

Reporting of Energy Usage for year 2014

Permit Number: LP3731SU

Operator: BAE Systems Land Systems
(Munitions& Ordnance) Ltd

Installation: Glascoed Munitions Factory

Form Number: Energy 1
Form Issue Date: 03/11/2006

Energy Source	Energy Usage Quantity	Primary Energy	Specific Usage
Electricity (1)	MWh	806	0.0122 MWh/tonne of steam produced (42.64MJ/tonne of steam)
Natural Gas (2)	MJ	190,724,890	2890 MJ/tonne of steam produced
Gas Oil (boilers) (3)	MJ	1,054,111	15.97 MJ/tonne of steam produced
Diesel usage(Back-up generator)(4)	MJ	38,495	0.58 MJ/tonne of steam produced
TOTAL	MJ	194,720,304	2950 MJ/tonne of steam produced

Operator's comments

- Note 1 Conversion factor for delivered electricity to primary energy (x2.4)
- Note 2 4,760,411m³ of natural gas consumed, (conversion factors from Department of Energy and Climate Change - Digest of UK Energy Statistics 2011
Natural gas = 11.3kWh/m³ and 1MJ = (1kWh/0.2778))
- Note 3 26,890 litres of gas oil consumed in boilers, diesel/gas oil = 10.89kWh/litre (source: Department of Energy and Climate Change - Digest of UK Energy Statistics 2011) and 1MJ = (1kWh/0.2778)
- Note 4 982 litres of gas oil (generator) consumed, diesel/gas oil = 10.89kWh/litre (source: Department of Energy and Climate Change - Digest of UK Energy Statistics 2011) and 1MJ = (1kWh/0.2778)

Signed



(authorised to sign as representative of Operator)

Date 30.1.2015

Reporting of Water Usage for year 2014

Permit Number: LP3731SU

Operator: BAE Systems Land Systems
(Munitions& Ordnance) Ltd

Installation: Glascoed Munitions Factory

Form Number: Water Usage1
Form Issue Date: 03/11/2006

Water Source	Usage m ³ /year	Specific Usage
River Abstraction	588,436	
Boiler House Use	75,000	1.14 m ³ /tonne of steam produced

Operator's comments

75,000 m³ of water was used in the Boiler house representing 13 % of the total water abstracted given above

Signed



Date 30.1.15

(authorised to sign as representative of Operator)

Releases to Air

PPC Reporting

Operational Summary for the year to December 2014

Operator: BAE Systems Land Systems
(Munitions & Ordnance)Ltd

Site Location: Glascoed, Usk

Form Number: Air - 8 (Discontinuous Monitoring)
Form Issue Date: 03/11/2006

Permit/Variation number: LP3731SU

Release point:A1 & A2

Measurement frequency: 12monthly

Date of sampling : A1: 29.5.14
A2: 28.5.14

Release Point	Flue	ELV	Measured	Sampling	Unit load	Fuel usage
		mg/m ³	value	method	or	during
			mg/m ³		%MCR	sampling
A1						
	Boiler 1	140	91.89	BS EN 14792:2005	50%	Natural Gas
	Boiler 2 Left	140	98.66	BS EN 14792:2005	50%	Natural Gas
	Boiler 2 Right	140	90.40	BS EN 14792:2005	50%	Natural Gas
A2						
	Boiler 3	140	90.49	BS EN 14792:2005	50%	Natural Gas
	Boiler 4 Left	140	87.09	BS EN 14792:2005	50%	Natural Gas
	Boiler 4 Right	140	84.02	BS EN 14792:2005	50%	Natural Gas

Note 1: Boiler 1 was subject to maintenance at the time of testing. It was not commissioned until several months after testing was complete. The operator will ensure that this boiler is tested during 2014.

Signed on behalf of the Operator



Date 30.1.14

Reporting of other performance indicators for the period 01/01/2014 to 31/12/2014

Permit Number: LP3731SU Operator: BAE Systems Land systems (Munitions& Ordnance) Ltd
 Installation: Glascoed Munitions Factory Form Number: Performance 1
 Form Issue Date: 03/11/2006

Parameter	Units
Steam Generated	66,000 tonnes per annum
Annual waste production	1.2368 tonnes per annum

Environmental Performance Indicators	
Electricity	0.01 MWh/tonne of steam produced (42.64MJ/tonne of steam)
Natural Gas	2890 MJ/tonne of steam produced
Gas Oil (boilers)	15.97 MJ/tonne of steam produced
Diesel usage(Back-up generator)	0.58 MJ/tonne of steam produced
Total Energy	2950 MJ/tonne of steam produced
Waste Production	0.0187 kg/tonne of steam produced

Operator's comments

Signed



(authorised to sign as representative of Operator)

Date 30.1.15

Reporting of Waste Disposal for year 2014

Permit Number: LP3731SU

Operator: BAE Systems Land Systems
(Munitions& Ordnance) Ltd

Installation: Glascoed Munitions Factory

Form Number: Waste 1
Form Issue Date: 03/11/2006

Waste Description	Units	Quantity Disposed	Disposal Route
Refractory Waste	kg	1,200	Landfill
Boiler Soot	kg	5.8	Landfill
Boiler Sludge	kg	31.0	Landfill
TOTAL	kg	1,236.8	

Operator's comments

Signed



(authorised to sign as representative of Operator)

Date 30.1.15

Reporting of Waste Disposal for Quarter 1 (Jan/Feb/Mar 2014)

Permit Number: LP3731SU

Operator: BAE Systems Land Systems
(Munitions& Ordnance) Ltd

Installation: Glascoed Munitions Factory

Form Number: Waste Q1
Form Issue Date: 03/11/2006

Waste Description	Quantity Disposed (kg)	Disposal Route
Refractory Waste	0	n/a
Boiler Soot	1.8	Landfill
Boiler Sludge	8.0	Landfill
TOTAL	9.8	

Operator's comments

Signed



(authorised to sign as representative of Operator)

Date 30.1.15

Reporting of Waste Disposal for Quarter 2 (Apr/May/Jun 2014)

Permit Number: LP3731SU

Operator: BAE Systems Land Systems
(Munitions& Ordnance) Ltd

Installation: Glascoed Munitions Factory

Form Number: Waste Q2
Form Issue Date: 03/11/2006

Waste Description	Quantity Disposed (kg)	Disposal Route
Refractory Waste	0	n/a
Boiler Soot	0.0	n/a
Boiler Sludge/Scale	0.0	n/a
TOTAL	0.0	

Operator's comments

Signed



(authorised to sign as representative of Operator)

Date 30.1.15

Reporting of Waste Disposal for Quarter 3 (Jul/Aug/Sept 2014)

Permit Number: LP3731SU

Operator: BAE Systems Land Systems
(Munitions& Ordnance) Ltd

Installation: Glascoed Munitions Factory

Form Number: Waste Q3
Form Issue Date: 03/11/2006

Waste Description	Quantity Disposed (kg)	Disposal Route
Refractory Waste	0	N/A
Boiler Soot	2.1	landfill
Boiler Sludge	11.0	landfill
TOTAL	13.1	

Operator's comments

Signed



(authorised to sign as representative of Operator)

Date 30.1.15

Reporting of Waste Disposal for Quarter 4 (Oct/Nov/Dec 2014)

Permit Number: LP3731SU

Operator: BAE Systems Land Systems
(Munitions& Ordnance) Ltd

Installation: Glascoed Munitions Factory

Form Number: Waste Q4
Form Issue Date: 03/11/2006

Waste Description	Quantity Disposed (kg)	Disposal Route
Refractory Waste	1,200	Landfill
Boiler Soot	1.9	Landfill
Boiler Sludge	1.2	Landfill
TOTAL	1,203.1	

Operator's comments

Signed 

(authorised to sign as representative of Operator)

Date 30.1.15