

**Facility Information Summary**

AER Reporting Year	2014
Licence Register Number	W0151-01
Name of site	Murphy Environmental Gormanston
Site Location	Sarsfieldstown, Gormanston, Co. Meath
NACE Code	3832
Class/Classes of Activity	3.1, 3.13, 4.3, 4.4, 4.13
National Grid Reference (6E, 6 N)	-6.25153 53.654

A description of the activities/processes at the site for the reporting year. This should include information such as production increases or decreases on site, any infrastructural changes, environmental performance which was measured during the reporting year **and an overview of compliance with your licence listing all exceedances of licence limits (where applicable) and what they relate to e.g. air, water, noise.**


Land Restoration - Using clean construction and demolition waste - Soil & Stones and Concrete, in line with licence requirements. It has been agreed with the Agency that W0151-01 is a recovery activity.

There were no infrastructural or other significant changes during the reporting year.

Annual monitoring was conducted during the reporting year for: noise, LF gas, dust, surface water, groundwater and leachate. There were a number of breaches of trigger levels, as detailed in the 'Complaints-Incidents' tab - all were reported as 'minor incidents' to the EPA.

**Declaration:**

All the data and information presented in this report has been checked and certified as being accurate. The quality of the information is assured to meet licence requirements.

	<p>31/03/2015</p>
<p>Signature Group/Facility manager <small>(or nominated, suitably qualified and experienced deputy)</small></p>	<p>Date</p>

**AIR-summary template** Lic No: W0151-01 Year 2014

Answer all questions and complete all tables where relevant

1 Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the current reporting year and answer further questions. If **you do not have** licenced emissions and **do not complete a solvent management plan** (table A4 and A5) you do not need to complete the tables

Additional information	
No	Ambient dust monitoring was conducted at 4 No. monitoring locations in Q2, 2014 (27/05/14 to 26/06/14) and Q3, 2014 (20/08/14 to 19/09/14) - there were no breaches of the dust ELV set in the licence.

**Periodic/Non-Continuous Monitoring**

2 Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below

SELECT	
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3 Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist? [Basic air monitoring checklist](#) [AGN2](#)

SELECT	
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**Table A1: Licensed Mass Emissions/Ambient data-periodic monitoring (non-continuous)**

Emission reference no:	Parameter/ Substance	Frequency of Monitoring	ELV in licence or any revision therof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments - reason for change in % mass load from previous year if applicable
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		

Note 1: Volumetric flow shall be included as a reportable parameter

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<b>Continuous Monitoring</b>				

4	Does your site carry out continuous air emissions monitoring?	SELECT	
	If yes please review your continuous monitoring data and report the required fields below in Table A2 and compare it to its relevant Emission Limit Value (ELV)		
5	Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below	SELECT	
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	SELECT	
7	Did your site experience any abatement system bypasses? If yes please detail them in table A3 below	SELECT	

**Table A2: Summary of average emissions -continuous monitoring**

Emission reference no:	Parameter/ Substance	ELV in licence or any revision thereof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission	Annual maximum	Monitoring Equipment downtime (hours)	Number of ELV exceedences in current reporting year	Comments
	SELECT			SELECT	SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					

note 1: Volumetric flow shall be included as a reportable parameter.

**Table A3: Abatement system bypass reporting table**

[Bypass protocol](#)

Date*	Duration** (hours)	Location	Reason for bypass	Impact magnitude	Corrective action

\* this should include all dates that an abatement system bypass occurred

\*\* an accurate record of time bypass beginning and end should be logged on site and maintained for future Agency inspections please refer to bypass protocol link

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<b>Solvent use and management on site</b>								
8 Do you have a total Emission Limit Value of direct and fugitive emissions on site? if yes please fill out tables A4 and A5					SELECT			
<b>Table A4: Solvent Management Plan Summary</b>			Please refer to linked solvent regulations to complete table 5 and 6					
<b>Total VOC Emission limit value</b>			<a href="#">Solvent regulations</a>					
Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and fugitive)	Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision thereof	Compliance			
					SELECT			
					SELECT			
<b>Table A5: Solvent Mass Balance summary</b>								
	(I) Inputs (kg)	(O) Outputs (kg)						
Solvent	(I) Inputs (kg)	Organic solvent emission in waste	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g.	Solvents destroyed onsite through	Total emission of Solvent to air (kg)
							Total	

## AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)

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## Additional information

1 Does your site have licensed emissions direct to surface water or direct to sewer? If yes please complete table W2 and W3 below for the current reporting year and answer further questions. If **you do not have** licensed emissions you **only** need to complete table W1 and or W2 for storm water analysis and visual inspections

2 Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses on or near your site? If yes please complete table W2 below summarising **only** any evidence of contamination noted during visual inspections

No	
Yes	

Table W1 Storm water monitoring

Location reference	Location relative to site activities	PRTR Parameter	Licensed Parameter	Monitoring date	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
ST-1	upstream		Alkalinity, Total	27/05/2014 03/12/2014	Not applicable	Not applicable	353	mg/l	Not applicable	
ST-1	upstream		Ammoniacal Nitrogen	27/05/2014 03/12/2014	Not applicable	Not applicable	0.085	mg/l	Not applicable	
ST-1	upstream		BOD	27/05/2014 03/12/2014	Not applicable	Not applicable	1.5	mg/l	Not applicable	
ST-1	upstream		Boron	27/05/2014 03/12/2014	Not applicable	Not applicable	0.023	mg/l	Not applicable	
ST-1	upstream		Cadmium	27/05/2014 03/12/2014	Not applicable	Not applicable	0.0005	mg/l	Not applicable	
ST-1	upstream		Calcium	27/05/2014 03/12/2014	Not applicable	Not applicable	136.75	mg/l	Not applicable	
ST-1	upstream		Chloride	27/05/2014 03/12/2014	Not applicable	Not applicable	35.7	mg/l	Not applicable	
ST-1	upstream		Chromium, Total	27/05/2014 03/12/2014	Not applicable	Not applicable	0.0015	mg/l	Not applicable	
ST-1	upstream		COD	27/05/2014 03/12/2014	Not applicable	Not applicable	16.5	mg/l	Not applicable	
ST-1	upstream		Colour	27/05/2014 03/12/2014	Not applicable	Not applicable	#VALUE!	N/A	Not applicable	
ST-1	upstream		Conductivity	27/05/2014 03/12/2014	Not applicable	Not applicable	0.795	mS/cm	Not applicable	
ST-1	upstream		Copper	27/05/2014 03/12/2014	Not applicable	Not applicable	0.007	mg/l	Not applicable	
ST-1	upstream		Cyanide, Total	27/05/2014 03/12/2014	Not applicable	Not applicable	0.01	mg/l	Not applicable	
ST-1	upstream		Dissolved Oxygen	27/05/2014 03/12/2014	Not applicable	Not applicable	8	mg/l	Not applicable	
ST-1	upstream		Iron	27/05/2014 03/12/2014	Not applicable	Not applicable	0.02	mg/l	Not applicable	
ST-1	upstream		Lead	27/05/2014 03/12/2014	Not applicable	Not applicable	0.005	mg/l	Not applicable	
ST-1	upstream		Magnesium	27/05/2014 03/12/2014	Not applicable	Not applicable	12.7	mg/l	Not applicable	
ST-1	upstream		Manganese	27/05/2014 03/12/2014	Not applicable	Not applicable	0.002	mg/l	Not applicable	
ST-1	upstream		Nickel	27/05/2014 03/12/2014	Not applicable	Not applicable	0.002	mg/l	Not applicable	
ST-1	upstream		Odour	27/05/2014 03/12/2014	Not applicable	Not applicable	#VALUE!	N/A	Not applicable	
ST-1	upstream		Orthophosphates	27/05/2014 03/12/2014	Not applicable	Not applicable	0.225	mg/l	Not applicable	
ST-1	upstream		pH	27/05/2014 03/12/2014	Not applicable	Not applicable	8.15	pH units	Not applicable	
ST-1	upstream		Phosphorus, Total	27/05/2014 03/12/2014	Not applicable	Not applicable	0.1225	mg/l	Not applicable	
ST-1	upstream		Potassium	27/05/2014 03/12/2014	Not applicable	Not applicable	2.8	mg/l	Not applicable	
ST-1	upstream		Sodium	27/05/2014 03/12/2014	Not applicable	Not applicable	18.4	mg/l	Not applicable	
ST-1	upstream		Sulphate	27/05/2014 03/12/2014	Not applicable	Not applicable	26.595	mg/l	Not applicable	

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ST-1	upstream		Suspended Solids, Total	27/05/2014 03/12/2014	Not applicable	Not applicable	12.5	mg/l	Not applicable	
ST-1	upstream		Temperature	27/05/2014 03/12/2014	Not applicable	Not applicable	11.1	oC	Not applicable	
ST-1	upstream		Zinc	27/05/2014 03/12/2014	Not applicable	Not applicable	0.0045	mg/l	Not applicable	
ST-2	upstream		Alkalinity, Total	27/05/2014 03/12/2014	Not applicable	Not applicable	215	mg/l	Not applicable	
ST-2	upstream		Ammoniacal Nitrogen	27/05/2014 03/12/2014	Not applicable	Not applicable	0.04	mg/l	Not applicable	
ST-2	upstream		BOD	27/05/2014 03/12/2014	Not applicable	Not applicable	2.5	mg/l	Not applicable	
ST-2	upstream		Boron	27/05/2014 03/12/2014	Not applicable	Not applicable	0.0305	mg/l	Not applicable	
ST-2	upstream		Cadmium	27/05/2014 03/12/2014	Not applicable	Not applicable	0.0005	mg/l	Not applicable	
ST-2	upstream		Calcium	27/05/2014 03/12/2014	Not applicable	Not applicable	109.5	mg/l	Not applicable	
ST-2	upstream		Chloride	27/05/2014 03/12/2014	Not applicable	Not applicable	38.15	mg/l	Not applicable	
ST-2	upstream		Chromium, Total	27/05/2014 03/12/2014	Not applicable	Not applicable	0.0015	mg/l	Not applicable	
ST-2	upstream		COD	27/05/2014 03/12/2014	Not applicable	Not applicable	7	mg/l	Not applicable	
ST-2	upstream		Colour	27/05/2014 03/12/2014	Not applicable	Not applicable	#VALUE!	N/A	Not applicable	
ST-2	upstream		Conductivity	27/05/2014 03/12/2014	Not applicable	Not applicable	0.76	mS/cm	Not applicable	
ST-2	upstream		Copper	27/05/2014 03/12/2014	Not applicable	Not applicable	0.007	mg/l	Not applicable	
ST-2	upstream		Cyanide, Total	27/05/2014 03/12/2014	Not applicable	Not applicable	0.01	mg/l	Not applicable	
ST-2	upstream		Dissolved Oxygen	27/05/2014 03/12/2014	Not applicable	Not applicable	10	mg/l	Not applicable	
ST-2	upstream		Iron	27/05/2014 03/12/2014	Not applicable	Not applicable	0.02	mg/l	Not applicable	
ST-2	upstream		Lead	27/05/2014 03/12/2014	Not applicable	Not applicable	0.005	mg/l	Not applicable	
ST-2	upstream		Magnesium	27/05/2014 03/12/2014	Not applicable	Not applicable	13.55	mg/l	Not applicable	
ST-2	upstream		Manganese	27/05/2014 03/12/2014	Not applicable	Not applicable	0.0045	mg/l	Not applicable	
ST-2	upstream		Nickel	27/05/2014 03/12/2014	Not applicable	Not applicable	0.002	mg/l	Not applicable	
ST-2	upstream		Odour	27/05/2014 03/12/2014	Not applicable	Not applicable	#VALUE!	N/A	Not applicable	
ST-2	upstream		Orthophosphates	27/05/2014 03/12/2014	Not applicable	Not applicable	0.06	mg/l	Not applicable	
ST-2	upstream		pH	27/05/2014 03/12/2014	Not applicable	Not applicable	8.25	pH units	Not applicable	
ST-2	upstream		Phosphorus, Total	27/05/2014 03/12/2014	Not applicable	Not applicable	0.026	mg/l	Not applicable	
ST-2	upstream		Potassium	27/05/2014 03/12/2014	Not applicable	Not applicable	8.55	mg/l	Not applicable	
ST-2	upstream		Sodium	27/05/2014 03/12/2014	Not applicable	Not applicable	20.2	mg/l	Not applicable	
ST-2	upstream		Sulphate	27/05/2014 03/12/2014	Not applicable	Not applicable	104.845	mg/l	Not applicable	
ST-2	upstream		Suspended Solids, Total	27/05/2014 03/12/2014	Not applicable	Not applicable	12.5	mg/l	Not applicable	
ST-2	upstream		Temperature	27/05/2014 03/12/2014	Not applicable	Not applicable	10.95	oC	Not applicable	
ST-2	upstream		Zinc	27/05/2014 03/12/2014	Not applicable	Not applicable	0.0035	mg/l	Not applicable	
SWD-1	downstream		Alkalinity, Total	03/12/2014	Not applicable	Not applicable	278	mg/l	Not applicable	
SWD-1	downstream		Ammoniacal Nitrogen	03/12/2014	Not applicable	Not applicable	<0.03	mg/l	Not applicable	
SWD-1	downstream		BOD	03/12/2014	Not applicable	Not applicable	2	mg/l	Not applicable	

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SWD-1	downstream		Boron	03/12/2014	Not applicable	Not applicable	0.034	mg/l	Not applicable	
SWD-1	downstream		Cadmium	03/12/2014	Not applicable	Not applicable	<0.005	mg/l	Not applicable	
SWD-1	downstream		Calcium	03/12/2014	Not applicable	Not applicable	135.3	mg/l	Not applicable	
SWD-1	downstream		Chloride	03/12/2014	Not applicable	Not applicable	41.9	mg/l	Not applicable	
SWD-1	downstream		Chromium, Total	03/12/2014	Not applicable	Not applicable	<0.0015	mg/l	Not applicable	
SWD-1	downstream		COD	03/12/2014	Not applicable	Not applicable	<7	mg/l	Not applicable	
SWD-1	downstream		Colour	03/12/2014	Not applicable	Not applicable	Clear	N/A	Not applicable	
SWD-1	downstream		Conductivity	03/12/2014	Not applicable	Not applicable	0.85	mS/cm	Not applicable	
SWD-1	downstream		Copper	03/12/2014	Not applicable	Not applicable	<0.007	mg/l	Not applicable	
SWD-1	downstream		Cyanide, Total	03/12/2014	Not applicable	Not applicable	<0.01	mg/l	Not applicable	
SWD-1	downstream		Dissolved Oxygen	03/12/2014	Not applicable	Not applicable	9	mg/l	Not applicable	
SWD-1	downstream		Iron	03/12/2014	Not applicable	Not applicable	<0.020	mg/l	Not applicable	
SWD-1	downstream		Lead	03/12/2014	Not applicable	Not applicable	<0.005	mg/l	Not applicable	
SWD-1	downstream		Magnesium	03/12/2014	Not applicable	Not applicable	12.8	mg/l	Not applicable	
SWD-1	downstream		Manganese	03/12/2014	Not applicable	Not applicable	<0.002	mg/l	Not applicable	
SWD-1	downstream		Nickel	03/12/2014	Not applicable	Not applicable	<0.002	mg/l	Not applicable	
SWD-1	downstream		Odour	03/12/2014	Not applicable	Not applicable	None	N/A	Not applicable	
SWD-1	downstream		Orthophosphates	03/12/2014	Not applicable	Not applicable	<0.06	mg/l	Not applicable	
SWD-1	downstream		pH	03/12/2014	Not applicable	Not applicable	8	pH units	Not applicable	
SWD-1	downstream		Phosphorus, Total	03/12/2014	Not applicable	Not applicable	0.046	mg/l	Not applicable	
SWD-1	downstream		Potassium	03/12/2014	Not applicable	Not applicable	9.4	mg/l	Not applicable	
SWD-1	downstream		Sodium	03/12/2014	Not applicable	Not applicable	26.1	mg/l	Not applicable	
SWD-1	downstream		Sulphate	03/12/2014	Not applicable	Not applicable	129.22	mg/l	Not applicable	
SWD-1	downstream		Suspended Solids, Total	03/12/2014	Not applicable	Not applicable	22	mg/l	Not applicable	
SWD-1	downstream		Temperature	03/12/2014	Not applicable	Not applicable	6.4	°C	Not applicable	
SWD-1	downstream		Zinc	03/12/2014	Not applicable	Not applicable	<0.003	mg/l	Not applicable	

\*trigger values may be agreed by the Agency outside of licence conditions

**Table W2 Visual inspections-Please only enter details where contamination was observed.**

Location Reference	Date of inspection	Description of contamination	Source of contamination	Corrective action	Comments
		NO CONTAMINATION	SELECT		
			SELECT		

**Licensed Emissions to water and /or wastewater(sewer)-periodic monitoring (non-continuous)**

3 Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table W3 below

No	Additional information
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Was all monitoring carried out in accordance with EPA guidance and checklists for Quality of Aqueous Monitoring Data Reported to the EPA? If no please detail what areas require improvement in additional information box

4 [External/Internal Lab Quality checklist](#) [Assessment of results checklist](#)

Yes	
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**Table W3: Licensed Emissions to water and /or wastewater (sewer)-periodic monitoring (non-continuous)**

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision thereof <sup>Note 2</sup>	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference standard number	Annual mass load (kg)	Comments
	SELECT	SELECT	SELECT		SELECT		SELECT		SELECT	SELECT	SELECT	SELECT			

Note 1: Volumetric flow shall be included as a reportable parameter  
 Note 2: Where Emission Limit Values (ELV) do not apply to your licence please compare results against EQS for Surface water or relevant receptor quality standards

**Continuous monitoring**

5 Does your site carry out continuous emissions to water/sewer monitoring?

SELECT	Additional Information
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If yes please summarise your continuous monitoring data below in Table W4 and compare it to its relevant Emission Limit Value (ELV)

6 Did continuous monitoring equipment experience downtime? If yes please record downtime in table W4 below

SELECT	
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7 Do you have a proactive service contract for each piece of continuous monitoring equipment on site?

SELECT	
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8 Did abatement system bypass occur during the reporting year? If yes please complete table W5 below

SELECT	
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**Table W4: Summary of average emissions -continuous monitoring**

Emission reference no:	Emission released to	Parameter/ Substance	ELV or trigger values in licence or any revision thereof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission for current reporting year (kg)	% change +/- from previous reporting year	Monitoring Equipment downtime (hours)	Number of ELV exceedences in reporting year	Comments
	SELECT	SELECT		SELECT	SELECT	SELECT					
	SELECT	SELECT		SELECT	SELECT	SELECT					

note 1: Volumetric flow shall be included as a reportable parameter.

**Table W5: Abatement system bypass reporting table**

Date	Duration (hours)	Location	Resultant emissions	Reason for bypass	Corrective action*	Was a report submitted to the EPA?	When was this report submitted?
						SELECT	

\*Measures taken or proposed to reduce or limit bypass frequency



**Bund testing**

dropdown menu click to see options

**Additional information**

Are you required by your licence to undertake integrity testing on bunds and containment structures ? if yes please fill out table B1 below listing all **new bunds and containment structures** on site, in addition to **all bunds which failed** the integrity test-**all bunding structures which failed including mobile bunds must be listed in the table below, please include all bunds outside the licenced testing period** (mobile bunds and chemstore included)

Yes	Bund testing is stipulated in W0151-01; however fuel is no longer stored on site (the plant items which required diesel are no longer on site). Bund testing has, therefore, not been required (diesel tanks are empty).
SELECT	
SELECT	
SELECT	
SELECT	
SELECT	
SELECT	

- 1
- 2 Please provide integrity testing frequency period  
Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), Tanks, sumps and containers? (containers refers to "Chemstore"
- 3 type units and mobile bunds)
- 4 How many bunds are on site?
- 5 How many of these bunds have been tested within the required test schedule?
- 6 How many mobile bunds are on site?
- 7 Are the mobile bunds included in the bund test schedule?
- 8 How many of these mobile bunds have been tested within the required test schedule?
- 9 How many sumps on site are included in the integrity test schedule?
- 10 How many of these sumps are integrity tested within the test schedule?  
**Please list any sump integrity failures in table B1**
- 11 Do all sumps and chambers have high level liquid alarms?
- 12 If yes to Q11 are these failsafe systems included in a maintenance and testing programme?
- 13 Is the Fire Water Retention Pond included in your integrity test programme?

**Table B1: Summary details of bund /containment structure integrity test**

Bund/Containment structure ID	Type	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest (if in current reporting year)
	SELECT					SELECT			SELECT	SELECT		SELECT		
	SELECT					SELECT			SELECT	SELECT		SELECT		

\* Capacity required should comply with 25% or 100% containment rule as detailed in your licence

Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance?

[bundings and storage guidelines](#)

- 15
- 16 Are channels/transfer systems to remote containment systems tested?
- 17 Are channels/transfer systems compliant in both integrity and available volume?

Commentary	
SELECT	
SELECT	
SELECT	

**Pipeline/underground structure testing**

Are you required by your licence to undertake integrity testing\* on underground structures e.g. pipelines or sumps etc ? if yes please fill out table 2 below listing all underground structures and pipelines on site **which failed the integrity test and all which have not been tested within the integrity test period as specified**

SELECT	
SELECT	

- 1 Please provide integrity testing frequency period  
\*please note integrity testing means water tightness testing for process and foul pipelines (as required under your licence)

**Table B2: Summary details of pipeline/underground structures integrity test**

Structure ID	Type system	Material of construction:	Does this structure have Secondary containment?	Type of secondary containment	Type integrity testing	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest (if in current reporting year)
	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT				SELECT

Please use commentary for additional details not answered by tables/ questions above

<b>Groundwater/Soil monitoring template</b>	Lic No: W0151-01	Year: 2014
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		Comments
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	yes
2	Are you required to carry out soil monitoring as part of your licence requirements?	no
3	Do you extract groundwater for use on site? If yes please specify use in comment section	no
Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template <a href="#">Groundwater monitoring Report</a> (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below.		no
5	Is the contamination related to operations at the facility (either current and/or historic)	N/A
6	Have actions been taken to address contamination issues? If yes please summarise remediation strategies proposed/undertaken for the site	N/A
7	Please specify the proposed time frame for the remediation strategy	
8	Is there a licence condition to carry out/update ELRA for the site?	N/A
9	Has any type of risk assessment been carried out for the site?	
10	Has a Conceptual Site Model been developed for the site?	N/A
11	Have potential receptors been identified on and off site?	
12	Is there evidence that contamination is migrating offsite?	N/A

Please provide an interpretation of groundwater monitoring data in the interpretation box below or if you require additional space please include a groundwater/contaminated land monitoring results interpretation as an additional section in this AER

Groundwater is monitored on a quarterly basis and a quarterly report submitted to the Agency. Results were generally in conformance with relevant limit values and the EPA trigger levels set for the site. There were a number of breaches of trigger levels/ELVs reported to the Agency as minor incidents during the reporting year (detailed in 'Incidents' tab). Exceedances relative to trigger levels/ELVs are thought to be largely related to external sources, and not as a result of the operation of the subject facility.

**Table 1: Upgradient Groundwater monitoring results**

Date of sampling	Sample location reference	Parameter/Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	SELECT**	Upward trend in pollutant concentration over last 5 years of monitoring data
11/02/14 28/08/14	MW-18	Ammoniacal Nitrogen	Lab analysis	Biannual	0.08	0.055	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Chloride	Lab analysis	Biannual	40.1	39.3	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 28/08/14	MW-18	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 28/08/14	MW-18	Sulphate	Lab analysis	Biannual	15.7	15.455	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 28/08/14	MW-18	Total Organic Carbon	Lab analysis	Biannual	2	2	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 28/08/14	MW-18	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Conductivity	Field analysis	Biannual	0.27	0.265	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	MW-18	Dissolved Oxygen	Field analysis	Biannual	9	5.7	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Level, Water	Field analysis	Biannual	14.17	13.5	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No

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11/02/14 28/08/14	MW-18	pH	Field analysis	Biannual	7.8	7.7	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	MW-18	Temperature	Field analysis	Biannual	14.6	10.25	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Alkalinity, Total	Lab analysis	Biannual	66	66	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Boron	Lab analysis	Biannual	0.012	0.012	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 28/08/14	MW-18	Calcium	Lab analysis	Biannual	20.4	20.4	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Coliforms, Faecal	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Coliforms, Total	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Copper	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	MW-18	Cyanide	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Fluoride	Lab analysis	Biannual	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Iron	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Lead	Lab analysis	Biannual	0.05	0.05	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Magnesium	Lab analysis	Biannual	2	2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Manganese	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Nickel	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Orthophospha tes	Lab analysis	Biannual	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Phosphorous, Total	Lab analysis	Biannual	0.034	0.034	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Potassium	Lab analysis	Biannual	1.6	1.6	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Residue on Evaporation	Lab analysis	Biannual	166	166	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Sodium	Lab analysis	Biannual	26	26	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 28/08/14	MW-18	Total Oxidized Nitrogen	Lab analysis	Biannual	0.2	0.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-18	Zinc	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 28/08/14	MW-19	Ammoniacal Nitrogen	Lab analysis	Biannual	0.05	0.04	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Chloride	Lab analysis	Biannual	40.1	32.35	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 28/08/14	MW-19	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 28/08/14	MW-19	Sulphate	Lab analysis	Biannual	138.74	91.535	mg/l	W0151-01 EPA Trigger Level	140	No

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11/02/14 28/08/14	MW-19	Total Organic Carbon	Lab analysis	Biannual	5	3.5	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 28/08/14	MW-19	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Conductivity	Field analysis	Biannual	0.72	0.72	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	MW-19	Dissolved Oxygen	Field analysis	Biannual	9	7.725	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Level, Water	Field analysis	Biannual	14.29	13.67	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	pH	Field analysis	Biannual	7.6	7.55	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	MW-19	Temperature	Field analysis	Biannual	15.9	10.7	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Alkalinity, Total	Lab analysis	Biannual	410	410	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Boron	Lab analysis	Biannual	0.036	0.036	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 28/08/14	MW-19	Calcium	Lab analysis	Biannual	139.5	139.5	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Coliforms, Faecal	Lab analysis	Biannual	14000	14000	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Coliforms, Total	Lab analysis	Biannual	9400	9400	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Copper	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	MW-19	Cyanide	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Fluoride	Lab analysis	Biannual	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Iron	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Lead	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Magnesium	Lab analysis	Biannual	11.9	11.9	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Manganese	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Nickel	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Orthophosphates	Lab analysis	Biannual	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Phosphorous, Total	Lab analysis	Biannual	0.252	0.252	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Potassium	Lab analysis	Biannual	2.8	2.8	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Residue on Evaporation	Lab analysis	Biannual	615	615	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Sodium	Lab analysis	Biannual	19.9	19.9	mg/l	W0151-01 EPA Trigger Level	80	No

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11/02/14 28/08/14	MW-19	Total Oxidized Nitrogen	Lab analysis	Biannual	0.7	0.7	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-19	Zinc	Lab analysis	Biannual	0.003	0.003	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.04	0.0325	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Chloride	Lab analysis	Quarterly	112	71.275	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Phenols, Total	Lab analysis	Quarterly	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Sulphate	Lab analysis	Quarterly	136.5	82.0825	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Total Organic Carbon	Lab analysis	Quarterly	5	3	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Colour	Field analysis	Quarterly	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Conductivity	Field analysis	Quarterly	1.36	1.095	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Dissolved Oxygen	Field analysis	Quarterly	9	8.1	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Level, Water	Field analysis	Quarterly	14.06	13.355	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Odour	Field analysis	Quarterly	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	pH	Field analysis	Quarterly	8	7.55	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Temperature	Field analysis	Quarterly	14.1	11.425	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Alkalinity, Total	Lab analysis	Quarterly	346	346	mg/l	W0151-01 EPA Trigger Level	N/A	No

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11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Boron	Lab analysis	Quarterly	0.044	0.044	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Cadmium	Lab analysis	Quarterly	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Calcium	Lab analysis	Quarterly	136.6	136.6	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Chromium, Total	Lab analysis	Quarterly	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Coliforms, Faecal	Lab analysis	Quarterly	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Coliforms, Total	Lab analysis	Quarterly	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Copper	Lab analysis	Quarterly	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Cyanide	Lab analysis	Quarterly	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Fluoride	Lab analysis	Quarterly	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Iron	Lab analysis	Quarterly	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Lead	Lab analysis	Quarterly	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Magnesium	Lab analysis	Quarterly	0	0	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Manganese	Lab analysis	Quarterly	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Mercury	Lab analysis	Quarterly	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Nickel	Lab analysis	Quarterly	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No

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11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Orthophosphates	Lab analysis	Quarterly	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Phosphorous, Total	Lab analysis	Quarterly	0.312	0.312	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Potassium	Lab analysis	Quarterly	3.4	3.4	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Residue on Evaporation	Lab analysis	Quarterly	746	746	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Sodium	Lab analysis	Quarterly	39.5	39.5	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Total Oxidized Nitrogen	Lab analysis	Quarterly	26.4	26.4	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-21	Zinc	Lab analysis	Quarterly	0.003	0.003	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 28/08/14	MW-24	Ammoniacal Nitrogen	Lab analysis	Biannual	0.04	0.035	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Chloride	Lab analysis	Biannual	36.5	31.75	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 28/08/14	MW-24	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 28/08/14	MW-24	Sulphate	Lab analysis	Biannual	33.91	32.925	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 28/08/14	MW-24	Total Organic Carbon	Lab analysis	Biannual	3	2.5	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 28/08/14	MW-24	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Conductivity	Field analysis	Biannual	0.8	0.71	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	MW-24	Dissolved Oxygen	Field analysis	Biannual	9	8.685	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Level, Water	Field analysis	Biannual	12.91	12.135	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	pH	Field analysis	Biannual	7.6	7.35	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	MW-24	Temperature	Field analysis	Biannual	13.6	10.55	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Alkalinity, Total	Lab analysis	Biannual	402	402	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Boron	Lab analysis	Biannual	0.03	0.03	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No

Groundwater/Soil monitoring template				Lic No:	W0151-01	Year	2014			
11/02/14 28/08/14	MW-24	Calcium	Lab analysis	Biannual	136.2	136.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Coliforms, Faecal	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Coliforms, Total	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Copper	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	MW-24	Cyanide	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Fluoride	Lab analysis	Biannual	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Iron	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Lead	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Magnesium	Lab analysis	Biannual	13.7	13.7	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Manganese	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Nickel	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Orthophospha tes	Lab analysis	Biannual	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Phosphorous, Total	Lab analysis	Biannual	0.054	0.054	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Potassium	Lab analysis	Biannual	3.3	3.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Residue on Evaporation	Lab analysis	Biannual	459	459	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Sodium	Lab analysis	Biannual	20.4	20.4	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 28/08/14	MW-24	Total Oxidized Nitrogen	Lab analysis	Biannual	5.5	5.5	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-24	Zinc	Lab analysis	Biannual	0.003	0.003	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 28/08/14	MW-25	Ammoniacal Nitrogen	Lab analysis	Biannual	0.08	0.055	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Chloride	Lab analysis	Biannual	39.7	31.95	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 28/08/14	MW-25	Phenols, Total	Lab analysis	Biannual	1	0.55	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 28/08/14	MW-25	Sulphate	Lab analysis	Biannual	40.39	27.985	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 28/08/14	MW-25	Total Organic Carbon	Lab analysis	Biannual	50	26	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 28/08/14	MW-25	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Conductivity	Field analysis	Biannual	0.82	0.58	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	MW-25	Dissolved Oxygen	Field analysis	Biannual	9	6.905	mg/l	W0151-01 EPA Trigger Level	N/A	No



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11/02/14 28/08/14	MW-25	Level, Water	Field analysis	Biannual	12.8	12.055	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	pH	Field analysis	Biannual	7.6	7.5	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	MW-25	Temperature	Field analysis	Biannual	15.8	11.75	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Alkalinity, Total	Lab analysis	Biannual	166	166	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Boron	Lab analysis	Biannual	0.012	0.012	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 28/08/14	MW-25	Calcium	Lab analysis	Biannual	63.9	63.9	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Coliforms, Faecal	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Coliforms, Total	Lab analysis	Biannual	7	7	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Copper	Lab analysis	Biannual	0.016	0.016	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	MW-25	Cyanide	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Fluoride	Lab analysis	Biannual	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Iron	Lab analysis	Biannual	0.052	0.052	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Lead	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Magnesium	Lab analysis	Biannual	3.6	3.6	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Manganese	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Nickel	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Orthophospha tes	Lab analysis	Biannual	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Phosphorous, Total	Lab analysis	Biannual	0.128	0.128	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Potassium	Lab analysis	Biannual	10.1	10.1	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Residue on Evaporation	Lab analysis	Biannual	323	323	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Sodium	Lab analysis	Biannual	8.6	8.6	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 28/08/14	MW-25	Total Oxidized Nitrogen	Lab analysis	Biannual	0.2	0.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-25	Zinc	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 28/08/14	TW-2	Ammoniacal Nitrogen	Lab analysis	Biannual	4.5	4.31	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Chloride	Lab analysis	Biannual	25.6	24.9	mg/l	W0151-01 EPA Trigger Level	70	No

Groundwater/Soil monitoring template				Lic No:	W0151-01	Year	2014			
11/02/14 28/08/14	TW-2	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 28/08/14	TW-2	Sulphate	Lab analysis	Biannual	0.29	0.17	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 28/08/14	TW-2	Total Organic Carbon	Lab analysis	Biannual	2	2	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 28/08/14	TW-2	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Conductivity	Field analysis	Biannual	0.3	0.295	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	TW-2	Dissolved Oxygen	Field analysis	Biannual	9	5.755	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Level, Water	Field analysis	Biannual	14.69	14.015	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	pH	Field analysis	Biannual	10.3	9.85	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	TW-2	Temperature	Field analysis	Biannual	12.3	10.45	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Boron	Lab analysis	Biannual	0.027	0.027	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 28/08/14	TW-2	Calcium	Lab analysis	Biannual	4.5	4.5	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Coliforms, Faecal	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Coliforms, Total	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Copper	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	TW-2	Cyanide	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Fluoride	Lab analysis	Biannual	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Iron	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Lead	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Magnesium	Lab analysis	Biannual	10.5	10.5	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Manganese	Lab analysis	Biannual	0.012	0.012	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Nickel	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Orthophospha tes	Lab analysis	Biannual	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Potassium	Lab analysis	Biannual	4.4	4.4	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Residue on Evaporation	Lab analysis	Biannual	436	436	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Sodium	Lab analysis	Biannual	33.9	33.9	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 28/08/14	TW-2	Alkalinity, Total	Lab analysis	Biannual	146	146	mg/l	W0151-01 EPA Trigger Level	N/A	No

Groundwater/Soil monitoring template				Lic No:	W0151-01	Year	2014			
11/02/14 28/08/14	TW-2	Total Oxidized Nitrogen	Lab analysis	Biannual	0.2	0.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Phosphorous, Total	Lab analysis	Biannual	0.037	0.037	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	TW-2	Zinc	Lab analysis	Biannual	0.003	0.003	mg/l	W0151-01 EPA Trigger Level	N/A	No

.+ where average indicates arithmetic mean

.++ maximum concentration indicates the maximum measured concentration from all monitoring results produced during the reporting year

**Table 2: Downgradient Groundwater monitoring results**

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTV's*	SELECT**	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.09	0.0725	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Chloride	Lab analysis	Quarterly	12.3	11.325	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Phenols, Total	Lab analysis	Quarterly	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Sulphate	Lab analysis	Quarterly	3.93	1.4525	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Total Organic Carbon	Lab analysis	Quarterly	2	2	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Colour	Field analysis	Quarterly	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Conductivity	Field analysis	Quarterly	0.76	0.57	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Dissolved Oxygen	Field analysis	Quarterly	9	7.0375	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Level, Water	Field analysis	Quarterly	15.16	14.8975	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Odour	Field analysis	Quarterly	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No

Groundwater/Soil monitoring template				Lic No:	W0151-01	Year	2014				
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	pH	Field analysis	Quarterly	8.4	8.125	pH	W0151-01 EPA Trigger Level	6<pH<9	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Temperature	Field analysis	Quarterly	13.5	11.775	oC	W0151-01 EPA Trigger Level	N/A	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Alkalinity, Total	Lab analysis	Quarterly	430	430	mg/l	W0151-01 EPA Trigger Level	N/A	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Boron	Lab analysis	Quarterly	0.029	0.029	mg/l	W0151-01 EPA Trigger Level	N/A	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Cadmium	Lab analysis	Quarterly	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Calcium	Lab analysis	Quarterly	46.1	46.1	mg/l	W0151-01 EPA Trigger Level	N/A	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Chromium, Total	Lab analysis	Quarterly	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Coliforms, Faecal	Lab analysis	Quarterly	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Coliforms, Total	Lab analysis	Quarterly	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Copper	Lab analysis	Quarterly	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Cyanide	Lab analysis	Quarterly	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Fluoride	Lab analysis	Quarterly	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Iron	Lab analysis	Quarterly	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Lead	Lab analysis	Quarterly	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No	
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Magnesium	Lab analysis	Quarterly	42.3	42.3	mg/l	W0151-01 EPA Trigger Level	N/A	No	

Groundwater/Soil monitoring template				Lic No:	W0151-01	Year	2014			
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Manganese	Lab analysis	Quarterly	0.372	0.372	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Mercury	Lab analysis	Quarterly	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Nickel	Lab analysis	Quarterly	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Orthophosphates	Lab analysis	Quarterly	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Phosphorous, Total	Lab analysis	Quarterly	0.041	0.041	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Potassium	Lab analysis	Quarterly	3.6	3.6	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Residue on Evaporation	Lab analysis	Quarterly	386	386	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Sodium	Lab analysis	Quarterly	46.8	46.8	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Total Oxidized Nitrogen	Lab analysis	Quarterly	0.2	0.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	MW-1	Zinc	Lab analysis	Quarterly	0.003	0.003	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 28/08/14	MW-2	Ammoniacal Nitrogen	Lab analysis	Biannual	0.09	0.06	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Chloride	Lab analysis	Biannual	24.4	22.95	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 28/08/14	MW-2	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 28/08/14	MW-2	Sulphate	Lab analysis	Biannual	72.16	57.005	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 28/08/14	MW-2	Total Organic Carbon	Lab analysis	Biannual	2	2	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 28/08/14	MW-2	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Conductivity	Field analysis	Biannual	0.34	0.295	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	MW-2	Dissolved Oxygen	Field analysis	Biannual	9	6.185	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Level, Water	Field analysis	Biannual	12.72	12.36	mOD	W0151-01 EPA Trigger Level	N/A	No

Groundwater/Soil monitoring template					Lic No:	W0151-01	Year	2014		
11/02/14 28/08/14	MW-2	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	pH	Field analysis	Biannual	9.5	8.6	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	MW-2	Temperature	Field analysis	Biannual	14.3	11.75	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Alkalinity, Total	Lab analysis	Biannual	78	78	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Boron	Lab analysis	Biannual	0.012	0.012	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 28/08/14	MW-2	Calcium	Lab analysis	Biannual	24.2	24.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Coliforms, Faecal	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Coliforms, Total	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Copper	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	MW-2	Cyanide	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Fluoride	Lab analysis	Biannual	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Iron	Lab analysis	Biannual	0.097	0.097	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Lead	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Magnesium	Lab analysis	Biannual	6.5	6.5	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Manganese	Lab analysis	Biannual	0.139	0.139	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Nickel	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Orthophospha tes	Lab analysis	Biannual	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Phosphorous, Total	Lab analysis	Biannual	0.085	0.085	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Potassium	Lab analysis	Biannual	3.2	3.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Residue on Evaporation	Lab analysis	Biannual	307	307	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Sodium	Lab analysis	Biannual	21.2	21.2	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 28/08/14	MW-2	Total Oxidized Nitrogen	Lab analysis	Biannual	0.2	0.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-2	Zinc	Lab analysis	Biannual	0.003	0.003	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 28/08/14	MW-3	Ammoniacal Nitrogen	Lab analysis	Biannual	2.08	1.06	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Chloride	Lab analysis	Biannual	25.6	24.7	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 28/08/14	MW-3	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No

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11/02/14 28/08/14	MW-3	Sulphate	Lab analysis	Biannual	33.01	29.945	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 28/08/14	MW-3	Total Organic Carbon	Lab analysis	Biannual	6	4.5	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 28/08/14	MW-3	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Conductivity	Field analysis	Biannual	0.57	0.565	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	MW-3	Dissolved Oxygen	Field analysis	Biannual	8.14	7.57	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Level, Water	Field analysis	Biannual	11.65	11.65	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	pH	Field analysis	Biannual	7.9	7.75	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	MW-3	Temperature	Field analysis	Biannual	12.6	11.15	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Alkalinity, Total	Lab analysis	Biannual	284	284	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Boron	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 28/08/14	MW-3	Calcium	Lab analysis	Biannual	97.7	97.7	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Coliforms, Faecal	Lab analysis	Biannual	13	13	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Coliforms, Total	Lab analysis	Biannual	55	55	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Copper	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	MW-3	Cyanide	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Fluoride	Lab analysis	Biannual	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Iron	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Lead	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Magnesium	Lab analysis	Biannual	6.4	6.4	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Manganese	Lab analysis	Biannual	0.091	0.091	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Nickel	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Orthophospha tes	Lab analysis	Biannual	0.35	0.35	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Phosphorous, Total	Lab analysis	Biannual	0.545	0.545	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Potassium	Lab analysis	Biannual	3.1	3.1	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Residue on Evaporation	Lab analysis	Biannual	392	392	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Sodium	Lab analysis	Biannual	13.2	13.2	mg/l	W0151-01 EPA Trigger Level	80	No

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11/02/14 28/08/14	MW-3	Total Oxidized Nitrogen	Lab analysis	Biannual	0.2	0.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-3	Zinc	Lab analysis	Biannual	0.003	0.003	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 28/08/14	MW-4	Ammoniacal Nitrogen	Lab analysis	Biannual	0.97	0.7	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Chloride	Lab analysis	Biannual	39.2	36.7	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 28/08/14	MW-4	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 28/08/14	MW-4	Sulphate	Lab analysis	Biannual	82.48	77.55	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 28/08/14	MW-4	Total Organic Carbon	Lab analysis	Biannual	4	3	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 28/08/14	MW-4	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Conductivity	Field analysis	Biannual	0.88	0.845	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	MW-4	Dissolved Oxygen	Field analysis	Biannual	9	5.935	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Level, Water	Field analysis	Biannual	12.67	12.135	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	pH	Field analysis	Biannual	7.5	7.35	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	MW-4	Temperature	Field analysis	Biannual	11.8	10.75	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Alkalinity, Total	Lab analysis	Biannual	348	348	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Boron	Lab analysis	Biannual	0.053	0.053	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 28/08/14	MW-4	Calcium	Lab analysis	Biannual	115.8	115.8	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Coliforms, Faecal	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Coliforms, Total	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Copper	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	MW-4	Cyanide	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Fluoride	Lab analysis	Biannual	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Iron	Lab analysis	Biannual	0.028	0.028	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Lead	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Magnesium	Lab analysis	Biannual	15.6	15.6	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Manganese	Lab analysis	Biannual	0.71	0.71	mg/l	W0151-01 EPA Trigger Level	N/A	No



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11/02/14 28/08/14	MW-4	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Nickel	Lab analysis	Biannual	0.006	0.006	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Orthophosphates	Lab analysis	Biannual	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Phosphorous, Total	Lab analysis	Biannual	0.098	0.098	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Potassium	Lab analysis	Biannual	7.1	7.1	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Residue on Evaporation	Lab analysis	Biannual	639	639	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Sodium	Lab analysis	Biannual	27.9	27.9	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 28/08/14	MW-4	Total Oxidized Nitrogen	Lab analysis	Biannual	0.2	0.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-4	Zinc	Lab analysis	Biannual	0.003	0.003	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 28/08/14	MW-5	Ammoniacal Nitrogen	Lab analysis	Biannual	0.19	0.11	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Chloride	Lab analysis	Biannual	36.6	33.25	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 28/08/14	MW-5	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 28/08/14	MW-5	Sulphate	Lab analysis	Biannual	82.43	66.575	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 28/08/14	MW-5	Total Organic Carbon	Lab analysis	Biannual	2	2	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 28/08/14	MW-5	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Conductivity	Field analysis	Biannual	0.76	0.695	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	MW-5	Dissolved Oxygen	Field analysis	Biannual	9	7.775	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Level, Water	Field analysis	Biannual	12.89	12.425	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	pH	Field analysis	Biannual	7.7	7.7	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	MW-5	Temperature	Field analysis	Biannual	13.3	9.9	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Alkalinity, Total	Lab analysis	Biannual	304	304	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Boron	Lab analysis	Biannual	0.05	0.05	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 28/08/14	MW-5	Calcium	Lab analysis	Biannual	115.9	115.9	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Coliforms, Faecal	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Coliforms, Total	Lab analysis	Biannual	88	88	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No

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11/02/14 28/08/14	MW-5	Copper	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	MW-5	Cyanide	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Fluoride	Lab analysis	Biannual	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Iron	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Lead	Lab analysis	Biannual	0.05	0.05	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Magnesium	Lab analysis	Biannual	15.3	15.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Manganese	Lab analysis	Biannual	0.201	0.201	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Nickel	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Orthophosphates	Lab analysis	Biannual	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Phosphorous, Total	Lab analysis	Biannual	0.042	0.042	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Potassium	Lab analysis	Biannual	7.1	7.1	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Residue on Evaporation	Lab analysis	Biannual	494	494	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Sodium	Lab analysis	Biannual	24.1	24.1	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 28/08/14	MW-5	Total Oxidized Nitrogen	Lab analysis	Biannual	3.2	3.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-5	Zinc	Lab analysis	Biannual	0.003	0.003	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 28/08/14	MW-6	Ammoniacal Nitrogen	Lab analysis	Biannual	0.03	0.03	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Chloride	Lab analysis	Biannual	28.4	27.6	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 28/08/14	MW-6	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 28/08/14	MW-6	Sulphate	Lab analysis	Biannual	17.5	16.535	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 28/08/14	MW-6	Total Organic Carbon	Lab analysis	Biannual	3	2.5	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 28/08/14	MW-6	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Conductivity	Field analysis	Biannual	0.39	0.39	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	MW-6	Dissolved Oxygen	Field analysis	Biannual	9	8.615	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Level, Water	Field analysis	Biannual	12.89	12.36	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	pH	Field analysis	Biannual	8	7.85	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	MW-6	Temperature	Field analysis	Biannual	12.7	9.95	oC	W0151-01 EPA Trigger Level	N/A	No

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11/02/14 28/08/14	MW-6	Alkalinity, Total	Lab analysis	Biannual	166	166	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Boron	Lab analysis	Biannual	0.015	0.015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 28/08/14	MW-6	Calcium	Lab analysis	Biannual	51.5	51.5	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Coliforms, Faecal	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Coliforms, Total	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Copper	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	MW-6	Cyanide	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Fluoride	Lab analysis	Biannual	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Iron	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Lead	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Magnesium	Lab analysis	Biannual	3.3	3.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Manganese	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Nickel	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Orthophospha tes	Lab analysis	Biannual	0.28	0.28	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Phosphorous, Total	Lab analysis	Biannual	0.144	0.144	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Potassium	Lab analysis	Biannual	14.7	14.7	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Residue on Evaporation	Lab analysis	Biannual	232	232	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Sodium	Lab analysis	Biannual	17.1	17.1	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 28/08/14	MW-6	Total Oxidized Nitrogen	Lab analysis	Biannual	0.5	0.5	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-6	Zinc	Lab analysis	Biannual	0.004	0.004	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 28/08/14	MW-14	Ammoniacal Nitrogen	Lab analysis	Biannual	0.03	0.03	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Chloride	Lab analysis	Biannual	60.1	54.45	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 28/08/14	MW-14	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 28/08/14	MW-14	Sulphate	Lab analysis	Biannual	0.28	0.165	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 28/08/14	MW-14	Total Organic Carbon	Lab analysis	Biannual	3	2.5	mg/l	W0151-01 EPA Trigger Level	50	No

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11/02/14 28/08/14	MW-14	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Conductivity	Field analysis	Biannual	0.27	0.265	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	MW-14	Dissolved Oxygen	Field analysis	Biannual	9	6.62	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Level, Water	Field analysis	Biannual	13.12	12.38	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	pH	Field analysis	Biannual	9.1	7.3	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	MW-14	Temperature	Field analysis	Biannual	12.2	10.75	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Alkalinity, Total	Lab analysis	Biannual	68	68	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Boron	Lab analysis	Biannual	0.015	0.015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 28/08/14	MW-14	Calcium	Lab analysis	Biannual	15.5	15.5	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Coliforms, Faecal	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Coliforms, Total	Lab analysis	Biannual	72	72	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Copper	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	MW-14	Cyanide	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Fluoride	Lab analysis	Biannual	0.8	0.8	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Iron	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Lead	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Magnesium	Lab analysis	Biannual	0.9	0.9	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Manganese	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Nickel	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Orthophospha tes	Lab analysis	Biannual	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Phosphorous, Total	Lab analysis	Biannual	0.127	0.127	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Potassium	Lab analysis	Biannual	1.7	1.7	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Residue on Evaporation	Lab analysis	Biannual	242	242	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Sodium	Lab analysis	Biannual	40.8	40.8	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 28/08/14	MW-14	Total Oxidized Nitrogen	Lab analysis	Biannual	0.2	0.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-14	Zinc	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	N/A	No

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11/02/14 28/08/14	MW-16	Ammoniacal Nitrogen	Lab analysis	Biannual	0	#DIV/0!		W0151-01 EPA Trigger Level		
					0.07	0.06	mg/l NH4-N		N/A	No
11/02/14 28/08/14	MW-16	Chloride	Lab analysis	Biannual	48.3	46.8	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 28/08/14	MW-16	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 28/08/14	MW-16	Sulphate	Lab analysis	Biannual	4.53	3.515	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 28/08/14	MW-16	Total Organic Carbon	Lab analysis	Biannual	2	2	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 28/08/14	MW-16	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Conductivity	Field analysis	Biannual	0.32	0.32	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	MW-16	Dissolved Oxygen	Field analysis	Biannual	9	7.165	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Level, Water	Field analysis	Biannual	12.33	11.645	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	pH	Field analysis	Biannual	8.5	8.25	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	MW-16	Temperature	Field analysis	Biannual	12.1	11	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Alkalinity, Total	Lab analysis	Biannual	106	106	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Boron	Lab analysis	Biannual	0.016	0.016	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 28/08/14	MW-16	Calcium	Lab analysis	Biannual	19.8	19.8	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Coliforms, Faecal	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Coliforms, Total	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Copper	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	MW-16	Cyanide	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Fluoride	Lab analysis	Biannual	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Iron	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Lead	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Magnesium	Lab analysis	Biannual	6.8	6.8	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Manganese	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Nickel	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Orthophosphates	Lab analysis	Biannual	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No

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11/02/14 28/08/14	MW-16	Phosphorous, Total	Lab analysis	Biannual	0.045	0.045	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Potassium	Lab analysis	Biannual	2.2	2.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Residue on Evaporation	Lab analysis	Biannual	169	169	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Sodium	Lab analysis	Biannual	35.5	35.5	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 28/08/14	MW-16	Total Oxidized Nitrogen	Lab analysis	Biannual	0.2	0.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-16	Zinc	Lab analysis	Biannual	0.003	0.003	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 28/08/14	MW-17	Ammoniacal Nitrogen	Lab analysis	Biannual	0.03	0.03	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Chloride	Lab analysis	Biannual	40.1	37.65	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 28/08/14	MW-17	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 28/08/14	MW-17	Sulphate	Lab analysis	Biannual	104.16	104.14	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 28/08/14	MW-17	Total Organic Carbon	Lab analysis	Biannual	5	3.5	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 28/08/14	MW-17	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Conductivity	Field analysis	Biannual	1.04	0.985	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	MW-17	Dissolved Oxygen	Field analysis	Biannual	9	8.805	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Level, Water	Field analysis	Biannual	12.29	11.59	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	pH	Field analysis	Biannual	7.2	7.2	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	MW-17	Temperature	Field analysis	Biannual	11.9	10.65	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Alkalinity, Total	Lab analysis	Biannual	474	474	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Boron	Lab analysis	Biannual	0.069	0.069	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 28/08/14	MW-17	Calcium	Lab analysis	Biannual	169.9	169.9	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Coliforms, Faecal	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Coliforms, Total	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Copper	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	MW-17	Cyanide	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Fluoride	Lab analysis	Biannual	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No

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11/02/14 28/08/14	MW-17	Iron	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Lead	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Magnesium	Lab analysis	Biannual	20.2	20.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Manganese	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Nickel	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Orthophosphates	Lab analysis	Biannual	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Phosphorous, Total	Lab analysis	Biannual	0.094	0.094	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Potassium	Lab analysis	Biannual	6.7	6.7	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Residue on Evaporation	Lab analysis	Biannual	721	721	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Sodium	Lab analysis	Biannual	28.4	28.4	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 28/08/14	MW-17	Total Oxidized Nitrogen	Lab analysis	Biannual	1.8	1.8	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-17	Zinc	Lab analysis	Biannual	0.003	0.003	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14	MW-20	Ammoniacal Nitrogen	Lab analysis	Biannual	0.03	0.03	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Chloride	Lab analysis	Biannual	38.6	38.6	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14	MW-20	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14	MW-20	Sulphate	Lab analysis	Biannual	100.94	100.94	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14	MW-20	Total Organic Carbon	Lab analysis	Biannual	2	2	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14	MW-20	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Conductivity	Field analysis	Biannual	1.07	1.07	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14	MW-20	Dissolved Oxygen	Field analysis	Biannual	7.52	7.52	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Level, Water	Field analysis	Biannual	12.15	12.15	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	pH	Field analysis	Biannual	7	7	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14	MW-20	Temperature	Field analysis	Biannual	9.5	9.5	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Alkalinity, Total	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Boron	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Cadmium	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	0.004	No

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11/02/14	MW-20	Calcium	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Chromium, Total	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Coliforms, Faecal	Lab analysis	Biannual	0	#DIV/0!	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Coliforms, Total	Lab analysis	Biannual	0	#DIV/0!	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Copper	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14	MW-20	Cyanide	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Fluoride	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Iron	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Lead	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Magnesium	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Manganese	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Mercury	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Nickel	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Orthophosphates	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Phosphorous, Total	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Potassium	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Residue on Evaporation	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Sodium	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14	MW-20	Total Oxidized Nitrogen	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14	MW-20	Zinc	Lab analysis	Biannual	0	#DIV/0!	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 28/08/14	MW-22	Ammoniacal Nitrogen	Lab analysis	Biannual	0.03	0.03	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Chloride	Lab analysis	Biannual	99.8	90.4	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 28/08/14	MW-22	Phenols, Total	Lab analysis	Biannual	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 28/08/14	MW-22	Sulphate	Lab analysis	Biannual	34.46	28.72	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 28/08/14	MW-22	Total Organic Carbon	Lab analysis	Biannual	5	3.5	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 28/08/14	MW-22	Colour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Conductivity	Field analysis	Biannual	1.22	1.09	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 28/08/14	MW-22	Dissolved Oxygen	Field analysis	Biannual	9	8.365	mg/l	W0151-01 EPA Trigger Level	N/A	No



Groundwater/Soil monitoring template				Lic No:	W0151-01	Year	2014			
11/02/14 28/08/14	MW-22	Level, Water	Field analysis	Biannual	15.79	15.315	mOD	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Odour	Field analysis	Biannual	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	pH	Field analysis	Biannual	7.5	7.25	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 28/08/14	MW-22	Temperature	Field analysis	Biannual	11.3	9.15	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Alkalinity, Total	Lab analysis	Biannual	542	542	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Boron	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Cadmium	Lab analysis	Biannual	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 28/08/14	MW-22	Calcium	Lab analysis	Biannual	166.2	166.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Chromium, Total	Lab analysis	Biannual	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Coliforms, Faecal	Lab analysis	Biannual	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Coliforms, Total	Lab analysis	Biannual	2	2	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Copper	Lab analysis	Biannual	0.007	0.007	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 28/08/14	MW-22	Cyanide	Lab analysis	Biannual	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Fluoride	Lab analysis	Biannual	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Iron	Lab analysis	Biannual	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Lead	Lab analysis	Biannual	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Magnesium	Lab analysis	Biannual	9.8	9.8	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Manganese	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Mercury	Lab analysis	Biannual	0.001	0.001	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Nickel	Lab analysis	Biannual	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Orthophospha tes	Lab analysis	Biannual	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Phosphorous, Total	Lab analysis	Biannual	0.37	0.37	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Potassium	Lab analysis	Biannual	0.9	0.9	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Residue on Evaporation	Lab analysis	Biannual	1047	1047	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Sodium	Lab analysis	Biannual	88.7	88.7	mg/l	W0151-01 EPA Trigger Level	80	No
11/02/14 28/08/14	MW-22	Total Oxidized Nitrogen	Lab analysis	Biannual	10	10	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 28/08/14	MW-22	Zinc	Lab analysis	Biannual	3	3	mg/l	W0151-01 EPA Trigger Level	N/A	No
					0	#DIV/0!				
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Ammoniacal Nitrogen	Lab analysis	Quarterly	0.09	0.0475	mg/l NH4-N	W0151-01 EPA Trigger Level	N/A	No

Groundwater/Soil monitoring template				Lic No:	W0151-01	Year	2014			
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Chloride	Lab analysis	Quarterly	52.4	39.975	mg/l	W0151-01 EPA Trigger Level	70	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Phenols, Total	Lab analysis	Quarterly	0.1	0.1	mg/l	W0151-01 EPA Trigger Level	0.1	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Sulphate	Lab analysis	Quarterly	154.71	108.4625	mg/l	W0151-01 EPA Trigger Level	140	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Total Organic Carbon	Lab analysis	Quarterly	2	2	mg/l	W0151-01 EPA Trigger Level	50	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Colour	Field analysis	Quarterly	#VALUE!	#VALUE!	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Conductivity	Field analysis	Quarterly	0.85	0.78	mS/cm	W0151-01 EPA Trigger Level	1	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Dissolved Oxygen	Field analysis	Quarterly	9.82	8.955	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Odour	Field analysis	Quarterly	0	0	N/A	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	pH	Field analysis	Quarterly	8.3	7.825	pH	W0151-01 EPA Trigger Level	6<pH<9	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Temperature	Field analysis	Quarterly	14.3	10.625	oC	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Boron	Lab analysis	Quarterly	0.033	0.033	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Cadmium	Lab analysis	Quarterly	0.0005	0.0005	mg/l	W0151-01 EPA Trigger Level	0.004	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Calcium	Lab analysis	Quarterly	113.6	113.6	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Chromium, Total	Lab analysis	Quarterly	0.0015	0.0015	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Coliforms, Faecal	Lab analysis	Quarterly	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No

Groundwater/Soil monitoring template				Lic No:	W0151-01	Year	2014			
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Coliforms, Total	Lab analysis	Quarterly	1	1	cfus/100ml	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Copper	Lab analysis	Quarterly	0.084	0.084	mg/l	W0151-01 EPA Trigger Level	0.5	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Cyanide	Lab analysis	Quarterly	0.01	0.01	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Fluoride	Lab analysis	Quarterly	0.3	0.3	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Iron	Lab analysis	Quarterly	0.02	0.02	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Lead	Lab analysis	Quarterly	0.005	0.005	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Magnesium	Lab analysis	Quarterly	0	0	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Manganese	Lab analysis	Quarterly	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Mercury	Lab analysis	Quarterly	0	0	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Nickel	Lab analysis	Quarterly	0.002	0.002	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Orthophospha tes	Lab analysis	Quarterly	0.06	0.06	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Phosphorous, Total	Lab analysis	Quarterly	0.047	0.047	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Potassium	Lab analysis	Quarterly	1.1	1.1	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Residue on Evaporation	Lab analysis	Quarterly	436	436	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Sodium	Lab analysis	Quarterly	24.7	24.7	mg/l	W0151-01 EPA Trigger Level	80	No

Groundwater/Soil monitoring template				Lic No:	W0151-01	Year	2014			
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Total Alkalinity	Lab analysis	Quarterly	284	284	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Total Oxidized Nitrogen	Lab analysis	Quarterly	2.2	2.2	mg/l	W0151-01 EPA Trigger Level	N/A	No
11/02/14 27/05/14 28/08/14 03/12/14	PW-3	Zinc	Lab analysis	Quarterly	0.07	0.07	mg/l	W0151-01 EPA Trigger Level	N/A	No
							SELECT			SELECT
<p>*please note exceedance of generic assessment criteria (GAC) such as a Groundwater Threshold Value (GTV) or an Interim Guideline Value (IGV) or an upward trend in results for a substance indicates that further interpretation of monitoring results is required. In addition to completing the above table, please complete the Groundwater Monitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA. <a href="#">Groundwater monitoring template</a></p>										
<p>More information on the use of soil and groundwater standards/ generic assessment criteria (GAC) and risk assessment tools is available in the EPA published guidance <a href="#">Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013)</a>. (see the link in G31)</p>										
<p>**Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition to the GTV e.g. if the site is close to surface water compare to Surface Water Environmental Quality Standards (SWEQS), If the site is close to a drinking water supply compare results to the Drinking Water Standards (DWS)</p>								<p><a href="#">Surface water EQS</a>   <a href="#">Groundwater regulations</a>   <a href="#">Drinking water (private supply) standards</a>   <a href="#">Drinking water (public supply) standards</a>   <a href="#">Interim Guideline Values (IGV)</a></p>		

**Table 3: Soil results**

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit
							SELECT
							SELECT

Where additional detail is required please enter it here in 200 words or less

**Environmental Liabilities template**

Lic No:

W0151-01

Year

2014

[Click here to access EPA guidance on Environmental Liabilities and Financial provision](#)

		Commentary	
1	ELRA initial agreement status	Submitted and not agreed by EPA;	
2	ELRA review status	Review required and completed	
3	Amount of Financial Provision cover required as determined by the latest ELRA	To be agreed	
4	Financial Provision for ELRA status	Submitted and not agreed by EPA;	
5	Financial Provision for ELRA - amount of cover	To be agreed	
6	Financial Provision for ELRA - type	Insurance with Environmental Impairment Liability cover,	
7	Financial provision for ELRA expiry date	Enter expiry date	
8	Closure plan initial agreement status	Closure plan submitted and not agreed by EPA	
9	Closure plan review status	Review required and completed	
10	Financial Provision for Closure status	Submitted and not agreed by EPA;	
11	Financial Provision for Closure - amount of cover	To be agreed	
12	Financial Provision for Closure - type	Other please specify	
13	Financial provision for Closure expiry date	Enter expiry date	

<b>Environmental Management Programme/Continuous Improvement Programme template</b>	Lic No:	W0151-01	Year	2014
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	Highlighted cells contain dropdown menu click to view		Additional Information
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	Yes	
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes	
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes	
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes	

**Environmental Management Programme (EMP) report**

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Groundwater protection	Ongoing monitoring and measurement - water	100	Monitoring completed	Individual	Improved Environmental Management Practices
Noise reduction	Ongoing monitoring and measurement - noise	100	Monitoring completed	Individual	Improved Environmental Management Practices
Reduction of emissions to Air	Ongoing monitoring and measurement - dust	100	Monitoring completed	Individual	Improved Environmental Management Practices

**Noise monitoring summary report** Lic No: W0151-01 Year 2014

- 1 Was noise monitoring a licence requirement for the AER period?  
If yes please fill in table N1 noise summary below
- 2 Was noise monitoring carried out using the EPA Guidance note, including completion of the "Checklist for noise measurement report" included in the guidance note as table 6? [Noise Guidance note NG4](#)
- 3 Does your site have a noise reduction plan?
- 4 When was the noise reduction plan last updated?
- 5 Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey?

**Table N1: Noise monitoring summary**

Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA <sub>eq</sub>	LA <sub>90</sub>	LA <sub>10</sub>	LA <sub>max</sub>	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is <u>site</u> compliant with noise limits (day/evening/night)?
27/05/2014	Daytime	NMP5		67	51	71	74	No	Yes	Noise levels exceeded the EPA noise limit values of 55dB LAeq at NMP5 and NMP8. However the dominant noise source at all locations was road traffic along the local road network. Site operations at the Murphy Environmental facility were subjectively audible at noise monitoring locations NMP7 and NMP13.	Yes
27/05/2014	Daytime	NMP7		51	40	48	74	No	Yes		Yes
27/05/2014	Daytime	NMP8		54	38	56	72	No	Yes		Yes
27/05/2014	Daytime	NMP13		52	47	55	73	Yes	Yes		Yes

\*Please ensure that a tonal analysis has been carried out as per guidance note NG4. These records must be maintained onsite for future inspection

If noise limits exceeded as a result of noise attributed to site activities, please choose the corrective action from the following options?

\*\* please explain the reason for not taking action/resolution of noise issues?

Any additional comments? (less than 200 words)



## Resource Usage/Energy efficiency summary

Lic No:

W0151-01

Year

2014

## Additional information

- 1 When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below
- 2 Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI programme linked to the right? If yes please list them in additional information
- 3 Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information

No formal audit completed; ongoing monitoring and management of energy use by licensee.	
no	
SELECT	

Table R1 Energy usage on site				
Energy Use	Previous year	Current year	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)		891.234		
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (MWHrs)				
Electricity Consumption (MWHrs)		16.7		
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)		86		
Light Fuel Oil (m3)				
Natural gas (m3)				
Coal/Solid fuel (metric tonnes)				
Peat (metric tonnes)				
Renewable Biomass				
Renewable energy generated on site				

SEAI: 10.169kWh/litre of diesel

\* where consumption of energy can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.

\*\* where site production information is available please enter percentage increase or decrease compared to previous year

Table R2 Water usage on site				Water Emissions	Water Consumption		
Water use	Water extracted Previous year m3/yr.	Water extracted Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*	Volume Discharged back to environment(m <sup>3</sup> /yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater							
Surface water							
Public supply		79.25					
Recycled water							
Total							

\* where consumption of water can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.

\*\* where site production information is available please enter percentage increase or decrease compared to previous year

<b>Resource Usage/Energy efficiency summary</b>	Lic No: W0151-01	Year	2014
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Table R3 Waste Stream Summary					
	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)					
Non-Hazardous (Tonnes)	0.76	0.48		0.28	

Table R4: Energy Audit finding recommendations								
Date of audit	Recommendations	Description of Measures proposed	Origin of measures	Predicted energy savings %	Implementation date	Responsibility	Completion date	Status and comments
			SELECT					
			SELECT					
			SELECT					

**Table R5: Power Generation: Where power is generated onsite (e.g. power generation facilities/food and drink industry) please complete the following information**

	Unit ID	Unit ID	Unit ID	Unit ID	Station Total
Technology					
Primary Fuel					
Thermal Efficiency					
Unit Date of Commission					
Total Starts for year					
Total Running Time					
Total Electricity Generated (GWH)					
House Load (GWH)					
KWH per Litre of Process Water					
KWH per Litre of Total Water used on Site					



<b>Complaints and Incidents summary template</b>		Lic No:	W0151-01	Year	2014
% reduction/ increase					33%

<b>WASTE SUMMARY</b>	Lic No:	W0151-01	Year	2014
<b>SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES</b>		<a href="#">PRTR Facility Logon</a>	dropdown list click to see options	

**SECTION B- WASTE ACCEPTED ONTO SITE-TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES**

1 Were any wastes **accepted onto** your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility?; (waste generated within your boundaries is to be captured through PRTR reporting)

Additional Information	
Yes	

If yes please enter details in table 1 below

2 Did your site have any rejected consignments of waste in the current reporting year? If yes please give a brief explanation in the additional information

Yes	See 'Incidents' tab
No	

3 Was waste accepted onto your site that was generated outside the Republic of Ireland? If yes please state the quantity in tonnes in additional information

**Table 1 Details of waste accepted onto your site for recovery, disposal or treatment (do not include wastes generated at your site, as these will have been reported in your PRTR workbook)**

Licensed annual tonnage limit for your site (total tonnes/annum)	EWC code	Source of waste accepted	Description of waste accepted <b>Please enter an accurate and detailed description - which applies to relevant EWC code</b>	Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/ Increase over previous year +/- %	Reason for reduction/ increase from previous reporting year	Packaging Content (%)- only applies if the waste has a packaging component	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -
	<a href="#">European Waste Catalogue EWC codes</a>		<a href="#">European Waste Catalogue EWC codes</a>								
750,000	170504	17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)	Soil & Stones	511,676.87	48,176.20	962%	market demand	0%	R5-Recycling/reclamation or other inorganic materials which includes soil celaning resulting in recovery of the soil and recycling of inorganic construction materials	0	
750,000	170101	17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)	Concrete	37,713.00	5,862.40	543%	market demand	0%	R5-Recycling/reclamation or other inorganic materials which includes soil celaning resulting in recovery of the soil and recycling of inorganic construction materials	1	

**SECTION C-TO BE COMPLETED BY ALL WASTE FACILITIES (waste transfer stations, Composters, Material recovery facilities etc) EXCEPT LANDFILL SITES**

4 Is all waste processing infrastructure as required by your licence and approved by the Agency in place? If no please list waste processing infrastructure required onsite

SELECT	
SELECT	

5 Is all waste storage infrastructure as required by your licence and approved by the Agency in place? If no please list waste storage infrastructure required onsite

SELECT	
SELECT	
SELECT	

6 Does your facility have relevant nuisance controls in place?

7 Do you have an odour management system in place for your facility? If no why?

8 Do you maintain a sludge register on site?

**SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY**

**Table 2 Waste type and tonnage-landfill only**

Waste types permitted for disposal	Authorised/licenced annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (m3)	Comments
inert waste	738,000			all incoming waste is recovered

<b>WASTE SUMMARY</b>		Lic No:	W0151-01	Year	2014
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**Table 3 General information-Landfill only**

Area ID	Date landfilling commenced	Date landfilling ceased	Currently landfilling	Private or Public Operated	Inert or non-hazardous	Predicted date to cease landfilling	Licence permits asbestos	Is there a separate cell for asbestos?	Accepted asbestos in reporting year	Total disposal area occupied by waste	Lined disposal area occupied by waste	Unlined area	Comments on liner type
										SELECT UNIT	SELECT UNIT	SELECT UNIT	
Zone 6		2003	Not applicable	Yes	Private	Inert	subject to filling ra	No	No	No			

**Table 4 Environmental monitoring-landfill only** [Landfill Manual-Monitoring Standards](#)

Was meterological monitoring in compliance with Landfill Directive (LD) standard in reporting year +	Was leachate monitored in compliance with LD standard in reporting year	Was Landfill Gas monitored in compliance with LD standard in reporting year	Was SW monitored in compliance with LD standard in reporting year	Have GW trigger levels been established	Were emission limit values agreed with the Agency (ELVs)	Was topography of the site surveyed in reporting year	Has the statement under S53(A)(5) of WMA been submitted in reporting year	Comments
Yes	Yes	Yes	Yes	Yes	No	No	No	

+ please refer to Landfill Manual linked above for relevant Landfill Directive monitoring standards

**Table 5 Capping-Landfill only**

Area uncapped*	Area with temporary cap	Area with final cap to LD Standard m2 ha, a	Area capped other	Area with waste that should be permanently capped to date under licence	What materials are used in the cap	Comments
SELECT UNIT	SELECT UNIT					

\*please note this includes daily cover area

**Table 6 Leachate-Landfill only**

9 Is leachate from your site treated in a Waste Water Treatment Plant?

SELECT
SELECT

10 Is leachate released to surface water? If yes please complete leachate mass load information below

Volume of leachate in reporting year(m3)	Leachate (BOD) mass load (kg/annum)	Leachate (COD) mass load (kg/annum)	Leachate (NH4) mass load (kg/annum)	Leachate (Chloride) mass load kg/annum	Leachate treatment on-site	Specify type of leachate treatment	Comments

Please ensure that all information reported in the landfill gas section is consistent with the Landfill Gas Survey submitted in conjunction with PRTR returns

**Table 7 Landfill Gas-Landfill only**

Gas Captured&Treated by LFG System m3	Power generated (MW / KWh)	Used on-site or to national grid	Was surface emissions monitoring performed during the reporting year?	Comments
			SELECT	



Environmental Protection Agency

[Guidance to completing the PRTR workbook](#)

# AER Returns Workbook

Version 1.1.18

<b>REFERENCE YEAR</b>	2014
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## 1. FACILITY IDENTIFICATION

Parent Company Name	Murphy Concrete Manufacturing Limited
Facility Name	Murphy Concrete Manufacturing Limited
PRTR Identification Number	W0151
Licence Number	W0151-01

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Sarsfieldtown
Address 2	Gormanstown
Address 3	
Address 4	
	Meath
Country	Ireland
Coordinates of Location	-6.25153 53.654
River Basin District	IEEA
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
<b>AER Returns Contact Name</b>	Louise O'Donnell
<b>AER Returns Contact Email Address</b>	louise.odonnell@pateltonra.com
<b>AER Returns Contact Position</b>	Environmental Consultant
<b>AER Returns Contact Telephone Number</b>	01-8020520
<b>AER Returns Contact Mobile Phone Number</b>	
<b>AER Returns Contact Fax Number</b>	01-8020525
<b>Production Volume</b>	0.0
<b>Production Volume Units</b>	
<b>Number of Installations</b>	0
<b>Number of Operating Hours in Year</b>	0
<b>Number of Employees</b>	4
<b>User Feedback/Comments</b>	
<b>Web Address</b>	

## 2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General
5(d)	Landfills
50.1	General

## 3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	No
Have you been granted an exemption ?	No
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

## 4. WASTE IMPORTED/ACCEPTED ONTO SITE

[Guidance on waste imported/accepted onto site](#)

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	Yes
------------------------------------------------------------------------------------------------------------	-----

This question is only applicable if you are an IPPC or Quarry site

4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

| PRTR# : W0151 | Facility Name : Murphy Concrete Manufacturing Limited | Filename : W0151-01 Annual Returns to EPA\_2015.xlsx | Return Year : 2014 |

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**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

POLLUTANT		RELEASES TO AIR			Please enter all quantities in this section in KGs				
No. Annex II	Name	M/C/E	METHOD		Emission Point 1	QUANTITY			
			Method Code	Designation or Description		T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
						0.0	0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**SECTION B : REMAINING PRTR POLLUTANTS**

POLLUTANT		RELEASES TO AIR			Please enter all quantities in this section in KGs				
No. Annex II	Name	M/C/E	METHOD		Emission Point 1	QUANTITY			
			Method Code	Designation or Description		T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
						0.0	0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)**

POLLUTANT		RELEASES TO AIR			Please enter all quantities in this section in KGs				
Pollutant No.	Name	M/C/E	METHOD		Emission Point 1	QUANTITY			
			Method Code	Designation or Description		T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
						0.0	0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**Additional Data Requested from Landfill operators**

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill:

Murphy Concrete Manufacturing Limited

Please enter summary data on the quantities of methane flared and / or utilised

T (Total) kg/Year	M/C/E	Method Used		Facility Total Capacity m3 per hour
		Method Code	Designation or Description	
Total estimated methane generation (as per site model)	0.0			N/A
Methane flared	0.0			0.0 (Total Flaring Capacity)
Methane utilised in engine/s	0.0			0.0 (Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0			N/A



4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

| PRTR#: W0151 | Facility Name : Murphy Concrete Manufacturing Limited | Filename : W0151-01 Annual Returns to EPA\_2015.xlsx | Return Year : 2014 |

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**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this onl

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT		Method Used			QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**SECTION B : REMAINING PRTR POLLUTANTS**

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT		Method Used			QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**SECTION C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)**

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT		Method Used			QUANTITY			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

| PRTR# : W0151 | Facility Name : Murphy Concrete Manufacturing Limited | Filename : W0151-01 /

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**SECTION A : PRTR POLLUTANTS**

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)**

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.4 RELEASES TO LAND

[Link to previous years emissions data](#)

| PRTR# : W0151 | Facility Name : Murphy Concrete Manufacturing Limited | Filename : W0151-01 Annual Returns to EPA\_2015.xlsx | Return Year : 2

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SECTION A : PRTR POLLUTANTS

POLLUTANT		RELEASURES TO LAND			Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
No. Annex II	Name	M/C/E	Method Code	Method Used Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

POLLUTANT		RELEASURES TO LAND			Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
Pollutant No.	Name	M/C/E	Method Code	Method Used Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR# : W0151 | Facility Name : Murphy Concrete Manufacturing Limited | Filename : W0151-01 Annual Returns to EPA\_2015.xlsx | Return Year : 2014 |

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Please enter all quantities on this sheet in Tonnes

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Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility	Non	Haz Waste : Address of Next Destination Facility	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						Haz Waste : Name and Licence/Permit No of Recover/Disposer	Non Haz Waste: Address of Recover/Disposer						
Within the Country	20 03 01	No	0.48	mixed municipal waste	D15	E	Volume Calculation	Offsite in Ireland	Panda,W0140-03		Beauparc,Navan,Co. Meath,0,Ireland		
Within the Country	20 03 01	No	0.28	mixed municipal waste	R3	E	Volume Calculation	Offsite in Ireland	Panda,W0140-03		Beauparc,Navan,Co. Meath,0,Ireland		

\* Select a row by double-clicking the Description of Waste then click the delete button

[Link to previous years waste data](#)

[Link to previous years waste summary data & percentage change](#)

[Link to Waste Guidance](#)