

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 2016...

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

Signed on behalf of the Operator 

Date 25/01/2017

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 2016.....

Reporting Form A4				
Parameter	Limit value	Release Point A3	Release Point A4	Date of sampling
Oxides of Nitrogen mg/m ³	-	137 Low 159 High	116 Low 137 High	14/01/2017
Carbon Monoxide mg/m ³	-	0 Low 43 High	4 Low 4 High	14/01/2017

Signed on behalf of the Operator 

Date 25/01/2017

Note:

Release Point A3 = No 1 Boiler

Release Point A4 = No 2 Boiler

Mg/m³ for NO_x calculated using:

$$\text{NO}_x \text{ (mg/m}^3\text{)} = \frac{\text{ppm (NO}_x\text{)} * 46}{22.4}$$

Schedule 3 - Form Number: A5

Operator: 2 Sisters Red Meats Ltd

Permit Number: AP3433ES

Installation: Dowlais Slaughterhouse

Release to Air

NIL RETURNED

Release Points: A1, Incinerator Bottom Ash

Release for Calendar Year ending:December 2016...

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 25/01/2017

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: December 2016...

Reporting Form S2		
Release point	Date of Sampling	Organophosphorus content mg/l
S1	27/10/2016	See Attached report results; COV/1331091/2016
W1	12/01/2017	See Attached report results; COV/1352692/2017
W2	12/01/2017	See Attached report results; COV/1352692/2017

Signed on behalf of the Operator



Date

25/01/2017

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:December 2016...

Reporting Form R1

Parameter	Quantity
Delivered Electricity MWh	18978
Primary electricity (delivered x 2.4) MWh	45547
Primary carbon dioxide (primary electricity x 0.166) te	7560
Delivered gas MWh	17004
Process water used m ³	220023

Signed on behalf of the Operator



Date

25/01/2017

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 2016...

Reporting Form R2				
Parameter	Raw Materials Used tonnes	Quantity Used in Production tonnes	Quantity to Waste tonnes	Fate of Waste
Animal tissue - SRM	-	-	14987.26	Incineration
Animal tissue - Bones	-	-	6876.36	Rendering
Animal tissue - Heads & Feet			3198.68	Rendering
Blood - Ovine	-		3510.79	Anaerobic Digestion
Incinerator Bottom Ash	-	-	N/A	N/A
Packaging			*See notes	*See notes
Sanitiser/Hygiene Chemicals/Detergents/ETP Chemicals			341	Foul Sewer
Refrigerants			1.55	Air emissions
Mixed Waste			752.70	Landfill
Metal			7.94	Recycled
Plastic			39.05	Recycled
Cardboard/Paper			92.86	Recycled
Stomach Content, Lairage Waste & DAF Sludge			11738.61	Anaerobic Digestion

Signed on behalf of the Operator.....

Date 25/01/2017

Notes:

Sanitisers / hygiene chemicals, detergents and effluent treatment have been grouped as one category as they all go down the drain.

* 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.

Certificate of Analysis



Report Number: **COV/1331091/2016**

Issue **1**

Laboratory Number: **15647944**

Sample **4** of **6**

Sample Source: **2 Sisters Red Meat Ltd**

Sample Point Description: **St. Merryns Meat**

Sample Description: **PP8 Annual Pesticides Organophosphorous**

Sample Matrix: **Trade Effluent**

Sample Date/Time: **27 October 2016 08:15**

Sample Received: **27 October 2016**

Analysis Complete: **22 November 2016**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Azinphos-ethyl	<0.009	ug/l	22/11/2016	Y Cov	GEO47
Azinphos-methyl	<0.008	ug/l	15/11/2016	Y Cov	GEO47
Carbophenothion	<0.014	ug/l	22/11/2016	Y Cov	GEO47
Chlorfenvinphos	<0.010	ug/l	15/11/2016	Y Cov	GEO47
Chlorpyrifos	<0.007	ug/l	22/11/2016	Y Cov	GEO47
Diazinon	0.215	ug/l	15/11/2016	Y Cov	GEO47
Dichlorvos	<0.006	ug/l	15/11/2016	Y Cov	GEO47
Dimethoate	<0.02	ug/l	22/11/2016	Y Cov	GEO47
Fenitrothion	<0.010	ug/l	15/11/2016	Y Cov	GEO47
Fenthion	<0.011	ug/l	15/11/2016	Y Cov	GEO47
Malathion	<0.011	ug/l	15/11/2016	Y Cov	GEO47
Mevinphos	<0.020	ug/l	22/11/2016	Y Cov	GEO47
Parathion-ethyl	<0.009	ug/l	15/11/2016	Y Cov	GEO47
Parathion-methyl	<0.008	ug/l	22/11/2016	Y Cov	GEO47
Phorate	<0.013	ug/l	15/11/2016	Y Cov	GEO47
Phosalone	<0.016	ug/l	15/11/2016	Y Cov	GEO47
Pirimiphos-methyl	<0.010	ug/l	15/11/2016	Y Cov	GEO47
Propetamphos	<0.008	ug/l	15/11/2016	Y Cov	GEO47
Triazophos	<0.009	ug/l	22/11/2016	Y Cov	GEO47

Analyst Comments for 15647944:

This sample has been analysed for Pesticides method GEO47 outside recommended stability times. It is therefore possible that the results provided may be compromised.

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.
Analysed at: Cov = Coventry(CV4 9GU), Che = Chester(CH4 9EP), Ott = Otterbourne(SO21 2SW), S = Subcontracted, Trb = Subcontracted to Trowbridge(BA14 0XD), Wak = Wakefield(WF5 9TG).
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered. The LOD for the Legionella analysis will increase where the volume analysed is <1000g (1g is approximately equivalent to 1ml for sample volume analysed).
I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **P. Johal**

Date: **22 November 2016**

Title: **Microbiology Manager**

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Certificate of Analysis



1314
0897
4409



Report Number: **COV/1352692/2017**

Issue **1**

Laboratory Number: **15806452**

Sample **1** of **2**

Sample Source: **2 Sisters Red Meat Ltd**

Sample Point Description: **St. Merryns Meat**

Sample Description: **W1**

Sample Matrix: **Trade Effluent**

Sample Date/Time: **12 January 2017 08:00**

Sample Received: **12 January 2017**

Analysis Complete: **25 January 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Azinphos-ethyl	<0.004	ug/l	24/01/2017	Y Cov	GEO47
Azinphos-methyl	<0.004	ug/l	24/01/2017	Y Cov	GEO47
Carbophenothion	<0.006	ug/l	24/01/2017	Y Cov	GEO47
Chlorfenvinphos	<0.004	ug/l	24/01/2017	Y Cov	GEO47
Chlorpyrifos	<0.004	ug/l	24/01/2017	Y Cov	GEO47
Diazinon	0.008	ug/l	24/01/2017	Y Cov	GEO47
Dichlorvos	<0.002	ug/l	24/01/2017	Y Cov	GEO47
Dimethoate	<0.020	ug/l	24/01/2017	Y Cov	GEO47
Fenitrothion	<0.005	ug/l	24/01/2017	Y Cov	GEO47
Fenthion	<0.005	ug/l	24/01/2017	Y Cov	GEO47
Malathion	<0.004	ug/l	24/01/2017	Y Cov	GEO47
Mevinphos	<0.020	ug/l	24/01/2017	Y Cov	GEO47
Parathion-ethyl	<0.004	ug/l	24/01/2017	Y Cov	GEO47
Parathion-methyl	<0.004	ug/l	24/01/2017	Y Cov	GEO47
Phorate	<0.006	ug/l	24/01/2017	Y Cov	GEO47
Phosalone	<0.007	ug/l	24/01/2017	Y Cov	GEO47
Pirimiphos-methyl	<0.005	ug/l	24/01/2017	Y Cov	GEO47
Propetamphos	<0.003	ug/l	24/01/2017	Y Cov	GEO47
Triazophos	<0.004	ug/l	24/01/2017	Y Cov	GEO47

Analyst Comments for 15806452:

This sample has been analysed for Pesticides method GEO47 outside recommended stability times. It is therefore possible that the results provided may be compromised. The sample for GCMSMS Pesticides was received in a container inappropriate for this parameter. It is therefore possible that the results provided may be compromised. Reporting limits raised for GCMSMS Pesticides due to nature of sample matrix.

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS.

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I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **A. Zunzunegui**

Date: **25 January 2017**

Title: **Organic Team Leader**

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Certificate of Analysis



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0897
4409



Environmental

Report Number: **COV/1352692/2017**

Issue **1**

Laboratory Number: **15806453**

Sample **2** of **2**

Sample Source: **2 Sisters Red Meat Ltd**

Sample Point Description: **St. Merryns Meat**

Sample Description: **W2**

Sample Matrix: **Trade Effluent**

Sample Date/Time: **12 January 2017 08:00**

Sample Received: **12 January 2017**

Analysis Complete: **25 January 2017**

Test Description	Result	Units	Analysis Date	Accreditation	Method
Azinphos-ethyl	<0.004	ug/l	24/01/2017	Y Cov	GEO47
Azinphos-methyl	<0.004	ug/l	24/01/2017	Y Cov	GEO47
Carbophenothion	<0.006	ug/l	24/01/2017	Y Cov	GEO47
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Dichlorvos	<0.002	ug/l	24/01/2017	Y Cov	GEO47
Dimethoate	<0.020	ug/l	24/01/2017	Y Cov	GEO47
Fenitrothion	<0.005	ug/l	24/01/2017	Y Cov	GEO47
Fenthion	<0.005	ug/l	24/01/2017	Y Cov	GEO47
Malathion	<0.004	ug/l	24/01/2017	Y Cov	GEO47
Mevinphos	<0.020	ug/l	24/01/2017	Y Cov	GEO47
Parathion-ethyl	<0.004	ug/l	24/01/2017	Y Cov	GEO47
Parathion-methyl	<0.004	ug/l	24/01/2017	Y Cov	GEO47
Phorate	<0.006	ug/l	24/01/2017	Y Cov	GEO47
Phosalone	<0.007	ug/l	24/01/2017	Y Cov	GEO47
Pirimiphos-methyl	<0.005	ug/l	24/01/2017	Y Cov	GEO47
Propetamphos	<0.003	ug/l	24/01/2017	Y Cov	GEO47
Triazophos	<0.004	ug/l	24/01/2017	Y Cov	GEO47

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I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Signed:

Name: **A. Zunzunegui**

Date: **25 January 2017**

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