waste Received /Disposed/Recycled from Soltec's Facility

Month	Composition	Received	Recycled	Disposed of
		Kgs	Kgs	Kgs
Jan 08	Solid Waste	2600	0	2600
Sub Total		2600	0	2600
Feb 08	Solid Waste	16000	0	16000
Sub Total		16000	0	16000
Mar 08	Solid Waste	9000	0	9000
Sub Total		9000	0	9000
April 08	Solid Waste	10800	0	10800
Sub Total		10800	0	10800
May 08	Solid Waste	14600	0	14600
Sub Total		14600	0	14600
June 08	Solid Waste	9400	0	9400
Sub Total		9400	0	9400
July 08	Solid Waste	14800	0	14800
Sub Total		14800	0	14800
Aug 08	Solid Waste	10400	0	10400
Sub Total		10400	0	10400
Sept 08	Solid Waste	12000	0	9000
Sub Total		12000	0	9000
				3000 still on site

Oct 08	Solid Waste	14800	0	13800
Sub Total		14800	0	13800
				1000 still on site
Nov 08	Solid Waste	11600	0	7200
Sub Total		11600		7200
				4400 still on site
Dec 08	Solid Waste	12600	0	
Sub Total		12600	0	
				12600 still on site
Total		138,600		117,600
				21,000 still on Site
Total in		138.60	0	117.60 Tonnes
Tonnes		Tonnes		21.00 Tonnes Still on Site

3.3 Schedule A, of Waste Licence W0115-01 allows Soltec to accept up to 5,000-tonnes/year of organic solvents at the facility. The above table shows that the Soltec facility received 1,066,180 Kgs of waste solvent over the period January 2008 to December 2008.

Assuming that 1,000 kgs of solvent is equivalent to 1 tonne, the Soltec facility is operating within the conditions of the waste Licence, having received 1066.18 tonnes of organic solvents over the 12-month period. The total of solid waste received in was 138,600 Kgs or 138.60 tonnes, which was recovered off site as a fuel in cement kilms.

3.4 During the 12-month reporting period, Soltec records show that 724 Tonnes of solvent were recovered and 190.43 Tonnes of solvent were disposed of, and 151.79 Tonnes of solvent are still waiting to be processed. Assuming that 1,000 kgs of solvent is equivalent to 1 tonne, the total of solid waste disposed of off site is 117.60 Tonnes and 21.00 Tonnes of solid waste still on site.

4. Quantity and Nature of recovered solvent dispatched from the facility.

4.1 Table 2 summarises the quantities and nature of recovered solvent that was dispatched from the facility over the last 12 months. The figures are based on site records held by Soltec management.

Table 2. Quantity and Nature of recovered solvent dispatched from the facility.

Period	Recovered Solvent Liquid (Tonnes)	Use
Jan 08		Used as thinners by
То	724	commercial &
Dec 08		private consumers

Period	Solid Waste Recovered as Fuel for Cement Kiln (Tonnes)
January 08	
То	118
December 2008	

5. Quantity and Nature dispatched for recovery or disposal.

5.1 Table 3 summarises the quantities and nature of wastes that was dispatched from the facility over the last 12 months. The figures are based on site records held by Soltec management.

Table 3 Quantity and Nature of Waste dispatched for recovery or disposal.

Month	Solvent	Solid	Cardboard	Timber	Waste	Office	Bund
	Liquid	Waste				Waste	Water
2008	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
Jan	0	0	0.0233	0	0.0666	2.475	0
Feb	33.600	0	0.0233	0	0.0666	2.475	0
Mar	17.600	17.600	0.0233	0	0.0666	2.475	9.60
April	0	0	0.0233	0	0.0666	2.475	0
May	0	17.600	0.0233	0	0.0666	2.475	0
June	0	21.000	0.0233	0	0.0666	2.475	0
July	54.940	17.600	0.0233	0	0.0666	2.475	0
Aug	17.600	0	0.0233	0	0.0666	2.475	0
Sept	17.600	17.600	0.0233	0	0.0666	2.475	0
Oct	17.600	20.500	0.0233	0	0.0666	2.475	0
Nov	39.400	0	0.0233	0	0.0666	2.475	9.80
Dec	22.000	16.410	0.0233	0	0.0666	2.475	0
Total	220.340	128.310	0.2796	0	0.7992	29.70	19.40

5.2 The quantity of waste solvent (i.e. liquid) sent for disposal between January 2008 to December 2008 was 220.340 Tonnes. The quantity of solid waste sent for disposal between January 2008 and December 2008 was 128.310 Tonnes.

6. Reports on Emissions

- 6.1 Soltec employed Euro Environmental Services to carry the following analysis.
 - Emissions to the Atmosphere See attached Report No. 1570/M17 Rev .01 carried out the 5th February 2008
 - Emissions to the Atmosphere See attached Report No. 1570/M21 Rev .01 carried out the 16th September 2008
 - Noise Survey See attached Report No. 1570/M16 carried out the 14th January 2008
 - Noise Survey See attached Report No. 1570/M18 carried out the 25th August 2008
 - Occupational Air Monitoring See attached Report No 1570/M18 dated 20th May 2008
 - Occupational Air Survey See attached Report No 1570/M22 dated 26th November 2008
 - Groundwater Monitoring See attached Report No. 1570/M20 carried out on the 1st September 2008
 - Groundwater Monitoring- See attached Report No 2240/010/01 carried out on the 11th September 2008.
 - Bund Verification Report See attached Report No. 1570/M19 (Next report due in 2011)

8. Resource and Energy Consumption Summary

- 8.1 The main energy use at the Soltec facility includes:
- Electricity
- Heating and Oil
- 8.2 A review of utility bills over the last 12 months shows that Soltec used the following quantities.

Table 8. Energy Consumption

Energy	Quantity	Cost
Electricity	160,633 Units	€25,899.16
Heating Oil	26,652 Litres	€17,572.89

- Excludes Demand Charge, Service Capacity, and Vat.
- 8.3 The main resources used at the Soltec facility include:
- Water
- Metal drums
- Plastic drums
- Cardboard boxes
- Plastic bottles for product
- Pallets
- 8.4 A review of the last 12 months shows that Soltec used the following quantities:

Table 9. Material Consumption

Material		Cost
Water /Rates		€7178.48
Plastic Drums	12150 x 5 Litre 9576 x 20 Litre	€36211.37
Cardboard Boxes	2351	€2332.83
IBC'S	41	€3610.00
Metal Drums	3848	€32984.40
Total		€82317.08

• Excludes meter rental, standing charge & VAT.

9. Proposed Development of the facility and a time scale for such development.

9.1 The following Table outlines the proposed plant and site development and approximate time scale. There are No further proposed developments at this stage.

9.2 Proposed Site Development.

Time scale
N/A

10. Report on development works undertaken during the reporting period.

10.1 Site developments implemented by Soltec during the reporting period are tabulated below.

Table 11. Site Developments

Item	Detail
New Floor	New floor was installed please find copy of report from O'Reilly Stuart & Associates Consulting Engineers

11. Estimated annual and cumulative quantity of indirect emissions to groundwater.

11.1 The main solvent handling, storage and processing areas at the Soltec facility are covered in concrete or tarmac. Rainwater runs off drains from the building roof and external concrete areas directly to sewer.

Groundwater sampling and analysis has shown that there are no significant detectable traces of solvent in the groundwater. Ground water from central bund is tested and sent off site for treatment.

11.2 There are no obvious significant indirect emissions from the Soltec facility to groundwater. Soltec sends the bund water for disposal off site.

12. Report on the progress towards the achievement of the environmental Objectives & Targets contained in the previous year's report.

Objective	Target	Action	Date	Progress
To Store empty 200 L steel barrels in a safer manner	June 2008		28/04/08	Completed
To upgrade The Health and Safety Statement	June 2008	Brendan Donaghy from Total Manufacturing Services updated the Health & Safety Statement	28/04/08	Completed
To Install a New Floor in the Production Area	Dec 2008	Rhino Linings installed New Floor	31/12/08	Completed

13. Schedule of Environmental Objectives & Targets for the forthcoming year.

13.1 The environmental objectives for 2008 - 2009 are shown below.

Table 12. Environmental Objectives

Objectives	Date
To investigate the feasibility of covering the bunded	Dec 2009
areas	
To connect the vent pipe from the storage tanks to an	Dec 2009
extractor system	

14 Summary of written procedures developed during the previous 12 months.

14.1 Soltec has developed a series of written procedures, which relate to the operation of the facility. The following table details the procedure titles and a summary of their content:

Table 13. List of written procedures

Title	Summary of the Procedure
SOP 2.1	Quality System
SOP 9A.3	Production of Solvents
SOP 9A.4	Toxic & Dangerous Waste Regulations
SOP 9A.5	Determination of Distillation Range
SOP 9A.6	Determination of Boiling Point
SOP 9A.7	Determination of weight per Milliliters & Density
SOP 9A.8	Determination of Moisture Content
SOP 9A.9	Solvent Recovery Unit
SOP 9A.10	Satorius Scales
SOP 9A.12	Discharge of Bulk Solvent
SOP 9A.13	Proscon Soltec Batch Recovery
SOP 9A.14	To Transfer Product
SOP 9A.15	Waste Discharge
SOP 9A.16	Soltec Emergency Plan
SOP 9A.17	Clean Mode
SOP 9A.19	Epa Licence Application
SOP 9A.20	Quality Inspection

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SOP 9A.21	Calibration pH Meter	
SOP 9A.22	Waste Water Discharge	
SOP 9A.23	Handling Storage & Disposal EWC Codes 150202 UN No 1325 Un No 3175	
SOP 9A.24	Production of Solvent for Bulk Tankers	
SOP 9A.25	Karl Fisher Titration	
SOP 9A.26	Paint Test	
SOP 9A.27	Rinsing the Lines	
SOP 9A.28	Operating Instructions Jean Briel Machine	
SOP 9A.29	Lone Working Policy	

14.2 The above procedures are available for inspection at the Soltec facility if required.

15 Tank, pipeline and bund testing and inspection report.

15.1 A bund integrity assessment was carried out at the site and a copy of the report is attached.

16 Reported Incidents and complaints summary.

16.1 There were no reported incidents or complaints in relation to Soltec's facility during the reported period covered in this AER.

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Report on financial provision made under this licence, management, and staffing structure of the facility.

17 Soltec has recently invested heavily to upgrade the existing site and install additional solvent recycling plant. There are no immediate plans to stop trading.

However should Soltec cease its current operations all machinery plant and stock would either be relocated to an alternative site or sold. All solvent/chemical storage tanks would be emptied site wastes would be appropriately disposed of and the site secured against vandalism.

Soltec will render safe or remove from the site all reasonable materials waste plant or equipment contained on or in the site that may result in environmental pollution.

Soltec will consider any reasonable request by the EPA to deposit a security bond in the case of insolvency. This bond will be used to cover the cost of any site decommissioning if required.

The environmental risks associated with Soltec activities include soil groundwater and surface water contamination. These risks only occur during site operations Soltec do not store waste for long periods or dispose of any waste materials on site. If operations were to cease the potential environmental risks would be significantly reduced, there would not be any expected long-term environment effects after the site has closed.

As a result of the above Soltec, do not foresee the need for a long term site monitoring or an aftercare management plan once the operation has ceased.

17.1

An Environmental Liabilities Risk Assessment was carried out and submitted to the agency.

17.2

Michael Corcoran, Managing Director, has overall responsibility for ensuring that the conditions of the Waste Licence are adhered to. Michael manages the facility, is responsible for contracts, purchasing, and staff management, and is responsible for the environmental management and operational staff training on site.

17.3

Paddy O Keeffe is responsible for transport of the Hazardous Chemicals and up keep of the yard.

17.4

Mary Lynam-Dunne, Accounts Manager, is responsible for credit control; document and data control; and is in charge of quality records and internal audits.

17.5

David Corcoran, Laboratory Assistant, is responsible for carrying out tests on samples, and keeping records of same.

17.6

Juris Krivko is responsible for the manufacture of products to specific requirements. The collection and delivery of products. The handling, storage & packing of products. Stock and Process Control and testing. He is also involved in laboratory tests, analysis, and keeping required records of them.

- 17.7 Pete Jordan is a Sales Representative who is responsible for increasing our customer contacts and sales in Carlow, Clare, Cork, Limerick, Kerry, Waterford and Wexford.
- **17.8** Thomas Corcoran is a Sales Representative who is responsible for increasing our customer contacts and sales in Cavan, Meath, Offaly Kilkenny, Tipperary and Westmeath.
- **17.9** Vincent Ronan is a Sales Representative who is responsible for increasing our customer contacts and sales. Dublin Louth Kildare and Monaghan.
- **17.10** Joe Browne is a Sales Representative who is responsible for increasing our customer contacts and sales, in Galway Sligo Donegal and Mayo.

- **17.11** Niamh Dunne's main responsibilities are entering sales and purchase invoices, filing, typing reception duties and any other office duties that arise.
- **17.12** Tom Griffith is a business executive whose main responsibility is business development lead generation marketing and includes web marketing & PR.
- **17.13** Igor Majoros is a general operator whose main responsibilities are filling thinners and upkeep of yard.

17.14

In compliance with condition 3.3 of Soltec's waste licence, a facility notice board has been placed outside the main entrance of the facility as described. Soltec has established a public file for inspection by interested parties.

18 Report on staff training

18.1 Soltec has implemented an environmental training schedule for relevant staff, including attendance and completion of the F.A.S. Waste Management Course. Attendances at further relevant training courses are detailed below.

Table 14. Staff Training.

Name	Training
David Corcoran	First Aid Course
Juris Krivko David Corcoran Peter Jordan	Manual Handling
Paddy O Keeffe	Forktruck Course

19. Boiler Efficiency Test Results

19.1 The Soltec facility has one small oil fired boiler. It is proposed that an efficiency test be carried out on this boiler during the next round of emissions monitoring which is scheduled to take place.