

## Reporting of Energy Usage for year 2020

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	643	0.0157 MWh/tonne of steam produced (29.83MJ/tonne of steam)
Natural Gas (2)	MJ	160,234,895	3904 MJ/tonne of steam produced
Gas Oil (boilers) (3)	MJ	714,240	17.40 MJ/tonne of steam produced
Diesel usage(Back-up generator)(4)	MJ	55,591	1.35 MJ/tonne of steam produced
<b>TOTAL</b>	<b>MJ</b>	<b>161,005,368</b>	<b>3922 MJ/tonne of steam produced</b>

### Operator's comments

- Note 1 Conversion factor for delivered electricity to primary energy (x2.4)
- Note 2 3939226m<sup>3</sup> of natural gas consumed, (conversion factors from Department of Energy and Climate Change - Digest of UK Energy Statistics 2011 Natural gas = 11.3kWh/m<sup>3</sup> and 1MJ = (1kWh/0.2778)). No meter data available since 27/11/2020.
- Note 3 18,220 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 1418.1 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 29.01.2021

## Reporting of Water Usage for year 2020

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 <sup>3</sup> /year	Specific Usage
River Abstraction	953,182	
Boiler House Use	29,826	0.73 m <sup>3</sup> /tonne of steam produced

### Operator's comments

29,826 m<sup>3</sup> of water was used in the Boiler house representing 3 % of the total water abstracted given above

Signed



Date 29.01.2021

(authorised to sign as representative of Operator)

**Releases to Air**

**PPC Reporting**

**Operational Summary for the year to December 2020**

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: 12/12/2020

A2: 12/12/2020

Release Point	Flue	ELV	Measured	Sampling	Unit load	Fuel usage
		mg/m <sup>3</sup>	value	method	or	during
			mg/m <sup>3</sup>		%MCR	sampling
A1	Boiler 1	140	94.28	BS EN 14792:2017	90-100%	Natural Gas
	Boiler 2 Left	140	*	BS EN 14792:2017	90-100%	Natural Gas
	Boiler 2 Right	140	*	BS EN 14792:2017	90-100%	Natural Gas
A2	Boiler 3	140	97.62	BS EN 14792:2017	90-100%	Natural Gas
	Boiler 4 Left	140	*	BS EN 14792:2017	90-100%	Natural Gas
	Boiler 4 Right	140	*	BS EN 14792:2017	90-100%	Natural Gas

Notes: \* denotes that the process was not operational so sampling could not be undertaken.

Signed on behalf of the Operator



Date 29.01.2021

### Reporting of other performance indicators for the period 01/01/2020 to 31/12/2020

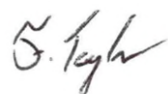
Permit Number: LP3731SU Operator: BAE Systems Land systems (Munitions& Ordnance) Ltd  
 Installation: Glascoed Munitions Factory Form Number: Performance 1  
 Form Issue Date: 03/11/2006

Parameter	Units
Steam Generated	<b>41,047</b> tonnes per annum
Annual waste production	<b>1.145</b> tonnes per annum

Environmental Performance Indicators	
Electricity	<b>0.0157</b> MWh/tonne of steam produced (29.93MJ/tonne of steam)
Natural Gas	<b>3904</b> MJ/tonne of steam produced
Gas Oil (boilers)	<b>17.40</b> MJ/tonne of steam produced
Diesel usage(Back-up generator)	<b>1.35</b> MJ/tonne of steam produced
Total Energy	<b>3922</b> MJ/tonne of steam produced
Waste Production	<b>0.0279</b> kg/tonne of stream produced

**Operator's comments**

Signed



(authorised to sign as representative of Operator)

Date 29.01.2021

## Reporting of Waste Disposal for year 2020

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	1,140.0	Landfill
Boiler Soot	kg	0.0	Landfill
Boiler Sludge	kg	5.2	Landfill
<b>TOTAL</b>	<b>kg</b>	<b>1,145.2</b>	

Operator's comments

Signed



(authorised to sign as representative of Operator)

Date 29.01.2021

## Reporting of Waste Disposal for Quarter 1 (Jan/Feb/Mar 2020)

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	1,140.0	n/a
Boiler Soot	0.0	n/a
Boiler Sludge	5.2	Landfill
<b>TOTAL</b>	<b>1,145.2</b>	

Operator's comments

Signed



(authorised to sign as representative of Operator)

Date 29.01.2021

## Reporting of Waste Disposal for Quarter 2 (Apr/May/Jun 2020)

Permit Number: LP3731SU

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

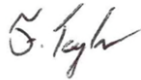
Installation: Glascoed Munitions Factory

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

Waste Description	Quantity Disposed (kg)	Disposal Route
Refractory Waste	0.0	Landfill
Boiler Soot	0.0	n/a
Boiler Sludge/Scale	0.0	Landfill
<b>TOTAL</b>	<b>0.0</b>	

**Operator's comments**

Signed



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Date 29.01.2021

### Reporting of Waste Disposal for Quarter 3 (Jul/Aug/Sept 2020)

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		n/a
Boiler Soot		n/a
Boiler Sludge		n/a
<b>TOTAL</b>	<b>0.0</b>	

**Operator's comments**

Signed 

(authorised to sign as representative of Operator)

Date 29.01.2021

## Reporting of Waste Disposal for Quarter 4 (Oct/Nov/Dec 2020)

Permit Number: LP3731SU

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

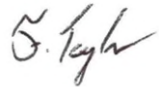
Installation: Glascoed Munitions Factory

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

Waste Description	Quantity Disposed (kg)	Disposal Route
Refractory Waste	0.0	n/a
Boiler Soot	0.0	Landfill
Boiler Sludge	0.0	Landfill
<b>TOTAL</b>	<b>0.0</b>	

**Operator's comments**

Signed



(authorised to sign as representative of Operator)

Date 29.01.2021