

**Schedule 3 - Form Number: A2**

**Operator: 2 Sisters Red Meats Ltd**

**Permit Number: AP3433ES**

Installation: Dowlais Slaughterhouse

Release to Air

**NIL RETURNED**

Release Point: A1

Release for Calendar Year ending: ..... December 2017

<b>Reporting Form A2</b>			
<b>Parameter</b>	<b>Limit Value</b>	<b>Measured Value</b>	<b>Date of Sampling</b>
Sulphur dioxide (as 20 minute average) mg/m <sup>3</sup>	300		
Volatile Organic Compounds (as carbon) mg/m <sup>3</sup>	20		
Gaseous Chlorides (as HCl) mg/m <sup>3</sup>	100		
Oxides of Nitrogen (as NO <sub>x</sub> ) mg/m <sup>3</sup>	-		
Particulate Matter mg/m <sup>3</sup>	100		
Dioxins and Furans** (expressed as ITEQ equivalent) ng/m <sup>3</sup>	1		
Polycyclic Aromatic Hydrocarbons (as benzo-a-pyrene) mg/m <sup>3</sup>	-		

Signed on behalf of the Operator .....



Date 29/1/2018 .....

**Schedule 3 - Form Number: A4**

**Operator: 2 Sisters Red Meats Ltd**

**Permit number: AP3433ES**

**Installation: Dowlais Slaughterhouse**

Release to Air

Release Points: A3, A4

Release for Calendar Year ending: ..... December 2017

Reporting Form A4				
Parameter	Limit value	Release Point A3	Release Point A4	Date of sampling
Oxides of Nitrogen mg/m <sup>3</sup>	-	116.0 low 136.6 high	136.6 low 155.0 high	14/01/17
Carbon Monoxide mg/m <sup>3</sup>	-	2.5 low 2.5 high	0 low 26.2 high	14/01/17

Signed on behalf of the Operator .....

Date 29/01/2018.....

Note:  
Release Point A3 = No 1 Boiler  
Release Point A4 = No 2 Boiler

Mg/m3 for NOx and CO calculated using:

$$\text{NOx (mg/m3)} = \frac{\text{ppm (NOx)} * 46}{22.4}$$

$$\text{CO (mg/m3)} = \text{ppm} \times 28.01/22.41$$

**Schedule 3 - Form Number: A5**

**Operator: 2 Sisters Red Meats Ltd**

**Permit Number: AP3433ES**

**NIL RETURNED**


Installation: Dowlais Slaughterhouse

Release to Air

Release Points: A1, Incinerator Bottom Ash

Release for Calendar Year ending: ..... December 2017

Reporting Form A5				
Parameter	Limit Value	Value	Release Point	Date of sampling
Total organic carbon content %	-		A1	
Protein Content mg/100g	-			
Total organic carbon content %	-		Incinerator bottom ash	
Protein Content mg/100g	-			
Total organic carbon content %	-		Incinerator bottom ash	
Protein Content mg/100g	-			

Signed on behalf of the Operator ..... 

Date 29/1/2018 .....

**Schedule 3 - Form Number: S2**

**Operator: 2 Sisters Red Meats Ltd**

**Permit Number: AP3433ES**

Installation: Dowlais Slaughterhouse

Release to Sewer and Water

Release Point: S1, W1, W2

Release for Calendar Year ending: .....

Reporting Form S2		
Release point	Date of Sampling	Organophosphorus content mg/l
S1	07/12/2017	See attached certificate.
W1	See note below	See note below
W2	See note below	See note below

Signed on behalf of the Operator ..... 

Date 29/1/2018

**NOTES:**

27/01/2018: Analysis of Organophosphorus Pesticides has been completed for S1, but were incorrectly analysed for W1 and W2. These samples were resubmitted on 18/1/2017 and the results will be forwarded to NRW when available.

**Schedule 3 - Form Number: R1**

**Operator: 2 Sisters Red Meats Ltd**

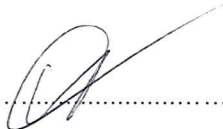
**Permit Number: AP3433ES**

Installation: Dowlais Slaughterhouse

Energy and Water Consumption

Release for Calendar Year ending: .....

Reporting Form R1	
Parameter	Quantity
Delivered Electricity MWh	16210
Primary electricity (delivered electricity x 2.6) MWh	42146
Primary carbon dioxide (delivered electricity x 0.35156 kg CO <sub>2</sub> e)	5699
Delivered gas MWh	15343
Process water used m <sup>3</sup>	176998

Signed on behalf of the Operator ..... 

Date 29/1/2018 .....

**Schedule 3 - Form Number: R2**

**Operator: 2 Sisters Red Meats Ltd**


**Permit Number: AP3433ES**

Installation: Dowlais Slaughterhouse

Waste Return

Release for Calendar Year ending: ..... December 2017

Reporting Form R2				
Parameter	Raw Materials Used tonnes	Quantity Used in Production tonnes	Quantity to Waste tonnes	Fate of Waste
Animal tissue - SRM	-	-	12429	Incineration
Animal tissue - Bones	-	-	5994.91	Rendering
Blood - Ovine	-	-	3010.36	Anaerobic Digestion
Incinerator Bottom Ash	-	-	N/A	N/A
Packaging			*See notes	*See notes
Sanitiser/Hygiene Chemicals/Detergents/ETP Chemicals			291.37	Foul Sewer + Anaerobic Digestion
Refrigerants			1.535	Air emissions
Mixed Waste			909.44	Landfill
Metal			14.02	Recycled
Plastic			57.77	Recycled
Cardboard/Paper			99.92	Recycled
Stomach Content, Lairage Waste & DAF Sludge			11130.38	Anaerobic Digestion

Signed on behalf of the Operator.....

Date 29/1/2018

Notes:  
Sanitisers / hygiene chemicals, detergents and effluent treatment chemicals have been grouped as one category as they are all discharged to sewer, or disposed of as effluent sludge.  
2014: Some bovine blood is now sold for pet food and is not classified as waste.  
2015: Some bones have been sold for further processing and have not been classified as waste.  
\* Packaging: Packaging waste data is not finalised for the previous calendar year until mid Feb when it is used for the Packaging Waste Regulations submission. Once this data is available it will be forwarded to NRW.