Permit Number: EPR/PP3993VS

Operator: Atlantic Recycling Limited

Facility: Atlantic Recycling

Form Number: Surfacewater1

Reporting of surface water monitoring for quarterly monitoring in December 2019

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result(1)	Unit	Test Method(2)	Sample Date and Time(3)	Uncertainty (4)
OF	Ammoniacal Nitrogen as N	>1 mg/l (1 occasion) >0.5 mg/l (4 consecutive occasions)	Monthly	1.29	mg/l	TM099	13/12/2019	Lab Precision: 1.73%, Bias: 0.73%, Expanded Uncertainty: 4.2%, Sampling Immeasurable
OF	BOD, unfiltered	>18 mg/l (1 occasion) >10 mg/l (3 consecutive occasions)	Monthly	3.58	mg/l	TM045	13/12/2019	Lab Precision: 6.13%, Bias: 3.17%, Expanded Uncertainty: 15.42%, Sampling Immeasurable
OF	Cadmium (tot.unfilt)	>0.005 mg/l	Monthly	1.44	ug/l	TM152	13/12/2019	Lab Precision: 2.72%, Bias: 2.7%, Expanded Uncertainty: 8.15%, Sampling Immeasurable
OF	Calcium (Tot. Unfilt.)	>300 mg/l	Monthly	115	mg/l	TM152	13/12/2019	Lab Precision: 3.24%, Bias: 2.74%, Expanded Uncertainty: 9.22%, Sampling Immeasurable
OF	Chloride	>300 mg/l	Monthly	106	mg/l	TM184	13/12/2019	Lab Precision: 2.96%, Bias: 4.79%, Expanded Uncertainty: 10.7%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result[1]	Unit	Test Method[2]	Sample Date and Time[3]	Uncertainty [4]
OF	Conductivity @ 20 deg.C	>2000 µS/cm	Monthly	0.766	mS/cm	TM120	13/12/2019	Lab Precision: 0.62%, Bias: 3.2%, Expanded Uncertainty: 4.43%, Sampling Immeasurable
OF	GRO >C5-C12	>2 mg/l	Monthly	<50	ug/l	TM245	13/12/2019	Lab Precision: 11.2%, Bias: 2.02%, Expanded Uncertainty: 24.41%, Sampling Immeasurable
OF	Lead (diss.filt)	>0.25 mg/l	Monthly	0.255	ug/l	TM152	13/12/2019	Lab Precision: 2.94%, Bias: 2.96%, Expanded Uncertainty: 8.84%, Sampling Immeasurable
OF	Nickel (diss.filt)	>0.1 mg/l	Monthly	3.29	ug/l	TM152	13/12/2019	Lab Precision: 2.9%, Bias: 1.81%, Expanded Uncertainty: 7.6%, Sampling Immeasurable
OF	Nitrate as N	>1 mg/l	Monthly	0.277	mg/l	TM184	13/12/2019	Lab Precision: N/A, Sampling Immeasureable
OF	Nitrite as N	>1 mg/l	Monthly	0.107	mg/l	TM184	13/12/2019	Lab Precision: 1.25%, Bias: -0.1%, Expanded Uncertainty: 2.6%, Sampling Immeasurable
OF	Oxygen, dissolved	<2 mg/l (1 occasion) <5 mg/l (3 consecutive occasions)	Monthly	3.18	mg/l	TM187	13/12/2019	Lab Precision: N/A, Sampling Immeasureable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result[1]	Unit	Test Method[2]	Sample Date and Time[3]	Uncertainty [4]
OF	pH	6.8 – 8.5	Monthly	7.92	pH Units	TM256	13/12/2019	Lab Precision: 0.03%, Bias: 0.09%, Expanded Uncertainty: 0.15%, Sampling Immeasurable
OF	Phosphate (Ortho as PO4)	>1 mg/l	Monthly	<0.05	mg/l	TM184	13/12/2019	Lab Precision: 1.56%, Bias: 2.78%, Expanded Uncertainty: 5.89%, Sampling Immeasurable
OF	Sulphate	>300 mg/l	Monthly	145	mg/l	TM184	13/12/2019	Lab Precision: 2.72%, Bias: 2.14%, Expanded Uncertainty: 7.58%, Sampling Immeasurable
OF	Suspended solids, Total	>250 mg/l (1 occasion) >100 mg/l (3 consecutive occasions) >60 mg/l (4 consecutive occasions)	Monthly	51	mg/l	TM022	13/12/2019	Lab Precision: 1.01%, Bias: -0.94%, Expanded Uncertainty: 2.96%, Sampling Immeasurable
OF	Total Aliphatics >C12-C35 (aq)	>2 mg/l	Monthly	195	ug/l	TM174	13/12/2019	Lab Precision: 8.79%, Bias: 2.42%, Expanded Uncertainty: 19.99%, Sampling Immeasurable
OF	Total Aromatics >EC12-EC35 (aq)	>2 mg/l	Monthly	108	ug/l	TM174	13/12/2019	Lab Precision: 8.27%, Bias: -9.7%, Expanded Uncertainty: 26.23%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result[1]	Unit	Test Method[2]	Sample Date and Time[3]	Uncertainty [4]
OF	Total Oxidised Nitrogen as N	>2 mg/l	Monthly	0.384	mg/l	TM184	13/12/2019	Lab Precision: 2.85%, Bias: 4.16%, Expanded Uncertainty: 9.87%, Sampling Immeasurable
OF	Zinc (tot.unfilt)	>1 mg/l	Monthly	149	ug/l	TM152	13/12/2019	Lab Precision: 2.91%, Bias: 3.44%, Expanded Uncertainty: 9.27%, Sampling Immeasurable
SW09	Ammoniacal Nitrogen as N	>1 mg/l (1 occasion) >0.5 mg/l (4 consecutive occasions)	Monthly	0.829	mg/l	TM099	13/12/2019	Lab Precision: 1.73%, Bias: 0.73%, Expanded Uncertainty: 4.2%, Sampling Immeasurable
SW09	BOD, unfiltered	>18 mg/l (1 occasion) >10 mg/l (3 consecutive occasions)	Monthly	2.52	mg/l	TM045	13/12/2019	Lab Precision: 6.13%, Bias: 3.17%, Expanded Uncertainty: 15.42%, Sampling Immeasurable
SW09	Cadmium (tot.unfilt)	>0.005 mg/l	Monthly	<0.5	ug/l	TM152	13/12/2019	Lab Precision: 2.72%, Bias: 2.7%, Expanded Uncertainty: 8.15%, Sampling Immeasurable
SW09	Calcium (Tot. Unfilt.)	>300 mg/l	Monthly	80.4	mg/l	TM152	13/12/2019	Lab Precision: 3.24%, Bias: 2.74%, Expanded Uncertainty: 9.22%, Sampling Immeasurable
SW09	Chloride	>300 mg/l	Monthly	69.4	mg/l	TM184	13/12/2019	Lab Precision: 2.96%, Bias: 4.79%, Expanded Uncertainty: 10.7%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result[1]	Unit	Test Method[2]	Sample Date and Time[3]	Uncertainty [4]
SW09	Conductivity @ 20 deg.C	>2000 µS/cm	Monthly	0.565	mS/cm	TM120	13/12/2019	Lab Precision: 0.62%, Bias: 3.2%, Expanded Uncertainty: 4.43%, Sampling Immeasurable
SW09	GRO >C5-C12	>2 mg/l	Monthly	<50	ug/l	TM245	13/12/2019	Lab Precision: 11.2%, Bias: 2.02%, Expanded Uncertainty: 24.41%, Sampling Immeasurable
SW09	Lead (diss.filt)	>0.25 mg/l	Monthly	<0.2	ug/l	TM152	13/12/2019	Lab Precision: 2.94%, Bias: 2.96%, Expanded Uncertainty: 8.84%, Sampling Immeasurable
SW09	Nickel (diss.filt)	>0.1 mg/l	Monthly	2.37	ug/l	TM152	13/12/2019	Lab Precision: 2.9%, Bias: 1.81%, Expanded Uncertainty: 7.6%, Sampling Immeasurable
SW09	Nitrate as N	>1 mg/l	Monthly	0.155	mg/l	TM184	13/12/2019	Lab Precision: N/A, Sampling Immeasureable
SW09	Nitrite as N	>1 mg/l	Monthly	0.0706	mg/l	TM184	13/12/2019	Lab Precision: 1.25%, Bias: -0.1%, Expanded Uncertainty: 2.6%, Sampling Immeasurable
SW09	Oxygen, dissolved	<2 mg/l (1 occasion) <5 mg/l (3 consecutive occasions)	Monthly	4.46	mg/l	TM187	13/12/2019	Lab Precision: N/A, Sampling Immeasureable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result[1]	Unit	Test Method[2]	Sample Date and Time[3]	Uncertainty [4]
SW09	pH	6.8 – 8.5	Monthly	7.85	pH Units	TM256	13/12/2019	Lab Precision: 0.03%, Bias: 0.09%, Expanded Uncertainty: 0.15%, Sampling Immeasurable
SW09	Phosphate (Ortho as PO4)	>1 mg/l	Monthly	<0.05	mg/l	TM184	13/12/2019	Lab Precision: 1.56%, Bias: 2.78%, Expanded Uncertainty: 5.89%, Sampling Immeasurable
SW09	Sulphate	>300 mg/l	Monthly	97.2	mg/l	TM184	13/12/2019	Lab Precision: 2.72%, Bias: 2.14%, Expanded Uncertainty: 7.58%, Sampling Immeasurable
SW09	Suspended solids, Total	>250 mg/l (1 occasion) >100 mg/l (3 consecutive occasions) >60 mg/l (4 consecutive occasions)	Monthly	29.5	mg/l	TM022	13/12/2019	Lab Precision: 1.01%, Bias: -0.94%, Expanded Uncertainty: 2.96%, Sampling Immeasurable
SW09	Total Aliphatics >C12-C35 (aq)	>2 mg/l	Monthly	<10	ug/l	TM174	13/12/2019	Lab Precision: 8.79%, Bias: 2.42%, Expanded Uncertainty: 19.99%, Sampling Immeasurable
SW09	Total Aromatics >EC12-EC35 (aq)	>2 mg/l	Monthly	<10	ug/l	TM174	13/12/2019	Lab Precision: 8.27%, Bias: -9.7%, Expanded Uncertainty: 26.23%, Sampling Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result[1]	Unit	Test Method[2]	Sample Date and Time[3]	Uncertainty [4]
SW09	Total Oxidised Nitrogen as N	>2 mg/l	Monthly	0.226	mg/l	TM184	13/12/2019	Lab Precision: 2.85%, Bias: 4.16%, Expanded Uncertainty: 9.87%, Sampling Immeasurable
SW09	Zinc (tot.unfilt)	>1 mg/l	Monthly	30.3	ug/l	TM152	13/12/2019	Lab Precision: 2.91%, Bias: 3.44%, Expanded Uncertainty: 9.27%, 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
Adam Parker

(Authorised to sign as representative of Operator)

Date: January 2020

Adam Parker on behalf of Atlantic Recycling
Permit Number: EPR/PP3993VS