

Reporting of Monitoring and Performance Data

Permit Reference Number : BX64211Y

Operator : REHAU Ltd , Amlwch

Installation : Amlwch Plastics Installation

Form Number : A1

Reporting of Emissions to Air for the period from 01.07.15 to 31.12.15

Emission Point	Substance/Parameter	Emission Limit Value	Test Method [2]	Result (mg/m ³) [1]	Sample date and time [3]	Accreditation / Certification [4]	Uncertainty [5]	Number of breaches of limit over period [6]
A1	Lead	2mg/m ³	BS EN 14385	0.0003	01.07.15	MCERTS	0.0001	0
A1	Particulate	20mg/m ³	BS EN 13284-1	0.32	01.07.15	MCERTS	0.56	0

[1] Where only one measurement is required for a specific substance/parameter over the reporting period, the value should be entered in this column.

[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. colorimetry.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements, or flow/time proportional samples, the percentage of the process operating time covered by the monitoring is given.

[4] The accreditation status of the equipment and/or the monitoring organisation shall be as agreed according to condition 2.10.7, and shall apply 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.

[6] The number of breaches is intended as a summary only and is in addition to the operators need to notify these to the Agency according to the conditions in Section 5 of the permit.

Signed : Mick Ryan
(authorised to sign as representative of the Operator)

Date : 25.08.16

Date: 01/2006

Reporting of Monitoring and Performance Data

Permit Reference Number : BX64211Y

Operator : REHAU Ltd, Amlwch

Installation : Amlwch Plastics Installation

Form Number : R1

Reporting of Waste Disposal and Recovery for the Year 2015

Waste Description	Disposal Route	Tonnes	Recovery Tonnes
1) Hazardous Wastes			
Various mixing materials, including those containing Pb stabiliser & Thinners / paint	Land	0.349	14.422
2) Non-Hazardous Waste			
General Waste	Land	41.402	
PVC Head Waste, Bag filter & CVS waste containing Pb stabiliser	Recovery		87.346
TOTAL WASTE		41.751	87.346

Year	Trends in Waste Disposal and Recovery			
	Plasticiser Waste	Bag filter waste containing Pb stabiliser	Total hazardous Non waste (te)	Total Hazardous Waste (te)
2005		7	433	440
2006		6	336.9	343
2007	1.8	32	465	497
2008	4.1	138	323.25	465.35
2009	0.6	25	121	146.6
2010	0	0	79	
2011			73.154	
2012	0.82		56.842	
2013	0	0	69.57	
2014	0	0	61.8	

Operator's Comments:- The bag filter waste as lead based PVC Compound from the extractor, CVS system and PVC Head waste were removed as free waste stream . The majority of waste is being streamed into a recovery stream. Our waste champions are continuously striving to review any waste stream as a revenue stream or Zero Cost option as well as reducing the amount of waste being created. A pulverisor has also been introduced to improve the reuse of PVC production wastes on site.

Signed :  (authorised to sign as representative of the Operator)

Date : 25.08.16

Date: 01/2006

Performance of Monitoring and Performance Data

Permit Reference Number : BX64211Y

Operator : REHAU Ltd, Amlwch

Installation : Amlwch Plastics Installation

Form Number : WU1

Reporting of Water Usage for the Year 2015

Water Source	Usage (m ³)
Mains water	1988

Trends in Water Usage Year	Parameter
2007	Mains Water 11457
2008	12412
2009	5200
2010	2989
2011	2509
2012	2525
2013	1696
2014	3973

Operator's comments: There was a significant decrease in the water usage during 2015 when compared to 2014 however our REHAU target was not met. This was due to a downturn in orders which resulted in a 28% reduction in despatched weight of finished goods.

On-line Telemetry (WaterCore) is now used to monitor mains Water consumption.

Signed :

Math Be

(authorised to sign as representative of the Operator)

Date : 25.08.16

Date: 01/2006

Performance of Monitoring and Performance Data

Permit Reference Number : BX64211Y

Operator : REHAU Ltd, Amlwch

Installation : Amlwch Plastics Installation

Form Number : E1


Reporting of Energy Usage for the Year 2015

Energy Source	Energy Usage Quantity	Primary Energy (MWh)	CO ₂ Produced (Tonnes)
Electricity*	4662	12121.2	2054.543
Natural Gas*	1731	1731	328.89
TOTAL		13852.2	2383.433

Trends in Energy Usage Year	Parameter	CO ₂ Produced (Tonnes)
2006	Primary Energy usage (MWh)	12192
2007		14847
2008		16324
2009		14892
2010		15092
2011		14341.4
2012		14326.2
2013		15565
2014		17583

- * Conversion factor for delivered electricity to primary energy = 2.6
- * CO₂ Conversion factor for primary electricity = 0.1695
- * CO₂ Conversion factor for primary natural gas = 0.19
- * CO₂ Conversion factor for primary gas oil = 0.25

Operator's comments:- During 2015 there was a 28% decrease in Production. The Natural Gas is used for the Regenerative Thermal Oxidiser under the LAPPC Permit with Isle of Anglesey County Council and for Factory Heating.

Signed :  Date : 25.08.16
(authorised to sign as representative of the Operator)

Date: 01/2006

Reporting of Monitoring and Performance Data

Permit Reference Number : BX6421Y Operator : REHAU Ltd, Amlwch

Installation : Amlwch Plastics Installation Form Number : P11

Reporting of Performance Indicators for the Year : 2015

Table P11(a): Reporting of Annual Production/Treatment	
None Required	

Environmental Performance Indicators			
Parameter	Usage (tonne/tonne)(on annual basis)	Trends in Environmental Performance	
		Year	Lead stabiliser usage per unit production(uPVC) - (te/te on an annual basis)
Lead	0.000041		t/t uPVC Product
		2006	0.01
		2007	0.01
		2008	0.007
		2009	0.015
		2010	0.015
		2011	0.016
		2012	0.016
		2013	0.014
		2014	0.0063

Operator's comments :- Although all articles had been converted to calcium zinc from lead stabiliser, lead continued to be used during 2015 for a few articles that were problematic. By the end of the year use of lead in production had stopped however a small stock of lead remains on site. Checks have been made with other REHAU sites located outside of the UK to see if they could use the lead stabiliser however none were interested as they have also removed lead from their process. The site will become lead free during 2016

Signed :  (authorised to sign as representative of the Operator) Date: 25.08.16

Date: 01/2006