

From: Ross, Stuart
To: Bradford, Julie
Subject: FW: End of year reporting 2013.
Date: 31 January 2014 16:19:26
Attachments: [CO_EA_Annual_EPR_Report_2013.xlsx](#)
[CONRW04AirWatRep2013.xlsx](#)
[CONRWInvalidlogUnit4Q32013.docx](#)
[CONRWInvalidlogUnit1Q42013.docx](#)
[CONRWInvalidlogUnit2Q42013.docx](#)
[CONRWInvalidlogUnit3Q42013.docx](#)



For PR

Cheers

Stu

From: Black, Andrew [mailto:Andy.Black@eon-uk.com]
Sent: 31 January 2014 16:13
To: Ross, Stuart
Cc: Plass, Jason
Subject: End of year reporting 2013.

Stuart.

As explained in our telephone conversation, please find enclosed monitoring reports for Q3 2013 and also end of year annual reports for 2013 in submission with the requirements of Environment Permit MP3337SH.

Please note that reporting form Air 1 still details annual surveillance testing for emission point A12 from 2012. A further monitoring report has been completed by our UKAS accredited contractor in 2013, but we are yet to receive the full monitoring report. Once we are in possession of this document, I will re-issue the reporting form with revised AST monitoring data for 2013. I apologise for the initial absence of this data.

Additionally, as detailed in our conversation today, we monitor pH levels on our surface water drainage systems which flow into the old Rockcliffe drain passing under the installation. This drain emerges into the River Dee estuary alongside our main surface water drainage outfall (W2). E.ON discharges into the old rockcliffe drain are subjected to pH / Oil in water monitoring as per the requirements placed upon W2 by the Environment permit. We have noticed some brief spiking in pH levels above 9 in this discharge point. Site surveys and investigations have shown that only car park, road and open area drainage passes into these drains, and we are unable to identify a confirmed source for the pH spiking. Whilst not recorded as an official discharge point by our Permit, we will be replacing the analyser probe and completing drainage cleaning works as examples of best practice for surface water monitoring discharge.

Please feel free to contact myself with any additional queries regarding these documents.

Kind Regards

Andy

Andy Black

MONITORING RETURNS N. WALL-3

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RELEASES TO AIR
LCPD REPORTING- Continuous measurement systems invalidations log

Operational

Operator: E.ON UK PLC

Location: Connah's Quay Power Station

Permit/Variation number:

Release Point: A4

Emissions to Air – Invalidation Log

Date	Period of invalidation (hours)	Cumulative invalidated days in year	Comments
31/3/2013	0	0	N/A
30/6/2013	1	0	Pump Change
30/9/2013	0	0	N/A
31/12/2013	0	0	N/A

Signed.....

Date.....

RELEASES TO AIR
LCPD REPORTING- Continuous measurement systems invalidations log

Operational

Operator: E.ON UK PLC

Location: Connah's Quay Power Station

Permit/Variation number:

Release Point: A1

Emissions to Air – Invalidation Log

Date	Period of invalidation (hours)	Cumulative invalidated days in year	Comments
31/3/2013	0	0	N/A
30/06/13	0	0	N/A
30/9/13	0	0	N/A
31/12/13	0	0	N/A

Signed.....

Date.....

Form: Air 3 – Continuous measurement invalidation log (01/12/06)

RELEASES TO AIR
LCPD REPORTING- Continuous measurement systems invalidations log

Operational

Operator: E.ON UK PLC

Location: Connah's Quay Power Station

Permit/Variation number:

Release Point: A2

Emissions to Air – Invalidation Log

Date	Period of invalidation (hours)	Cumulative invalidated days in year	Comments
31/3/2013	0	0	N/A
30/6/2013	1	0	Impinger Tube Change
30/9/2013	0	0	N/A
31/12/2013	0	0	N/A

Signed.....

Date.....

RELEASES TO AIR
LCPD REPORTING- Continuous measurement systems invalidations log

Operational

Operator: E.ON UK PLC

Location: Connah's Quay Power Station

Permit/Variation number:

Release Point: A3

Emissions to Air – Invalidation Log

Date	Period of invalidation (hours)	Cumulative invalidated days in year	Comments
31/3/2013	0	0	N/A
30/6/2013	0	0	N/A
30/9/2013	0	0	N/A
31/12/2013	0	0	N/A

Signed.....

Date.....

Form: Air 3 – Continuous measurement invalidation log (01/12/06)

Reporting of Water Usage for the year 2013

Operator: E.ON UK

Site Location: Connaught Quay

Permit/Variation Number: MP3337SH

Water Source	Usage (m3/year)	Specific Usage (m3/unit output)
River Abstraction	7,252,090	2.30m3 per MWh
Mains Water	306,569	0.09m3 per MWh
TOTAL WATER USAGE	7,558,659	2.40m3 per MWh

Operators Comments:

Signed on behalf of the Operator

Date

Reporting of Energy Usage (GTP) for the year 2013

Operator: E.ON UK

Site Location: Connahs Quay

Permit/Variation Number: MP3337SH

Energy Usage			
Energy Source	Quantity	Primary Energy (MWh)	Specific Usage (MWh/kSm ³)
Electricity*	MWh	162,055.40	0.0062
Natural Gas	MWh	42,140.80	0.0016

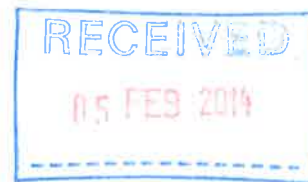
*Conversion factor for delivered electricity to primary energy = 2.6

Operators Comments:

Signed on behalf of the Operator

Date

Form Number: Energy1/Connah'sQuay PS GTP (01/12/06)



Releases to Air
LCPD Reporting - Energy Usage Summary for the year 2013

Operator: E.ON UK

Site Location: Connahs Quay

Permit/Variation Number: MP3337SH

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Release Point	A1	A2	A3	A4	All LCPD Release points in total
Parameter	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas
Fuel NCV (GJ/tonne)	50.34	50.25	49.22	50.02	49.96
Annual fuel usage (tonnes)	60,426.95	44,955.92	47,226.63	97,845.13	250,454.69
Annual energy input (GJ)	3,042,006.24	2,259,188.81	2,324,554.41	4,894,213.40	12,520,827.00
Annual energy output (GWh)	416.38	304.58	383.00	669.23	1,733.20
Annual energy input : output ratio	2.1	2.1	1.16.1	2.1	

Signed on behalf of the Operator

Date

Form Ref: Air - 7 Energy usage summary (01/12/06)

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**Releases to Air
Annual Mass Release
Operational Summary for the year 2013**

Operator: E.ON UK

Site Location: Connaught Quay

Permit/Variation Number: MP3337SH

Release Point : A1

	Oxides of Nitrogen Released	Sulphur Dioxide	Particulate Matter
Month			
January	16.60	0.06	0.54
February	4.02	0.01	0.10
March	0.00	0.00	0.00
April	4.18	0.02	0.17
May	5.56	0.03	0.31
June	12.12	0.06	0.49
July	6.40	0.05	0.26
August	3.78	0.02	0.17
September	4.64	0.03	0.22
October	0.98	0.00	0.03
November	5.66	0.03	0.22
December	5.89	0.02	0.20

69.83

0.33

2.71

Signed on behalf of the Operator

Date

Form Ref: Air - 4 Annual Mass Release

1420 MW
4
= 355

**Releases to Air
Annual Mass Release
Operational Summary for the year 2013**

Operator: E.ON UK

Site Location: Connaught Quay

Permit/Variation Number: MP3337SH

Release Point : A2

	Oxides of Nitrogen Released	Sulphur Dioxide	Particulate Matter
Month			
January	6.38	0.03	0.27
February	4.79	0.02	0.00
March	11.29	0.05	0.40
April	3.54	0.01	0.12
May	7.90	0.05	0.42
June	18.23	0.06	0.51
July	1.34	0.06	0.06
August	0.00	0.00	0.00
September	0.00	0.00	0.00
October	0.00	0.00	0.00
November	1.24	0.01	0.07
December	0.85	0.00	0.04

55.56

0.29

1.89

Signed on behalf of the Operator

Date

**Releases to Air
Annual Mass Release
Operational Summary for the year 2013**

Operator: E.ON UK

Site Location: Connahs Quay

Permit/Variation Number: MP3337SH

Release Point : A3

	Oxides of Nitrogen Released	Sulphur Dioxide	Particulate Matter
Month			
January	0.00	0.01	0.08
February	2.75	0.02	0.13
March	5.16	0.04	0.28
April	0.15	0.00	0.01
May	3.54	0.02	0.23
June	5.08	0.03	0.27
July	0.52	0.03	0.00
August	0.00	0.00	0.00
September	3.58	0.03	0.21
October	5.68	0.04	0.29
November	6.18	0.04	0.30
December	3.64	0.02	0.14

Signed on behalf of the Operator *36.28* *0.02* *1.94*

Date

**Releases to Air
Annual Mass Release
Operational Summary for the year 2013**

Operator: E.ON UK

Site Location: Connaught Quay

Permit/Variation Number: MP3337SH

Release Point : A4

	Oxides of Nitrogen Released	Sulphur Dioxide	Particulate Matter
Month			
January	14.72	0.08	0.67
February	7.01	0.04	0.29
March	17.35	0.08	0.62
April	10.56	0.05	0.42
May	2.00	0.02	0.13
June	0.00	0.00	0.00
July	0.22	0.02	0.03
August	6.38	0.04	0.01
September	7.77	0.07	0.02
October	6.42	0.05	0.01
November	8.60	0.07	0.02
December	5.20	0.04	0.01

Signed on behalf of the Operator *86.23* *0.56* *2.73*

Date

Reporting of emissions to air for the period from 01/10/2013 to 31/12/2013

Operator: E.ON UK

Site Location: Connaught Quay

Permit/Variation Number: MP3337SH

Release Points: A11, A12

Release Point	Substance / Parameter	ELV (mg/m3)	Reference Period	Result (mg/m3)
A11	Oxides of Nitrogen (NO and NO2 expressed as NO2)	95	10 min average	78.58
A12	Oxides of Nitrogen (NO and NO2 expressed as NO2)	95	10 min average	73*
A11	Carbon Monoxide	10	10 min average	8.1
A12	Carbon Monoxide	100	10 min average	77.7*
A11	Sulphur dioxide	9950	10 min average	98.7

*External monitoring completed by E.ON Engineering on 21st June 2012
2013 monitoring visit report awaited from ENT Stack Monitoring Team.

Signed on behalf of the Operator

Form Ref: Air - 1 / Connaught Quay PS (01/12/06)

Releases to Air - LCPD/PPC Continuous Measurement

Operational Summary for the 3 months to 31/12/2013

Operator: E.ON UK

Site Location: Connah's Quay

Release Points: A1, A2, A3, A4

Permit/Variation Number: MP3337SH

Release Point	Pollutant	Month	ELV (mg/m3)	Max Daily Average	Calendar Monthly Mean	95% of validated hourly means
A1	NOx	Oct	75	32.7	31.65	34.2
A1	CO	Oct	30	1.54	1.39	1.2
A1	NOx	Nov	75	45.8	37.52	47
A1	CO	Nov	30	1.8	1.51	1.5
A1	NOx	Dec	75	43.52	38.4	43.9
A1	CO	Dec	30	3.35	1.66	9.5
A1	NOx	Annual	75			57.2
A1	CO	Annual	30			2
A2	NOx	Oct	75	-	-	-
A2	CO	Oct	30	-	-	-
A2	NOx	Nov	75	63.95	59.45	60.4
A2	CO	Nov	30	2.25	1.49	1.3
A2	NOx	Dec	75	68.52	63.67	58.8
A2	CO	Dec	30	1.47	1.41	1.4
A2	NOx	Annual	75			58.5
A2	CO	Annual	30			2.7
A3	NOx	Oct	75	28.63	22.7	27
A3	CO	Oct	30	1.47	1.27	1.6
A3	NOx	Nov	75	30.37	25.05	30.1
A3	CO	Nov	30	1.95	1.46	1.7
A3	NOx	Dec	75	30.07	23.98	30.7
A3	CO	Dec	30	1.61	1.38	1.7
A3	NOx	Annual	75			29.8
A3	CO	Annual	30			1.7
A4	NOx	Oct	75	26.3	25.14	25.8
A4	CO	Oct	30	3.82	1.74	2.1
A4	NOx	Nov	75	25.18	23.01	24
A4	CO	Nov	30	2.58	1.89	2.5
A4	NOx	Dec	75	27.32	25.33	26.2
A4	CO	Dec	30	15.45	3.96	2.4
A4	NOx	Annual	75			43
A4	CO	Annual	30			2.3

Notes - 1 Compliance with LCPD articles 4.1, 4.3 require measurement results for:

Nitrogen oxides (as NO2) to demonstrate that:

- i) none of the validated daily averages exceeds the ELV
- ii) 95% of all validated hourly averages do not exceed 150% of the ELV

Signed.....
(Authorised to sign as a representative of operator)

Date.....

Air - 2 LCPD Continuous (01/12/06)

Permit Number : MP3337SH

Operator

Installation : Connahs Quay Power Station

Form Number : Water1 / ConnahsQuay PS (29/09/08)

Reporting of emissions to water (other than to sewer) for the period :

01/10/2013 To 31/12/2013

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result	Test Method	Sample Date and Times	Uncertainty
W1	Flow	2.5 m3/s	Instantaneous	2.23	Analyser	28 Dec : 06:09:37 - 07:44:05	2.47%
W1	Temperature	25 C		22.2	Analyser	08 Oct 12:56:02 - 13:59:07	0.1c
W1	Temperature Difference April - October	13 C		10.4	Analyser	12 Nov: 05:41:04 - 07:52:35	0.1c
W1	Temperature Difference November - March 95 percentile Maximum	13 C 20C		8.0	Analyser	N/A	N/A
W1	Salinity	60 g/l		58.9	Analyser	8 Oct : 12:56:02 - 13:59:07	
W1	pH Maximum	9	Instantaneous	8.6	Analyser	4 Nov : 22:35:00 - 00:52:56	0.01pH
W1	pH Minimum	6		6.4	Analyser	3 Dec 09:57:15 - 11:15:49	0.01pH
W1	Total Residual Oxidant (TRO) [5]	0.2 mg/l		N/A	Analyser	N/A	N/A
W1	Residual Chlorine Dioxide [6]			0.005174	Analyser	8 Dec : 16:19:37 - 19:02:01	0.001 mg/m3
W1	Residual Chlorite Ion [6]	10 mg/l (absolute limit)		0.005153	Analyser	1 Oct 23:16:00 - 2 Oct 01:47:13	0.001 mg/m3
W1	Residual Chlorite Ion [6]	5 mg/l	Average	0.005153	Analyser	1 Oct 23:16:00 - 2 Oct 01:47:13	0.001 mg/m3
W1	Oil and Grease	20 mg/l	Instantaneous	14.1	Analyser	1 Nov 22:59:11 - 2 Nov 01:58:00	N/A

Signed

(Authorised to sign as representative of Operator)

Date

Installation : Connahs Quay Power Station

Form Number : Water1 / ConnahsQuay PS (29/09/08)

Reporting of emissions to water (other than to sewer) for the period :

01/07/2013 To 30/09/2013

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result	Test Method	Sample Date and Times	Uncertainty
W2	pH Maximum	9	Instantaneous	8.17	Analyser	4 Nov : 10:00:00 - 11:00:00	0.01
W2	pH Minimum	6	Instantaneous	7.07	Analyser	3 Oct 00:00:00 - 01:00:00	0.01
W2	Oil and Grease	20 mg/l	Instantaneous	None	Analyser	Continuous	N/A
W2	Residual Chlorine Dioxide [6]		Instantaneous	0.07378578	Analyser	29 Oct - 10:44:36	0.001 mg/m3

Signed

(Authorised to sign as representative of Operator)

Date

