



TS RESINS LIMITED

ALYN WORKS, DENBIGH ROAD, MOLD,
FLINTSHIRE, UNITED KINGDOM CH7 1BF

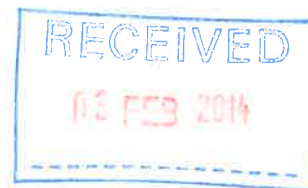
A Member of the Tennant Group (Est. 1797)

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Mr A Zachary
Natural Resources Wales
Chester Road
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Flintshire
CH7 3AJ



Greg Hickman, Health, Safety and Environment Officer

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Email: greg.hickman@tsresins.co.uk

Your Ref: BU2322

Our ref: EPR returns 2013

Date: 28th January 2014

MONITORING RETURNS N. WALES

CHECKED VIA AUTHORIZATION

TRACKING

DELETED FROM REGISTER

TYPE TO FORM 15 (EPR) 1/14

INITIALS DATE

AZ 10/2/14

JB 3.2.14

AZ 10/2/14

JB EPR 2014

Dear Mr Zachary,

I enclose the following EPR returns for TS Resins Ltd:

Form A1 – Emissions to air
Form E1 – Energy usage
Form R1 – Waste disposal and recovery
Form PA1 – Performance indicators
Form WU1 – Water usage
Sections 4.1.4 and 4.1.5 returns

In December, Dynea UK Ltd, Mold was purchased by the Tennants Consolidated Group. As a result, we are now trading as TS Resins Ltd. Synthite Ltd share the same parent company but we will continue to operate as two separate companies.

TS Resins have applied for a transfer of our EPR licence from Dynea to TS Resins. There have been no changes to management or our safety and environmental management systems.

During the year there were the following:

1. Monthly checks on the state of the tank farm bunds showed no leaks.
2. There were no emissions from point F516.
3. There were no fugitive emissions from valves, pumps etc. Emissions from the tank farm will be included in the Pollution Inventory returns.
4. There were no noise or odour issues that could be attributed to TS Resins operations.



There was a significant drop in the quantity of hazardous waste. Part of this was due to the problems in 2013 with oil contaminated effluent and also no phenolic resin was recycled or disposed of during 2013.

SPMP monitoring is continuing and the results show that there are no problems with the management of the area of the site controlled by TS Resins. Synthite Ltd have been carrying out work on the lagoons and this is expected to be finished in 2014.

The main contract for AdBlue production ceased towards the end of the year. Some equipment has been decommissioned or removed, but the site is still capable of producing AdBlue if required.

TS Resins had no environmental complaints during the year.

Due to the change in product mix from board resins to specialist resins (that often have a significant distillation step or are phenolic with associated higher energy use), the energy use per tonne of resin has increased. This is expected to worsen in 2014 due to the loss of AdBlue (which has a lower energy use per tonne of product). There has been an increase in melamine formaldehyde resin production which has a high energy use due to a relatively small exothermic reaction step.

Upgrades have taken place across site lighting, with a number of external lights being fitted with sensors to give automatic operation.

Water use has increased slightly. With a reduction in board resin production, there has been a drop in the quantity of distillate produced which has meant an increase in water use within production.

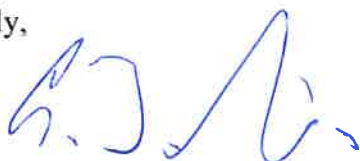
Security awareness and CLP signs were covered in the safety training day along with a number of other items (chemical first aid, communications, permit to work and AED defibrillator).

The site joined the CIA CIABATA climate change agreement that covers the chemical industry. Synthite Ltd has entered EU ETS under phase III. As a result there will be some changes as Dynea's steam is supplied by Synthite. We are currently informing the CIA of the change in ownership.

An 'Ageing Plant' programme has started. To date all of the tanks storing COMAH or hazardous substances have been inspected. All tanks have passed with very minor work (minor weld repairs from initial construction).

Our certifications to ISO9001 2008, ISO14001 2004 and OHSAS18001 2007 were renewed. There were no non conformances, an achievement we are very proud of. We continue to play an active role in the CIA North Wales Responsible Care cell.

Yours sincerely,



Greg Hickman

Permit Reference Number: BU2322

Operator: Dynea UK Ltd

Installation: Dynea, Alyn Works

Form Number: A1

Reporting of Emissions to Air for the year.....2013.....

Emissions to Air							
Emission Point	Substance / Parameter	Emissions Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation / Certification ^[4]	Uncertainty ^[5]
A18	Formaldehyde	2 mgm ⁻³ [6]	0.11	BS EN 13649	11:38 – 12:08 09/05/13	MCERTs/UKAS1015	0.04
A18	Methanol	25 mgm ⁻³ [6]	0.70	BS EN 13649	10:55 – 11:25 09/05/13	MCERTs/UKAS1015	0.82
A18	Phenol	5 mgm ⁻³ [6]	1.7	BS EN 13649	10:38 – 11:08 09/05/13	MCERTs/UKAS1015	1.9

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g chromatography.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The accreditation status of the equipment and/or the monitoring organisation, as appropriate, for the methods used for both sampling and analysis.

[5] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated. The following uncertainties are quoted on a different basis (basis as stated) – {The basis of any other uncertainty figure needs to be stated. Where no figure is available the Agency will need to agree and appropriate uncertainty value}.

[6] The emission limit values are expressed as daily averages and corrected to {273K, 101.3kPa, 11% oxygen, dry}.

Signed


Date: 28/1/14.....

(authorised to sign as representative of the Operator)

Permit Reference Number: BU2322

Operator: Dynea UK Ltd

Installation: Dynea, Alyn Works

Form Number: E1

Reporting of Energy Usage for the year.....2013.....

Energy Source	Energy Usage		Units
	Quantity	Primary Energy (MWh)	
Electricity*	MWh	5584.4	926.8
Steam**	tonnes	3325.4	632.0
Gas oil	tonnes	58.2	14.5
Heavy fuel oil	tonnes	0	0
TOTAL	-	8968.0	1573.3

*Conversion factor for delivered electricity to primary energy = 0.385

** Steam is supplied from natural gas fired boilers.

Trends In Energy Usage			
Year	Primary Energy	CO ₂ produced	CO ₂ per unit output
2013	8968.0	1573.3	0.041
2012	8484.1	1487.1	0.037
2011	7973.4	1381.2	0.023
2010	9238.4	1617.1	0.025
2009	7447.9	1318.2	0.022
2008	8738.4	1554.9	0.026
2007	9764.9	1554.9	0.021
2006	10578.8	1746.2	0.025
2005	10547.7	1887.6	0.028
2004	13026.9	2329.1	0.034

Operator comments:

Boiler efficiency = 80%
Energy use is dependent on product mix.

Signed

Date: 28/1/14

(authorised to sign as representative of the Operator)

Permit Reference Number: BU2322

Operator: Dynea UK Ltd

Installation: Dynea, Alyn Works

Form Number: PA1

Reporting of Performance Indicators for the year...2013....

Annual Production (tonnes)			38157
Performance Indicators			Trends In Environmental Performance
Parameter	Annual	Units	
Potable water use	0.60	m ³ te ⁻¹ of total production	
Non potable water use	0	m ³ te ⁻¹ of total production	
Distillate produced	0.02	m ³ te ⁻¹ of total production	
Waste hazard score	0.37	%	
Waste disposal score	31.51	%	
			2008
			2009
			2010
			2011
			2012
			2013
			0.25
			0.31
			0.32
			0.44
			0.58
			0.60
			0
			0
			0
			0.04
			0.03
			0.03
			0.02
			0.02
			2.20
			1.99
			0.01
			34.21
			16.45
			0.37
			65.60
			69.70
			63.43
			49.21
			39.11
			31.51

Operator comments:

Waste hazard score = % of waste that is hazardous.

Waste disposal score = % of waste that is recycled on site.

Signed

Date: 28/1/14

(authorised to sign as representative of the Operator)

Permit Reference Number: BU2322

Installation: Dynea, Alyn Works

Operator: Dynea UK Ltd

Form Number: R1

Reporting of Waste Disposal and Recovery for the year.....2013.....

Waste Disposal and Recovery			
Description	Route	Disposal	Recovery
Hazardous Waste	D1	10.92	
	D8	0	
	D13	0	
	R3		0
	R4		0
	Site	0	0
Total		10.92	0
Non Hazardous Waste	D1	222.69	
	D8	0	
	D13	0	
	R3		1765.17
	R4		45.0
	Site	0	940.083
Total		222.69	2750.253
TOTAL WASTE		233.61	2750.253

Operator comments: Hazardous waste recycled on site = 0.0% Waste recycled on site = 31.51% Waste recycled or recovered = 92.08%

Signed

(authorised to sign as representative of the Operator)

Trends in Waste Disposal and Recovery			
Year	Parameter	Total Waste	Waste per unit output
	Named waste		
2013		2983.863	0.078
2012		2817.205	0.070
2011		2387.363	0.040
2010		3030.798	0.046
2009		3205.57	0.052
2008		4231.75	0.071
2007		5227.77	0.064
2006		5654.91	0.076
2005		4985.15	0.075

Date: 28/1/14

Permit Reference Number: BU2322

Installation: Dynea, Alyn Works

Operator: Dynea UK Ltd

Form Number: WU1

Reporting of Water Usage for the year.....2013.....

Water Usage		
Water Source	Usage (m ³)	Specific Usage (m ³ te ⁻¹)
Mains water	22762.4	0.60
Site borehole	0	
River abstraction	0	
TOTAL WATER USAGE	22762.4	0.60

Trends In Water Usage			
Year	Named Water Source	Total Water Usage	Water per unit output
2013	Mains	22762.4	0.60
2012	Mains	23355	0.58
2011	Mains	26252	0.44
2010	Mains	21512	0.32
2009	Mains	19137	0.31
2008	Mains	14865	0.25
2007	Mains	20286	0.25

Operator comments:

Water use is dependent on product mix.



Signed



Date:

(authorised to sign as representative of the Operator)