

Permit Number: EPR/PP3993VS

Operator: Atlantic Recycling

Facility: Atlantic Recycling

Form Number: Surfacewater1

Reporting of surface water monitoring for the period of December 2016

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
Outfall	Suspended Solids, Total	>250 mg/l (1 occasion) >100 mg/l (3 consecutive occasions) >60 mg/l (4 consecutive occasions)	Monthly	35.9 mg/l	TM022	17/12/2016 09:00	Lab: Precision 1.4%, Bias -2.6%, Expanded Uncertainty 5.4%. Sampling: Immeasurable
Outfall	BOD, unfiltered	>18 mg/l (1 occasion) >10 mg/l (3 consecutive occasions)	Monthly	7.76 mg/l	TM045	17/12/2016 09:00	Lab: Precision 8.9%, Bias 2.6%, Expanded Uncertainty 20.5%. Sampling: Immeasurable
Outfall	Ammoniacal Nitrogen as N	>1 mg/l (1 occasion) >0.5 mg/l (4 consecutive occasions)	Monthly	2.16 mg/l	TM099	17/12/2016 09:00	Lab: Precision 2.1%, Bias 1.6%, Expanded Uncertainty 5.9%. Sampling: Immeasurable
Outfall	Conductivity	>2000 µS/cm	Monthly	0.904 mS/cm	TM120	17/12/2016 09:00	Lab: Precision 1.3%, Bias 2.9%, Expanded Uncertainty 5.6%.

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
							Sampling: Immeasurable
Outfall	Lead (diss.filt)	>0.25 mg/l	Monthly	1.1 µg/l	TM152	17/12/2016 09:00	Lab: Precision 4.1%, Bias -0.6%, Expanded Uncertainty 8.7%. Sampling: Immeasurable
Outfall	Nickel (diss.filt)	>0.1 mg/l	Monthly	5.91 µg/l	TM152	17/12/2016 09:00	Lab: Precision 4.6%, Bias 1.5%, Expanded Uncertainty 10.7%. Sampling: Immeasurable
Outfall	EPH Range >C10-C40 (aq)	>2 mg/l	Monthly	238 µg/l	TM172	17/12/2016 09:00	Lab: Precision 7.6%, Bias -12.0%, Expanded Uncertainty 27.3%. Sampling: Immeasurable
Outfall	EPH Range >C10-C20 (aq)	>2 mg/l	Monthly	80.2 µg/l	TM172	17/12/2016 09:00	Lab: Precision 7.6%, Bias -12.0%, Expanded Uncertainty 27.3%. Sampling: Immeasurable
Outfall	EPH Range >C20-C30 (aq)	>2 mg/l	Monthly	74.8 µg/l	TM172	17/12/2016 09:00	Lab: Precision 7.6%, Bias -12.0%, Expanded Uncertainty 27.3%. Sampling: Immeasurable
Outfall	EPH Range >C30-C40 (aq)	>2 mg/l	Monthly	83.5 µg/l	TM172	17/12/2016 09:00	Lab: Precision 7.6%, Bias -12.0%, Expanded Uncertainty 27.3%. Sampling: Immeasurable
Outfall	Sulphate	>300 mg/l	Monthly	229 mg/l	TM184	17/12/2016 09:00	Lab: Precision 2.8%, Bias 2.1%, Expanded Uncertainty 7.6%. Sampling: Immeasurable
Outfall	Chloride	>300 mg/l	Monthly	76.3 mg/l	TM184	17/12/2016 09:00	Lab: Precision 2.8%, Bias 2.7%, Expanded Uncertainty 8.2%. Sampling: Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
Outfall	Nitrite as N	>1 mg/l	Monthly	0.0243 mg/l	TM184	17/12/2016 09:00	Lab: Precision 2.2%, Bias 0.4%, Expanded Uncertainty 4.8%. Sampling: Immeasurable
Outfall	Phosphate (ortho) as PO ₄	>1 mg/l	Monthly	<0.05 mg/l	TM184	17/12/2016 09:00	Lab: Precision 1.7%, Bias 2.7%, Expanded Uncertainty 6.1%. Sampling: Immeasurable
Outfall	Nitrate as N	>1 mg/l	Monthly	0.208 mg/l	TM184	17/12/2016 09:00	Lab: Unknown. Sampling: Immeasurable
Outfall	Total Oxidised Nitrogen as N	>2 mg/l	Monthly	0.233 mg/l	TM184	17/12/2016 09:00	Lab: Precision 3.1%, Bias 3.2%, Expanded Uncertainty 9.3%. Sampling: Immeasurable
Outfall	Oxygen, dissolved	<2 mg/l (1 occasion) <5 mg/l (3 consecutive occasions)	Monthly	3.35 mg/l	TM187	17/12/2016 09:00	Lab: Unknown. Sampling: Immeasurable
Outfall	Cadmium (tot.unfilt)	>0.005 mg/l	Monthly	<0.5 µg/l	TM191	17/12/2016 09:00	Lab: Precision 5.4%, Bias -4.0%, Expanded Uncertainty 14.8%. Sampling: Immeasurable
Outfall	Zinc (tot.unfilt)	>1 mg/l	Monthly	41 µg/l	TM191	17/12/2016 09:00	Lab: Precision 5.7%, Bias -2.2%, Expanded Uncertainty 13.5%. Sampling: Immeasurable
Outfall	Calcium (tot.unfilt)	>300 mg/l	Monthly	146 mg/l	TM228	17/12/2016 09:00	Lab: Precision 5.0%, Bias -1.8%, Expanded Uncertainty 11.9%. Sampling: Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
Outfall	pH	6.8 ñ 8.5	Monthly	7.23 pH Units	TM256	17/12/2016 09:00	Lab: Precision 0.4%, Bias 0.9%, Expanded Uncertainty 1.7%. Sampling: Immeasurable
Outfall	GRO >C5-C12	>2 mg/l	Monthly	<50 µg/l	TM245	17/12/2016 09:00	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable
Outfall	GRO >C7-C8	>2 mg/l	Monthly	<10 µg/l	TM245	17/12/2016 09:00	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable
Outfall	GRO >C5-C6	>2 mg/l	Monthly	<10 µg/l	TM245	17/12/2016 09:00	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable
Outfall	GRO >C6-C7	>2 mg/l	Monthly	<10 µg/l	TM245	17/12/2016 09:00	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable
Outfall	GRO >C8-C10	>2 mg/l	Monthly	<10 µg/l	TM245	17/12/2016 09:00	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable
Outfall	GRO >C10-C12	>2 mg/l	Monthly	<10 µg/l	TM245	17/12/2016 09:00	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable
Outfall	GRO >C5-C10	>2 mg/l	Monthly	<10 µg/l	TM245	17/12/2016 09:00	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
SW9	Suspended Solids, Total	>250 mg/l (1 occasion) >100 mg/l (3 consecutive occasions) >60 mg/l (4 consecutive occasions)	Monthly	16.3 mg/l	TM022	17/12/2016 09:15	Lab: Precision 1.4%, Bias -2.6%, Expanded Uncertainty 5.4%. Sampling: Immeasurable
SW9	BOD, unfiltered	>18 mg/l (1 occasion) >10 mg/l (3 consecutive occasions)	Monthly	29.7 mg/l	TM045	17/12/2016 09:15	Lab: Precision 8.9%, Bias 2.6%, Expanded Uncertainty 20.5%. Sampling: Immeasurable
SW9	Ammoniacal Nitrogen as N	>1 mg/l (1 occasion) >0.5 mg/l (4 consecutive occasions)	Monthly	2.68 mg/l	TM099	17/12/2016 09:15	Lab: Precision 2.1%, Bias 1.6%, Expanded Uncertainty 5.9%. Sampling: Immeasurable
SW9	Conductivity	>2000 µS/cm	Monthly	0.938 mS/cm	TM120	17/12/2016 09:15	Lab: Precision 1.3%, Bias 2.9%, Expanded Uncertainty 5.6%. Sampling: Immeasurable
SW9	Lead (diss.filt)	>0.25 mg/l	Monthly	0.417 µg/l	TM152	17/12/2016 09:15	Lab: Precision 4.1%, Bias -0.6%, Expanded Uncertainty 8.7%. Sampling: Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
SW9	Nickel (diss.filt)	>0.1 mg/l	Monthly	3.8 µg/l	TM152	17/12/2016 09:15	Lab: Precision 4.6%, Bias 1.5%, Expanded Uncertainty 10.7%. Sampling: Immeasurable
SW9	EPH Range >C10-C40 (aq)	>2 mg/l	Monthly	179 µg/l	TM172	17/12/2016 09:15	Lab: Precision 7.6%, Bias -12.0%, Expanded Uncertainty 27.3%. Sampling: Immeasurable
SW9	EPH Range >C10-C20 (aq)	>2 mg/l	Monthly	41.9 µg/l	TM172	17/12/2016 09:15	Lab: Precision 7.6%, Bias -12.0%, Expanded Uncertainty 27.3%. Sampling: Immeasurable
SW9	EPH Range >C20-C30 (aq)	>2 mg/l	Monthly	48.8 µg/l	TM172	17/12/2016 09:15	Lab: Precision 7.6%, Bias -12.0%, Expanded Uncertainty 27.3%. Sampling: Immeasurable
SW9	EPH Range >C30-C40 (aq)	>2 mg/l	Monthly	88 µg/l	TM172	17/12/2016 09:15	Lab: Precision 7.6%, Bias -12.0%, Expanded Uncertainty 27.3%. Sampling: Immeasurable
SW9	Sulphate	>300 mg/l	Monthly	238 mg/l	TM184	17/12/2016 09:15	Lab: Precision 2.8%, Bias 2.1%, Expanded Uncertainty 7.6%. Sampling: Immeasurable
SW9	Chloride	>300 mg/l	Monthly	77.6 mg/l	TM184	17/12/2016 09:15	Lab: Precision 2.8%, Bias 2.7%, Expanded Uncertainty 8.2%. Sampling: Immeasurable
SW9	Nitrite as N	>1 mg/l	Monthly	<0.0152 mg/l	TM184	17/12/2016 09:15	Lab: Precision 2.2%, Bias 0.4%, Expanded Uncertainty 4.8%. Sampling: Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
SW9	Phosphate (ortho) as PO ₄	>1 mg/l	Monthly	<0.05 mg/l	TM184	17/12/2016 09:15	Lab: Precision 1.7%, Bias 2.7%, Expanded Uncertainty 6.1%. Sampling: Immeasurable
SW9	Nitrate as N	>1 mg/l	Monthly	<0.0677 mg/l	TM184	17/12/2016 09:15	Lab: Unknown. Sampling: Immeasurable
SW9	Total Oxidised Nitrogen as N	>2 mg/l	Monthly	<0.1 mg/l	TM184	17/12/2016 09:15	Lab: Precision 3.1%, Bias 3.2%, Expanded Uncertainty 9.3%. Sampling: Immeasurable
SW9	Oxygen, dissolved	<2 mg/l (1 occasion) <5 mg/l (3 consecutive occasions)	Monthly	0.67 mg/l	TM187	17/12/2016 09:15	Lab: Unknown. Sampling: Immeasurable
SW9	Cadmium (tot.unfilt)	>0.005 mg/l	Monthly	<0.5 µg/l	TM191	17/12/2016 09:15	Lab: Precision 5.4%, Bias -4.0%, Expanded Uncertainty 14.8%. Sampling: Immeasurable
SW9	Zinc (tot.unfilt)	>1 mg/l	Monthly	27.4 µg/l	TM191	17/12/2016 09:15	Lab: Precision 5.7%, Bias -2.2%, Expanded Uncertainty 13.5%. Sampling: Immeasurable
SW9	Calcium (tot.unfilt)	>300 mg/l	Monthly	141 mg/l	TM228	17/12/2016 09:15	Lab: Precision 5.0%, Bias -1.8%, Expanded Uncertainty 11.9%. Sampling: Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
SW9	pH	6.8 ñ 8.5	Monthly	7.07 pH Units	TM256	17/12/2016 09:15	Lab: Precision 0.4%, Bias 0.9%, Expanded Uncertainty 1.7%. Sampling: Immeasurable
SW9	GRO >C5-C12	>2 mg/l	Monthly	<50 µg/l	TM245	17/12/2016 09:15	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable
SW9	GRO >C7-C8	>2 mg/l	Monthly	<10 µg/l	TM245	17/12/2016 09:15	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable
SW9	GRO >C5-C6	>2 mg/l	Monthly	<10 µg/l	TM245	17/12/2016 09:15	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable
SW9	GRO >C6-C7	>2 mg/l	Monthly	<10 µg/l	TM245	17/12/2016 09:15	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable
SW9	GRO >C8-C10	>2 mg/l	Monthly	<10 µg/l	TM245	17/12/2016 09:15	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable
SW9	GRO >C10-C12	>2 mg/l	Monthly	<10 µg/l	TM245	17/12/2016 09:15	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable
SW9	GRO >C5-C10	>2 mg/l	Monthly	<10 µg/l	TM245	17/12/2016 09:15	Lab: Precision 8.1%, Bias -6.3%, Expanded Uncertainty 22.5%. Sampling: Immeasurable

- [1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum - maximum' measured values.
- [2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
- [3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- [4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.



Signed

Date: January 2017

(Authorised to sign as representative of Operator)

Ahlim Hashm on behalf of Atlantic Recycling
Permit Number EPR/PP3993VS