Department of Environment and Conservation

Industrial Effluent Compliance
2015 Annual Report

Pollution Prevention Division

June 2016

Table of Contents

List of Tables

1) Executive Summary

The Newfoundland and Labrador Department of Environment and Conservation (ENVC) regulates industrial effluent under the *Environmental Control Water and Sewage Regulations NLR 65/03* (ECWSR). In April 2009, the ECWSR was amended. The amendment adopted specific limits from the corresponding federal regulations for each of the mining, pulp and paper and petroleum refining industrial sectors. Industries operating under a certificate of approval (COA) from the Pollution Prevention Division (PPD) have effluent streams identified and subsequent monitoring schedules developed to characterize the effluent. These schedules are designed to ensure that the effluent discharged from the industry meets regulatory requirements and is protective of the receiving environment.

Copies of the ECWSR, Metal Mining Effluent Regulations, the Pulp and Paper Effluent Regulations and the Petroleum Refinery Liquid Effluent Regulations can be obtained at:
www.assembly.nl.ca/Legislation/sr/Regulations/rc030065.htm
http://www.canlii.org/en/ca/laws/regu/sor-2002-222/latest/sor-2002-222.html
http://www.canlii.org/en/ca/laws/regu/sor-92-269/latest/sor-92-269.html
http://www.canlii.org/en/ca/laws/regu/crc-c-828/latest/crc-c-828.html

In 2015 there were more than 25 industries reporting effluent quality to the ENVC on a consistent basis. This report provides a summary of the effluent quality discharged at the major industries within the province of Newfoundland and Labrador. It is important to note that the summaries provided are for the discharge locations only. Most industries conduct additional monitoring for general water quality characterization at discharge points, as well as other locations in proximity to operations. Some industries operating in the province also participate in Environmental Effects Monitoring (EEM) programs. This report identifies EEM activities completed in 2015.

Disclaimer:

- The data presented is based upon reports submitted to the ENVC by industry, as of June 2016.
- The actual laboratory documentation is available upon request to verify analysis as required.
- If there is a discrepancy between the results depicted in this report and the laboratory documentation, the laboratory documentation is to be considered accurate.
- Average pH values have been corrected to reflect the logarithmic nature of the parameter.
- Typically, the number of samples listed in the tables is based on the maximum collected in a month for any one parameter. Some of the parameters may have been analyzed at a different frequency.

2) Metal Mines

a) Anaconda Mining Inc.

Current COA
Approval #: AA13-035579
Issue date: March 31, 2013
Expiration: March 31, 2018

Anaconda Mining Inc. has one discharge point located at the Polishing Pond outflow. The effluent monitoring program requires analysis of numerous parameters; nine of these parameters have compliance limits. Acute Lethality Test (ALT) is also required as part of the COA. A total of 81 samples were collected at the outflow of the Polishing Pond in 2015. There were no reported exceedances in any grab samples. There were four rainbow trout ALTs with no failures and four *Daphnia magna* ALTs with no failures performed at this location.

Environmental Effects Monitoring
There were no submissions for 2015.

See Table 1: Anaconda Mining Inc. 2015 Effluent Discharge Criteria Summary.

b) Beaver Brook Antimony Inc.

Current COA
Approval #: AA13-035578
Issue date: April 8, 2013
Expiration: March 19, 2018

Beaver Brook Antimony Inc. has one discharge point located at Site 16. The effluent monitoring program requires analysis of numerous parameters, eight of which have compliance limits. In 2015, there were a total of 53 samples collected with no reported exceedances. There were five rainbow trout ALTs with no failures and six *Daphnia magna* ALTs with one failure at this location. It is important to note that the *Daphnia magna* ALT is a required monitoring test but it is not a compliance determining test. It is used as a monitoring tool only.

It is important to note that operations were ceased at Beaver Brook Antimony Inc. in 2012, and the industry has been in care and maintenance since that time. Monitoring continued as part of the Care and Maintenance Plan for the facility.

Environmental Effects Monitoring
There were no submissions for 2015.

See Table 2: Beaver Brook Antimony Inc. 2015 Effluent Discharge Criteria Summary.

c) Iron Ore Company of Canada

Current COA
Approval #: AA13-045575A
Issue date: April 9, 2013
Amendment: November 24, 2015
Expiration: April 9, 2018

The Iron Ore Company of Canada has seven discharge points: FDP-MD5, FDP-TIA (Julienne Narrows), FDP-Hakim Culvert, FDP-MD30, PD-11, PD-19 and PD-24. The effluent monitoring

program for the FDP locations requires analysis of numerous parameters; eight of these have compliance limits. PD-19 requires monitoring for total petroleum hydrocarbons (TPH) only, PD-11 and PD-24 requires monitoring for five parameters.

FDP-MD5: Discharge of effluent occurred at this location between May and November 2015. During this time, 29 samples were collected with no reported exceedances. There were seven rainbow trout ALTs with no failures and seven *Daphnia magna* ALTs with no failures performed at this location.

FDP-TIA: 52 samples were collected at this location in 2015 with no exceedances. There were 12 rainbow trout ALTs with no failures and 12 *Daphnia magna* ALTs with no failures performed at this location.

FDP-Hakim Culvert: 52 samples were collected at this location in 2015 with no reported exceedances. There were 12 rainbow trout ALTs with no failures and 12 *Daphnia magna* ALTs with no failures performed at this location.

FDP-MD30: 52 samples were collected at FDP-MD30 in 2015 with no reported exceedances. There were 14 rainbow trout ALTs with no failures and 14 *Daphnia magna* ALTs with no failures performed at this location.

PD-11: Six samples were collected in 2015. There were no exceedances reported.

PD-19: 13 TPH samples were collected in 2015 and all were analysed below the detection limit.

PD-24: Eight samples were collected in 2015. There was one TSS exceedance reported and the monthly average limit was exceeded in July.

Environmental Effects Monitoring
There were no submissions for 2015.

See Table 3: Iron Ore Company of Canada 2015 Effluent Discharge Criteria Summary.

d) Labrador Iron Mines

Current COA

Approval #: AA15-125615
Issue date: December 16, 2015
Expiration: December 16, 2020

Approval #: AA10-095537
Issue date: September 8, 2010
Expiration: September 8, 2015

Labrador Iron Mines has one discharge point at Ruth Pit Outlet. The effluent monitoring program for this location requires analysis of numerous parameters, eight of which have associated compliance limits. There were a total of 54 samples collected with no exceedances. There were four rainbow trout ALTs with no failures and three *Daphnia magna* ALTs with no failures performed at this location. There were no mining operations at this facility in 2015.

Environmental Effects Monitoring

There were no submissions for 2015.

See Table 4: Labrador Iron Mines 2015 Effluent Discharge Criteria Summary.

e) Rambler Metals and Mining Canada Ltd (Ming Mine)

Current COA
Approval #: AA13-035580
Issue date: March 31, 2013
Expiration: March 31, 2018

Rambler Metals and Mining has one discharge location at the Ming Mine site that discharges treated mine effluent into South Brook Pond on the Baie Verte Peninsula. The effluent monitoring program consists of analysis of numerous parameters; nine of which have environmental compliance limits. There were 44 samples collected in 2015 with one pH being reported outside of the environmental discharge range. There were 13 rainbow trout ALTs with no failures and 13 *Daphnia magna* ALTs with no failures performed at this location.

Environmental Effects Monitoring
The Ming Mine Cycle 2 EEM Study Design was submitted in 2015.

See Table 5: Rambler Metals and Mining Canada Ltd 2015 Effluent Discharge Criteria Summary.

f) Rambler Metals and Mining Canada Ltd (Nugget Pond)

Current COA
Approval #: AA13-035580
Issue date: March 31, 2013
Expiration: March 31, 2018

There is one discharge point located at the outflow of the Polishing Pond at the Rambler Metals and Mining Nugget Pond mill facility. The effluent monitoring program contains numerous parameters; nine of which have environmental compliance limits. ALTs are also required as part of the COA. In 2015, a total of 30 samples were collected and analysed at the Polishing Pond with no exceedances reported. There were 11 rainbow trout ALTs with no failures and 11 *Daphnia magna* ALTs with no failures performed at this location. No sampling was conducted in March as there was no discharge from the Polishing Pond.

Environmental Effects Monitoring
The Nugget Pond Cycle 4 EEM Interpretive Report was submitted in 2015.

See Table 6: Rambler Metals and Mining Canada Ltd (Nugget Pond Facility) 2015 Effluent Discharge Criteria Summary.

g) Tata Steel Minerals Canada Ltd

Current COA
Approval #: AA12-085571B
Issue date: August 10, 2012
Amendment: December 14, 2015
Expiration: August 10, 2017

Tata Steel Minerals Canada Ltd operates an iron ore mine in Labrador near Schefferville, Quebec. There is very limited effluent discharge from this facility and as a result, effluent sampling only occurred in May 2015 at discharge location SW11. The effluent monitoring program requires analysis of numerous parameters, eight of which have associated compliance limits. There were three samples collected with one TSS exceedance reported and the monthly average for TSS exceeded. There was one rainbow trout ALT performed at this location and it failed.

Environmental Effects Monitoring
There were no EEM submissions for 2015.

See Table 7: Tata Steel Minerals Canada Ltd 2015 Effluent Discharge Criteria Summary.

h) Teck Resources Ltd

Current COA
Approval #: AA10-115540
Issue date: November 23, 2010
Expiration: November 23, 2015

Teck Resources Ltd has one discharge point (Dam C) at their mining operation located near Millertown, NL. The effluent monitoring program requires analysis of numerous parameters. Nine of these parameters have associated compliance limits. In 2015, 38 samples were collected. There were no exceedances reported in 2015. There were 11 rainbow trout ALTs with no failures and 11 *Daphnia magna* ALTs with three failures performed at this location. It is important to note that the *Daphnia magna* ALT is a required monitoring test but it is not a compliance determining test. It is used as a monitoring tool only.

It is important to note that operations were ceased at Teck Resources Ltd in 2015.

Environmental Effects Monitoring
There were no EEM submissions for 2015.

See Table 8: Teck Resources Ltd 2015 Effluent Discharge Criteria Summary.

i) Vale Newfoundland and Labrador Ltd (Voisey's Bay)

Current COA
Approval #: AA13-125585
Issue date: December 31, 2013
Expiration: December 31, 2018

The Vale Newfoundland and Labrador Ltd mine site near Nain, Labrador has one location that discharges treated effluent from the waste water treatment plant into Anaktalak Bay. The effluent monitoring program consists of several parameters; eight of these have compliance limits. A total of 44 samples were collected during the year, with no reported exceedances. No samples were collected during the month of June as there was no discharge during this time. There were five rainbow trout ALTs with no failures and 5 *Daphnia magna* ALTs with one failure performed at this location. It is important to note that the *Daphnia magna* ALT is a required monitoring test but it is not a compliance determining test. It is used as a monitoring tool only.

Environmental Effects Monitoring
There were no EEM submissions for 2015.

See Table 9: Vale Newfoundland and Labrador Ltd (Mine Site) 2015 Effluent Discharge Criteria Summary.

j) Wabush Mines

Current COA — Approval #: AA12-055569
Issue date: May 31, 2012
Expiration: May 31, 2016

Wabush Mines has four discharge points: Flora Lake, Knoll Lake, East Pit #2 and the Tailings Line Emergency Dump Basin. The effluent monitoring program consists of several parameters, eight of which have compliance limits. There are ALT requirements at all of these locations.

Flora Lake: 52 samples were collected at the Flora Lake discharge in 2015. Four TSS exceedances were reported, one in May and three in June. The monthly average for May and June exceeded the monthly average limit of 15 mg/L. There were four rainbow trout ALTs with no failures and four *Daphnia magna* ALTs with two failures performed at this location. It is important to note that the *Daphnia magna* ALT is a required monitoring test but it is not a compliance determining test. It is used as a monitoring tool only.

Knoll Lake: Seven samples were collected at the Knoll Lake discharge location in 2015. One TSS exceedances was reported in May. There was one rainbow trout ALT with no failure and one *Daphnia magna* ALT with no failure performed. Discharge occurred from this location in May and June only.

East Pit #2: 34 samples were analysed at the East Pit #2 location in 2015 with no exceedances reported. There were three rainbow trout ALTs with no failures and three *Daphnia magna* ALTs with no failures performed at this location. There was no discharge from January to April at this location.

Tailings Line Emergency Dump Basin: 6 samples were collected at the Tailings Line Emergency Dump Basin in 2015. There were no reported exceedances. There were two rainbow trout ALTs with no failures and two *Daphnia magna* ALTs with no failures performed at this location. Discharge occurred from this location from May to July only.

Environmental Effects Monitoring
There were no submissions for 2015.

See Table 10: Wabush Mines 2015 Effluent Discharge Criteria Summary.

Table 1: Anaconda Mining Inc. 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Polishing Pond Discharge	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Total
Samples	9	12	15	14	16	3	1	3	3	1	4	81
pH, Maximum (Units)	7.97	7.87	7.84	7.92	8.02	7.98	8.06	7.97	8.15	8.00	8.00	8.15
pH, Minimum (Units)	7.86		7.73	7.75	7.73	7.79		7.90	8.05		7.92	7.73
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum			<0.001			<0.001	<0.001	<0.001	<0.001		<0.001	<0.001
As, Exceedance (>1.0)			0			0	0	0	0		0	0
Monthly Average (>0.50)			<0.001			<0.001	<0.001	<0.001	<0.001		<0.001	
Cu, Maximum			0.079			0.014	0.0134	0.0219	0.0122		0.0109	0.079
Cu, Exceedance (>0.6)			0			0	0	0	0		0	0
Monthly Average (>0.30)			0.079			0.014	0.0134	0.0192	0.0122		0.0109	
CN, Maximum	0.11	0.24	0.29	0.31	0.09	0.027	0.0081	0.044	0.059	0.042	0.062	0.31
CN, Exceedance (>2.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>1.00)	0.10	0.11	0.17	0.17	0.043	0.022	0.0081	0.029	0.038	0.042	0.039	
Pb, Maximum			<0.0005			0.00053	<0.0005	0.00075	<0.0005		<0.0005	0.00075
Pb, Exceedance (>0.4)			0			0	0	0	0		0	0
Monthly Average (>0.20)			<0.0005			0.00053	<0.0005	0.00065	<0.0005		<0.0005	
Ni, Maximum			<0.002			<0.002	<0.002	<0.002	<0.002		<0.002	<0.002
Ni, Exceedance (>1.0)			0			0	0	0	0		0	0
Monthly Average (>0.50)			<0.002			<0.002	<0.002	<0.002	<0.002		<0.002	
Zn, Maximum			<0.005			0.0089	0.0102	0.0102	<0.005		<0.005	0.0102
Zn, Exceedance (>1)			0			0	0	0	0		0	0
Monthly Average (>0.50)			<0.005			0.0089	0.0102	0.0064	<0.005		<0.005	
TSS, Maximum	10	2.2	3	6.2	12	4.2	1.6	6.2	6	4.4	4.2	12
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>15.00)	8	2.2	1.8	4.3	8.3	1.9	1.6	4.4	3.7	4.4	3.5	
Ra-226, Maximum			<0.010			<0.010		<0.010			<0.010	<0.010
Ra-226, Exceedance (>1.11 Bq/L)			0			0		0			0	0
Monthly Average (>0.37 Bq/L)			<0.010			<0.010		<0.010			<0.010	

Table 1 Continued: Anaconda Mining Inc. 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Polishing Pond Discharge	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Total
Ammonia, Maximum			14				3	3.1	3.5		5.4	14
Cd, Maximum (ug/L)			<0.01				0.014	0.03	0.013		0.012	0.03
Fe, Maximum			0.119				0.144	1.15	0.338		0.45	1.15
Nitrate, Maximum			6.2				5.8	7.1	7.3		6.3	7.3
TDS, Maximum			980				460	470	490		580	980
TPH, Maximum			0.53				<0.10	<0.10	<0.10		<0.10	0.53
ALT, Pass (RT)			1			1			1		1	4
ALT, Fail (RT)			0			0			0		0	0
ALT, Pass (DM)			1			1			1		1	4
ALT, Fail (DM)			0			0			0		0	0

Table 2: Beaver Brook Antimony Inc. 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Site 16	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples	5	4	4	4	5	5	4	4	4	5	5	4	53
pH, Maximum (Units)	8.10	7.92	8.29	8.10	8.27	8.51	8.15	8.22	8.31	8.38	8.31	8.19	8.51
pH, Minimum (Units)	7.61	7.50	8.09	7.89	8.05	8.25	7.82	7.96	7.88	8.23	8.07	8.12	7.50
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	0.11	0.132	0.11	0.134	0.104	0.164	0.116	0.15	0.157	0.112	0.086	0.116	0.164
As, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.099	0.101	0.103	0.116	0.099	0.135	0.099	0.119	0.139	0.095	0.081	0.101	
Cu, Maximum	0.002	0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.002	0.001	0.007	0.002	<0.001	0.007
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.30)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.001	<0.001	0.003	<0.001	<0.001	
Pb, Maximum	0.0035	0.014	0.0007	0.0065	0.0012	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	0.014
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.20)	0.0011	0.007	0.0006	0.0033	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Ni, Maximum	0.016	0.013	0.017	0.021	0.017	0.013	0.008	0.009	0.014	0.015	0.017	0.019	0.021
Ni, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.014	0.012	0.016	0.018	0.014	0.010	0.008	0.008	0.013	0.013	0.015	0.018	
Zn, Maximum	0.022	0.013	0.019	0.012	0.055	0.005	0.006	0.02	0.006	0.007	0.009	0.007	0.055
Zn, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.011	0.012	0.012	0.010	0.017	<0.005	<0.005	0.007	<0.005	<0.005	0.007	0.005	
TSS, Maximum	6	11	2	22	<2	2	<2	3	<2	3	<2	4	22
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>15.00)	2.9	6.3	<2	8	<2	<2	<2	<2	<2	<2	<2	<2	
Ra-226, Maximum	0.02				0.01		0.01		0.03		<0.005		0.03
Ra-226, Exceedance (>1.11 Bq/l)	0				0		0		0		0		0
Monthly Average (>0.37)	0.013				0.01		0.01		0.03		<0.005		
Ammonia, Maximum	0.8				<0.03	<0.03	<0.03		<0.03		<0.03		0.8
Cd, Maximum (ug/L)	0.023				<0.017	0.018	<0.017	<0.017	<0.017	<0.025	<0.025	<0.017	<0.025
Fe, Maximum	0.084				0.375	0.148	0.191	0.06	0.056	0.107	0.112	0.128	0.375

Table 2 Continued: Beaver Brook Antimony Inc. 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Site 16	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Hg, Maximum (ug/L)	0.026				0.028	0.026	<0.026		<0.026		0.032		0.032
Nitrate, Maximum	0.99				0.64	0.09	0.29		0.62		0.55		0.99
TDS, Maximum	255				200	211	127		278		232		278
TPH, Maximum	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
ALT, Pass (RT)	1				1		1		1		1		5
ALT, Fail (RT)	0				0		0		0		0		0
ALT, Pass (DM)	1				1		1		1		1		5
ALT, Fail (DM)	1				0		0		0		0		1

Table 3: Iron Ore Company of Canada 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

FDP - MD5	May	Jun	Jul	Aug	Sept	Oct	Nov	Total
Samples	4	5	4	5	4	4	3	29
pH, Maximum (Units)	7.63	7.91	7.94	7.88	7.90	7.84	7.74	7.94
pH, Minimum (Units)	7.43	7.51	7.67	7.58	7.60	7.80	7.49	7.43
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0
As, Maximum	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
As, Exceedance (>1)	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Cu, Maximum	0.0027	0.0022	<0.002	<0.002	0.0023	<0.002	<0.002	0.0027
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0
Monthly Average (>0.30)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Pb, Maximum	<0.0005	<0.0005	<0.0005	<0.0005	0.00059	<0.0005	<0.0005	0.00059
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0
Monthly Average (>0.20)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Ni, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ni, Exceedance (>1)	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Zn, Maximum	0.013	0.013	0.0067	0.013	0.0099	<0.005	<0.005	0.013
Zn, Exceedance (>1)	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.011	0.008	<0.005	0.006	<0.005	<0.005	<0.005	
TSS, Maximum	9.2	2.4	<2	2.6	9.6	2	2	9.6
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0
Monthly Average (>15.00)	5.8	1.1	<2	<2.0	3.2	1.1	1.2	
Ra-226, Maximum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ra-226, Exceedance (>1.11 Bq/l)	0	0	0	0	0	0	0	0
Monthly Average (>0.37)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	

Table 3 Continued: Iron Ore Company of Canada 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

FDP - MD5	May	Jun	Jul	Aug	Sept	Oct	Nov	Total
Ammonia, Maximum		0.28	0.2	0.27	0.19			0.28
Cd, Maximum (ug/L)		<0.010	<0.010	0.011	<0.010			0.011
Fe, Maximum		0.6	0.36	0.56	0.71			0.71
Hg, Maximum (ug/L)		<0.013	<0.013	<0.013	<0.013			<0.013
Nitrate, Maximum		0.089	0.067	<0.050	<0.050			0.089
TDS, Maximum	120	110	130	170	120	140	150	170
TPH, Maximum	<0.10	<0.10	<0.10	<0.10	<0.10	0.13	<0.10	0.13
ALT, Pass (RT)	1	1	1	1	1	1	1	7
ALT, Fail (RT)	0	0	0	0	0	0	0	0
ALT, Pass (DM)	1	1	1	1	1	1	1	7
ALT, Fail (DM)	0	0	0	0	0	0	0	0

Table 3 Continued: Iron Ore Company of Canada 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

FDP-TIA (Julienne Narrows)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	4	4	5	4	4	5	4	5	4	4	5	4	52
pH, Maximum (Units)	7.89	7.83	7.73	7.81	7.88	7.86	8.06	8.04	7.97	7.91	7.89	7.82	8.06
pH, Minimum (Units)	7.67	7.73	7.57	7.71	7.47	7.62	7.79	7.79	7.74	7.85	7.76	7.76	7.47
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
As, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Cu, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0021	<0.002	<0.002	<0.002	<0.002	<0.002	0.0021
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.30)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Pb, Maximum	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.00072	0.0015	<0.0005	<0.0005	<0.0005	<0.0005	0.0015
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.20)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Ni, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ni, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Zn, Maximum	0.01	0.0061	<0.005	<0.005	<0.005	0.0092	0.0086	0.026	<0.005	<0.005	<0.005	<0.005	0.026
Zn, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0072	<0.005	<0.005	<0.005	<0.005	
TSS, Maximum	<1.0	<1.0	<1.0	<1.0	3.4	1	1.2	1.4	1.6	3.4	<1.0	<1.0	3.4
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>15.00)	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	1.1	1.6	<1.0	<1.0	
Ra-226, Maximum		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		<0.010
Ra-226, Exceedance (>1.11 Bq/l)		0	0	0	0	0	0	0	0	0	0		0
Monthly Average (>0.37)		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		

Table 3 Continued: Iron Ore Company of Canada 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

FDP-TIA (Julienne Narrows)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Ammonia, Maximum						0.26	0.099	0.18	0.18				0.26
Cd, Maximum (ug/L)						<0.010	0.044	0.026	<0.010				0.044
Fe, Maximum						0.12	0.089	<0.050	0.051				0.12
Hg, Maximum (ug/L)						<0.013	0.018	<0.013	<0.013				0.018
Nitrate, Maximum						0.58	0.61	0.59	0.63				0.63
TDS, Maximum	84	78	91	87	111	71	140	97	65	140	66	75	140
ALT, Pass (RT)	1	1	1	1	1	1	1	1	1	1	1	1	12
ALT, Fail (RT)	0	0	0	0	0	0	0	0	0	0	0	0	0
ALT, Pass (DM)	1	1	1	1	1	1	1	1	1	1	1	1	12
ALT, Fail (DM)	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 3 Continued: Iron Ore Company of Canada 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

FDP-Hakim Culvert	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	4	4	5	4	4	5	4	5	4	4	5	4	52
pH, Maximum (Units)	8.00	7.89	7.92	7.98	7.96	8.17	8.14	7.95	8.08	8.14	7.87	7.80	8.17
pH, Minimum (Units)	7.77	7.77	7.68	7.73	7.80	7.85	7.90	7.41	7.78	7.83	7.80	7.69	7.41
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
As, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Cu, Maximum	<0.002	<0.002	<0.002	<0.002	0.0028	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0028
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.30)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Pb, Maximum	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pb, Exceedance (>0.40)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.20)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Ni, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ni, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Zn, Maximum	0.0091	0.0068	<0.005	0.0064	<0.005	0.007	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	0.012
Zn, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	

Table 3 Continued: Iron Ore Company of Canada 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

FDP-Hakim Culvert	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
TSS, Maximum	1.2	1.4	<1.0	<1.0	8.6	2.4	<1.0	3.8	5.8	1.6	<1.0	<1.0	8.6
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>15.00)	<1.0	<1.0	<1.0	<1.0	3.7	1.2	<1.0	1.3	2.7	<1.0	<1.0	<1.0	
Ra-226, Maximum		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		<0.010
Ra-226, Exceedance (>1.11 Bq/l)		0	0	0	0	0	0	0	0	0	0		0
Monthly Average (>0.37)		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		
Ammonia, Maximum	1.3	0.63	0.63	1	0.59	0.84	1.7	1.6	2.9	2.9	1.5	1.4	2.9
Cd, Maximum (ug/L)						<0.010	<0.010	0.066	<0.010				0.066
Fe, Maximum	0.44	0.29	0.14			0.84	0.22	0.14	0.7				0.84
Hg, Maximum (ug/L)						<0.013	<0.013	<0.013	<0.013				<0.013
Nitrate, Maximum	650	10	7.3	11	7	6.5	12	11	14	16	12	13	650
TDS, Maximum	240	220	200	240	240	230	200	250	280	370	240	210	370
TPH, Maximum	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ALT, Pass (RT)	1	1	1	1	1	1	1	1	1	1	1	1	12
ALT, Fail (RT)	0	0	0	0	0	0	0	0	0	0	0	0	0
ALT, Pass (DM)	1	1	1	1	1	1	1	1	1	1	1	1	12
ALT, Fail (DM)	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 3 Continued: Iron Ore Company of Canada 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

FDP-MD30	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	4	4	5	4	4	5	4	5	4	4	5	4	52
pH, Maximum (Units)	7.85	7.72	7.70	7.80	7.93	8.07	8.26	8.29	8.20	7.99	8.06	8.01	8.29
pH, Minimum (Units)	7.61	7.68	7.42	7.59	7.79	7.81	8.09	7.93	7.84	7.61	7.61	7.89	7.42
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
As, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Cu, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0023	0.0031	<0.002	<0.002	<0.002	0.0031
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.30)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Pb, Maximum	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.20)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Ni, Maximum	<0.002	<0.002	<0.002	<0.0020	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ni, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Zn, Maximum	0.0091	0.0059	<0.005	<0.005	0.0051	0.0083	<0.005	0.021	<0.005	<0.005	<0.005	<0.005	0.021
Zn, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	

Table 3 Continued: Iron Ore Company of Canada 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

FDP-MD30	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
TSS, Maximum	1	<1.0	<1.0	2.6	<2.0	1.6	1.4	1	7.4	7	15	<1.0	15
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>15.00)	<1.0	<1.0	<1.0	1.3	<2.0	<1.0	<1.0	<1.0	3.6	3.1	3.4	<1.0	
Ra-226, Maximum		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		<0.010
Ra-226, Exceedance (>1.11 Bq/l)		0	0	0	0	0	0	0	0	0	0		0
Monthly Average (>0.37)		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		
Ammonia, Maximum						0.28	0.37	0.53	0.069				0.53
Cd, Maximum (ug/L)						0.062	0.012	<0.010	0.024				0.062
Fe, Maximum						0.093	0.11	0.052	0.21				0.21
Hg, Maximum (ug/L)						<0.013	<0.013	<0.013	<0.013				<0.013
Nitrate, Maximum						9.4	11	12	5.8				12
TDS, Maximum	170	200	190	190	170	200	250	260	230	200	240	250	260
TPH, Maximum	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ALT, Pass (RT)	1	1	1	1	1	1	1	1	1	1	3	1	14
ALT, Fail (RT)	0	0	0	0	0	0	0	0	0	0	0	0	0
ALT, Pass (DM)	1	1	1	1	1	1	1	1	1	1	3	1	14
ALT, Fail (DM)	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 3 Continued: Iron Ore Company of Canada 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

PD 11	Aug	Sept	Oct	Nov	Dec	Total
Samples	2	1	1	1	1	6
pH, Maximum (Units)	7.58	7.66				7.66
pH, Minimum (Units)	7.43					7.43
pH, Exceedance (<5.5, >9.0)	0	0				0
Fe, Maximum	0.75	<0.050				0.75
TDS, Maximum	140	100				140
TPH, Maximum	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
TSS, Maximum	4.2	<1.0				4.2
TSS, Exceedance (>30)	0	0				0
Monthly Average (>15.00)	2.35	<1.0				

PD 19 (Smallwood Pit)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	1	1	1	1	1	1	2	1	1	1	1	1	13
TPH, Maximum	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

PD 24	Mar	Apr	May	Jun	Jul	Aug	Sept	Total
Samples	1	1	1	1	2	1	1	8
pH, Maximum (Units)				7.47	7.66	7.72	7.68	7.72
pH, Minimum (Units)								
pH, Exceedance (<5.5, >9.0)				0	0	0	0	0
Fe, Maximum				0.47	70	0.14	0.085	70
TDS, Maximum				140	150	160	340	340
TPH, Maximum	<0.10	0.16	0.45	<0.10	0.11	<0.10	<0.10	0.45
TSS, Maximum				1.8	890	<1.0	<1.0	890
TSS, Exceedance (>30)				0	1	0	0	1
Monthly Average (>15.00)				1.8	890	<1.0	<1.0	

Table 4: Labrador Iron Mines 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Ruth Pit Outlet	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	4	4	4	5	4	4	5	4	6	4	6	4	54
pH, Maximum (Units)	7.84	7.67	7.68	7.79	7.85	7.80	7.87	8.04	8.00	7.95	7.88	8.01	8.04
pH, Minimum (Units)	7.49	7.44	7.58	7.19	7.24	7.27	7.59	7.8	7.28	7.71	7.33	7.67	7.19
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum			<0.001			<0.001			<0.001		<0.001		<0.001
As, Exceedance (>1)			0			0			0		0		0
Monthly Average (>0.50)			<0.001			<0.001			<0.001		<0.001		
Cu, Maximum			<0.001			<0.001			<0.001		<0.001		<0.001
Cu, Exceedance (>0.6)			0			0			0		0		0
Monthly Average (>0.30)			<0.001			<0.001			<0.001		<0.001		
Pb, Maximum			<0.0005			<0.0005			<0.0005		<0.0005		<0.0005
Pb, Exceedance (>0.4)			0			0			0		0		0
Monthly Average(>0.20)			<0.0005			<0.0005			<0.0005		<0.0005		
Ni, Maximum			<0.002			<0.002			<0.002		<0.002		<0.002
Ni, Exceedance (>1)			0			0			0		0		0
Monthly Average (>0.50)			<0.002			<0.002			<0.002		<0.002		
Zn, Maximum			<0.007			<0.007			0.0071		<0.007		0.0071
Zn, Exceedance (>1)			0			0			0		0		0
Monthly Average (>0.50)			<0.007			<0.007			0.0071		<0.007		
TSS, Maximum	<2	<2	<2	<2	2	3	2	<2	18	<2	9	3	18
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>15.00)	<2	<2	<2	<2	<2	<2	<2	<2	3.8	<2	2.7	<2	
Radium, Maximum			<0.002			<0.002			<0.002		<0.002		<0.002
Radium, Exceedance (>1.11 Bq/L)			0			0			0		0		0
Monthly Average (>0.37)			<0.002			<0.002			<0.002		<0.002		

Table 4 Continued: Labrador Iron Mines 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Ruth Pit Outlet	Jan	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Ammonia, Maximum		0.02			0.02			<0.02		<0.02		0.02
Cd, Maximum (ug/L)		<0.2			<0.2			<0.2		<0.2		<0.2
Fe, Maximum		<0.06			0.085			<0.06		<0.06		0.085
Hg, Maximum (ug/L)		<0.01			<0.01			<0.01				<0.01
Nitrate, Maximum		0.3			0.3			0.4		0.40		0.4
TDS, Maximum		97			69			71		67		97
ALT, Pass (RT)		1			1			1		1		4
ALT, Fail (RT)		0			0			0		0		0
ALT, Pass (DM)		1			1					1		3
ALT, Fail (DM)		0			0					0		0

Table 5: Rambler Metals and Mining Canada Ltd (Ming Mine) 2015 Effluent Discharge Criteria Summary
(mg/L, unless noted)

Treated Mine Effluent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	4	4	4	3	4	3	5	3	4	3	3	4	44
pH, Maximum (Units)	7.93	8.44	8.04	7.81	7.42	8.24	8.54	8.25	8.56	8.09	8.31	7.85	8.56
pH, Minimum (Units)	7.00	7.59	7.71	7.54	7.27	7.16	7.31	6.74	7.04	7.64	3.46	7.18	3.46
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	1	0	1
As, Maximum	0.0035	<0.001	<0.001	<0.001	0.0013	0.001	<0.001	0.0013	0.0012	0.0011	0.0012	0.0017	0.0035
As, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.50)	0.0018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Cu, Maximum	0.119	0.0077	0.0122	0.0082	0.0181	0.0132	0.019	0.018	0.0173	0.0141	0.0168	0.0204	0.119
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.30)	0.060	0.007	0.008	0.006	0.011	0.008	0.013	0.015	0.014	0.011	0.016	0.014	
CN, Maximum	0.013	0.013	0.013	0.0055	0.0049	0.0045	0.0097	0.0053	0.0098	0.0052	0.0082	0.0054	0.013
CN, Exceedance (>2.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<1.00)	<0.01	0.01	0.0079	0.0049	0.0037	0.0035	0.0048	0.0026	0.0041	0.0028	0.0044	0.0048	
Pb, Maximum	0.0124	0.00134	0.00064	0.0129	0.00882	0.00422	0.00493	0.00312	0.00459	0.007	0.0119	0.00392	0.0129
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.20)	0.0088	0.0009	<0.0005	0.0117	0.0035	0.0025	0.0015	0.0021	0.0032	0.0031	0.0077	0.0012	
Ni, Maximum	0.0224	0.01	0.0162	0.0187	0.0146	0.0183	0.0204	0.012	0.013	0.0134	0.0124	0.0102	0.0224
Ni, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.50)	0.015	0.0087	0.0097	0.0153	0.0109	0.012	0.0145	0.0103	0.0083	0.0108	0.0081	0.0087	
Zn, Maximum	0.34	0.132	0.0868	0.157	0.061	0.123	0.339	0.308	0.315	0.213	0.279	0.2	0.34
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.50)	0.216	0.073	0.0402	0.099	0.043	0.086	0.111	0.223	0.193	0.147	0.157	0.139	

Table 5 Continued: Rambler Metals and Mining Canada Ltd (Ming Mine) 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Treated Mine Effluent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
TSS, Maximum	6	<5.0	5	<5.0	<5	<5.0	<5.0	1.6	<2.0	<5.0	1.4	3.6	6
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<15.00)	<5.0	<5.0	2	<5.0	<5.0	<5.0	<5.0	1.2	<2.0	<5.0	<1.0	1.3	
Ra-226, Maximum	<0.01	<0.01	<0.010	<0.010	0.014	<0.010	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	0.014
Ra-226, Exceedance (>1.11 Bq/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.37 Bq/L)	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Ammonia, Maximum		15		11				10			10		15
Cd, Maximum (ug/L)		1.18		2.27				2.17			3.88		3.88
Fe, Maximum		0.125		0.111				<0.05			<0.05		0.125
Hg, Maximum (ug/L)		<0.013		<0.013				<0.013			<0.013		<0.013
Nitrate, Maximum		23		19				35			49		49
TDS, Maximum		1700		1800				2000			1800		2000
TPH, Maximum		<0.10		<0.10				<0.10			<0.10		<0.10
ALT, Pass (RT)	1	1	1	2	1	1	1	1	1	1	1	1	13
ALT, Fail (RT)	0	0	0	0	0	0	0	0	0	0	0	0	0
ALT, Pass (DM)	1	1	1	2	1	1	1	1	1	1	1	1	13
ALT, Fail (DM)	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 6: Rambler Metals and Mining (Nugget Pond) 2015 Effluent Discharge Criteria Summary
(mg/L, unless noted)

Polishing Pond	Jan.	Feb.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples	1	2	2	4	2	4	2	3	3	3	4	30
pH, Maximum (Units)	7.18	7.23	7.11	7.26	7.45	7.45	7.48	7.47	7.62	7.63	7.39	7.63
pH, Minimum (Units)		7.19	7.08	7.16	7.26	7.08	7.46	7.37	7.42	7.42	7.30	7.08
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	<0.001	0.0013	0.0013	<0.001	0.0018	0.0016	0.0014	0.0015	0.0016	0.0016	0.0014	0.0018
As, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.001	<0.001	<0.001	<0.001	0.0017	0.0014	0.0013	0.0015	0.0015	0.0013	0.0013	
Cu, Maximum	0.0042	0.005	0.004	0.0079	0.0052	0.0097	0.0037	0.0056	0.0058	0.0042	0.0042	0.0097
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.30)	0.0042	0.0045	0.0035	0.0071	0.0043	0.005	0.0033	0.0045	0.0047	0.0041	0.0041	
CN, Maximum	0.012	0.0084	0.0041	0.011	0.0023	0.0025	0.0014	0.0016	<0.010	0.0014	0.0017	0.012
CN, Exceedance (>2.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>1.00)	0.012	0.00445	0.0023	0.0047	0.0021	0.0018	<0.001	0.0015	<0.01	<0.001	0.0013	
Pb, Maximum	0.00182	0.00808	0.00684	0.0114	0.00257	0.00681	0.0072	0.00462	0.00628	0.00111	0.00184	0.0114
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.20)	0.00182	0.00541	0.00637	0.00726	0.00187	0.00513	0.0051	0.00234	0.00432	0.00104	0.00149	
Ni, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ni, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Zn, Maximum	0.0067	0.0109	0.0112	0.0114	0.0141	0.0091	<0.0050	0.0054	0.0083	0.0078	0.0103	0.0141
Zn, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.0067	0.0104	0.0069	0.0078	0.0116	0.0083	<0.005	<0.005	0.006	0.0075	0.0092	

Table 6 Continued: Rambler Metals and Mining (Nugget Pond) 2015 Effluent Discharge Criteria Summary
(mg/L, unless noted)

Polishing Pond	Jan.	Feb.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
TSS, Maximum	1.00	<1.0	<1.0	<2.0	1.4	1.6	<2.0	<2.0	2	<1.0	<1.0	2
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>15.00)	1.00	<1.0	<1.0	<2.0	<1.0	<1.0	<2.0	<2.0	1	<1.0	<1.0	
Ra-226, Maximum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Ra-226, Exceedance (>1.11 Bq/L)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.37 Bq/L)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Ammonia, Maximum		0.95	1.3				0.61			0.59		1.3
Cd, Maximum (ug/L)		0.054	0.13				0.038			0.07		0.13
Fe, Maximum		0.069	<0.050				<0.050			<0.050		0.069
Hg, Maximum (ug/L)		<0.013	<0.013				<0.013			<0.013		<0.013
Nitrate, Maximum		1.2	2.1				1.4			1.5		2.1
TDS, Maximum		200	360				240			290		360
TPH, Maximum		<0.10	<0.10				<0.10			<0.10		<0.10
ALT, Pass (RT)	1	1	1	1	1	1	1	1	1	1	1	11
ALT, Fail (RT)	0	0	0	0	0	0	0	0	0	0	0	0
ALT, Pass (DM)	1	1	1	1	1	1	1	1	1	1	1	11
ALT, Fail (DM)	0	0	0	0	0	0	0	0	0	0	0	0

Table 7: Tata Steel Minerals Canada Ltd 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

SW 11	May	Total
Samples	3	3
pH, Maximum (Units)	6.76	6.76
pH, Minimum (Units)	6.34	6.34
pH, Exceedance (<5.5, >9.0)	0	0
As, Maximum	<0.001	<0.001
As, Exceedance (>1.0)	0	0
Monthly Average (>0.50)	<0.001	
Cu, Maximum	0.0029	0.0029
Cu, Exceedance (>0.6)	0	0
Monthly Average (>0.30)	0.0022	
Pb, Maximum	0.00078	0.00078
Pb, Exceedance (>0.4)	0	0
Monthly Average(>0.20)	0.00062	
Ni, Maximum	0.0021	0.0021
Ni, Exceedance (>1.0)	0	0
Monthly Average (>0.50)	<0.002	
Zn, Maximum	0.11	0.11
Zn, Exceedance (>1.0)	0	0
Monthly Average (>0.50)	0.059	

SW 11	May	Total
TSS, Maximum	49	49
TSS, Exceedance (>30)	1	1
Monthly Average (>15.00)	29.3	
Radium, Maximum	0.004	0.004
Radium, Exceedance (>1.11 Bq/L)	0	0
Monthly Average (>0.37 Bq/L)	0.002	
Ammonia, Maximum	<0.02	<0.02
Cd, Maximum (ug/L)	<0.2	<0.2
Fe, Maximum	1.3	1.3
Hg, Maximum (ug/L)	0.02	0.02
Nitrate, Maximum	0.2	0.2
TDS, Maximum	56	56
ALT, Pass (RT)	0	0
ALT, Fail (RT)	1	1

Table 8: Teck Resources Ltd 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

DPM - Dam C	Jan	Feb	Mar	Apr	May	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	2	4	5	4	3	2	4	5	3	4	2	38
pH, Maximum (Units)	7.17	7.31	7.54	7.55	7.21	7.28	7.24	7.50	7.57	7.55	7.45	7.57
pH, Minimum (Units)	6.23	6.99	7.25	6.52	6.49	5.76	7.06	7.30	7.37	7.31	7.01	5.76
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	<0.01	0.01	0.01	0.03	0.32	<0.01	0.01	0.01	0.01	<0.01	<0.01	0.32
As, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.50)	<0.01	<0.01	<0.01	0.015	0.11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Cu, Maximum	0.194	0.161	0.196	0.206	0.155	0.194	0.201	0.141	0.105	0.069	0.043	0.206
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.30)	0.157	0.148	0.156	0.144	0.148	0.164	0.169	0.117	0.097	0.059	0.0395	
CN, Maximum	<0.005	<0.005	<0.005	<0.005	<0.005	0.019	<0.005	<0.005	<0.005	<0.005	<0.005	0.019
CN, Exceedance (>2.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<1.00)	<0.005	<0.005	<0.005	<0.005	<0.005	0.01075	<0.005	<0.005	<0.005	<0.005	<0.005	
Pb, Maximum	0.008	0.015	0.01	0.012	0.018	0.015	0.013	0.014	0.009	<0.007	<0.007	0.018
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.20)	<0.007	0.011	<0.007	<0.007	0.017	0.009	<0.007	<0.007	<0.007	<0.007	<0.007	
Ni, Maximum	<0.004	0.004	0.007	0.009	0.006	<0.004	0.031	0.005	<0.004	<0.004	<0.004	0.031
Ni, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.50)	<0.004	<0.004	<0.004	0.006	<0.004	<0.004	0.009	<0.004	<0.004	<0.004	<0.004	
Zn, Maximum	0.416	0.455	0.289	0.499	0.363	0.241	0.132	0.246	0.255	0.205	0.198	0.499
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.50)	0.343	0.362	0.193	0.308	0.34	0.217	0.125	0.166	0.186	0.200	0.195	

Table 8 Continued: Teck Resources Ltd 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

DPM - Dam C	Jan	Feb	Mar	Apr	May	Jul	Aug	Sept	Oct	Nov	Dec	Total
TSS, Maximum	2	<2	2	2	3	6	3	4	2	2	3	6
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<15.00)	<2	<2	<2	<2	3	4	3	2.8	<2	<2	2.5	
Ra-226, Maximum	0.011	0.018	0.035	0.021	0.011	0.039	0.029	0.024	0.01	0.013	0.005	0.039
Ra-226, Exceedance (>1.11 Bq/L)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.37 Bq/L)	0.011	0.018	0.035	0.021	0.011	0.039	0.024	0.018	0.006	0.007	<0.005	
Ammonia, Maximum	3.5	3.9	4	3.5	1.8	1	0.8	0.6	0.4	0.3	0.3	4
Cd, Maximum (ug/L)	4	4	3	4	3	3	3	4	4	2	1	4
Fe, Maximum	0.342	0.36	0.327	0.431	0.458	0.236	0.389	0.232	0.241	0.156	0.21	0.458
Hg, Maximum (ug/L)	0.11	0.03	0.03	0.05	0.01	<0.01	0.06	0.15	0.12	<0.01	0.02	0.15
Nitrate, Maximum	0.82	0.82	1.01	0.98	0.4	0.24	0.27	0.28	0.38	0.37	0.33	1.01
TDS, Maximum	1310	1510	1610	1660	917	1090	1290	1360	1460	1350	1210	1660
ALT, Pass (RT)	1	1	1	1	1	1	1	1	1	1	1	11
ALT, Fail (RT)	0	0	0	0	0	0	0	0	0	0	0	0
ALT, Pass (DM)	0	1	1	0	1	0	1	1	1	1	1	8
ALT, Fail (DM)	1	0	0	1	0	1	0	0	0	0	0	3

Table 9: Vale Newfoundland and Labrador Ltd (Voisey's Bay) 2015 Effluent Discharge Criteria Summary
(mg/L, unless noted)

Treated Effluent Discharge	Jan	Feb	Mar	Apr	May	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	4	4	5	4	1	4	5	4	4	5	4	44
pH, Maximum (Units)	8.07	8.84	8.78	8.99	8.58	7.01	8.15	7.63	8.29	8.84	7.79	8.99
pH, Minimum (Units)	7.15	7.05	7.78	7.39		6.28	6.79	7.41	6.93	7.44	7.10	6.28
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
As, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Cu, Maximum	0.0036	<0.002	<0.002	<0.002	<0.002	0.0043	<0.002	0.0036	0.002	<0.002	<0.002	0.0043
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.30)	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Pb, Maximum	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.20)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Ni, Maximum	0.035	0.027	0.035	0.036	0.023	0.089	0.11	0.03	0.055	0.079	0.041	0.11
Ni, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.027	0.024	0.026	0.029	0.023	0.040	0.059	0.027	0.046	0.063	0.039	
Zn, Maximum	<0.005	<0.005	<0.005	<0.005	<0.005	0.0083	0.0084	<0.005	<0.005	<0.005	<0.005	0.0084
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.005	<0.005	<0.005	<0.005	<0.005	0.0054	<0.005	<0.005	<0.005	<0.005	<0.005	

Table 9 Continued: Vale Newfoundland and Labrador Ltd (Voisey's Bay) 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Treated Effluent Discharge	Jan	Feb	Mar	Apr	May	Jul	Aug	Sept	Oct	Nov	Dec	Total
TSS, Maximum	2.8	2.2	5	7.2	7.6	4.4	2.8	5.4	8.2	6	5.6	8.2
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>15.00)	2.3	1.6	2.3	4.7	7.6	3.8	2.0	4.8	6.5	3.8	4.1	
Ra-226, Maximum (Bq/l)		<0.010			<0.010		<0.010					<0.010
Ra-226, Exceedance (>1.11 Bq/L)		0			0		0					0
Monthly Average (>0.37 Bq/L)		<0.010			<0.010		<0.010					
Ammonia, Maximum	1.2	1.4	1.6	1.6	1.9	1.5	1.6	1.6	1.4	1.5	1.7	1.9
Cd, Maximum (ug/L)	0.011	<0.010	<0.010	0.012	<0.010	0.011	0.012	0.011	<0.010	<0.010	0.014	0.014
Fe, Maximum	1	0.81	1.6	2.8	2.5	1.9	1.7	1.9	3.5	1.2	2	3.5
Hg, Maximum (ug/L)	<0.013	<0.013	0.033	0.018	<0.013	<0.013	<0.013	<0.013	0.017	<0.013	<0.013	0.033
Nitrate, Maximum	1.7	1.5	2.00	1.8	2.6	2.40	2.6	2.5	2.4	2.6	2.5	2.6
TDS, Maximum	1400	1500	1500	1500	1300	1300	1400	1300	1300	1400	1400	1500
TPH, Maximum	0.72	1.1	0.58	0.4	0.35	0.32	0.29	0.26	0.27	0.3	0.29	1.1
ALT, Pass (RT)	1	1			1		1			1		5
ALT, Fail (RT)	0	0			0		0			0		0
ALT, Pass (DM)	1	1			1		0			1		4
ALT, Fail (DM)	0	0			0		1			0		1

Table 10: Wabush Mines 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Flora Lake Discharge	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	4	4	5	4	4	5	4	4	5	4	4	5	52
pH, Maximum (Units)	7.73	7.55	7.61	7.68	7.61	7.62	7.58	7.69	7.84	7.72	7.68	7.53	7.84
pH, Minimum (Units)	7.48	7.50	7.40	7.38	7.49	7.49	7.48	7.53	7.44	7.49	7.49	7.48	7.38
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	<0.001	<0.001	<0.001	<0.001	0.0012	0.0014	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0014
As, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Cu, Maximum	0.0025	<0.002	<0.002	<0.002	0.0028	0.0021	0.0027	<0.002	0.0082	0.0032	0.0036	0.0033	0.0082
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.30)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0034	<0.002	<0.002	<0.002	
Pb, Maximum	<0.0005	<0.0005	<0.0005	<0.0005	0.00088	0.00081	<0.0005	<0.0005	<0.0005	<0.0005	0.00071	<0.0005	0.00088
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.20)	<0.0005	<0.0005	<0.0005	<0.0005	0.00056	0.00055	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Ni, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ni, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Zn, Maximum	0.0114	<0.005	<0.005	<0.005	0.008	0.0126	0.0135	0.0129	0.0124	<0.005	0.0134	0.0148	0.0148
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	0.0053	0.0076	0.006	<0.005	0.0052	0.0096	

Table 10 Continued: Wabush Mines 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Flora Lake Discharge	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
TSS, Maximum	3.8	1.8	1.6	2.4	42	100	10	8	4.9	8	3.2	3	100
TSS, Exceedance (>30)	0	0	0	0	1	3	0	0	0	0	0	0	4
Monthly Average(>15.00)	2.4	1.5	<2.0	1.6	23.1	47	7.7	6.3	3.3	4.6	<2.0	1.9	
Ra-226, Maximum	<0.010			<0.010			<0.010			<0.010			<0.010
Ra-226, Exceedance (>1.11 Bq/L)	0			0			0			0			0
Monthly Average (>0.37 Bq/L)	<0.010			<0.010			<0.010			<0.010			
Ammonia, Maximum						0.19	0.075	<0.050	0.19				0.19
Cd, Maximum (ug/L)						0.044	<0.010	<0.010	<0.010				0.044
Fe, Maximum						6.41	0.861	0.626	0.342				6.41
Hg, Maximum (ug/L)						<0.013	<0.013	<0.013	<0.013				<0.013
Nitrate, Maximum						0.2	0.2	0.2	0.18				0.2
TDS, Maximum						51	41	42	45				51
TPH, Maximum	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ALT, Pass (RT)	1			1			1			1			4
ALT, Fail (RT)	0			0			0			0			0
ALT, Pass (DM)	0			0			1			1			2
ALT, Fail (DM)	1			1			0			0			2

Table 10 Continued: Wabush Mines 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Knoll Lake	May	Jun	Total
Samples	4	3	7
pH, Maximum (Units)	7.7	7.88	7.88
pH, Minimum (Units)	6.8	7.61	6.8
pH, Exceedance (<5.5, >9.0)	0	0	0
As, Maximum	<0.001	<0.001	<0.001
As, Exceedance (>1.0)	0	0	0
Monthly Average (>0.50)	<0.001	<0.001	
Cu, Maximum	0.0035	0.0028	0.0035
Cu, Exceedance (>0.6)	0	0	0
Monthly Average (>0.30)	<0.002	<0.002	
Pb, Maximum	0.00053	<0.0005	0.00053
Pb, Exceedance (>0.4)	0	0	0
Monthly Average (>0.20)	<0.0005	<0.0005	
Ni, Maximum	0.0029	<0.002	0.0029
Ni, Exceedance (>1.0)	0	0	0
Monthly Average (>0.50)	<0.002	<0.002	
Zn, Maximum	0.018	0.0295	0.0295
Zn, Exceedance (>1.0)	0	0	0
Monthly Average (>0.50)	0.014	0.024	

Knoll Lake	May	Jun	Total
TSS, Maximum	34	7	34
TSS, Exceedance (>30)	1	0	1
Monthly Average(>15.00)	10.9	3.2	
Ra-226, Maximum	<0.010		<0.010
Ra-226, Exceedance (>1.11 Bq/L)	0		0
Monthly Average (>0.37 Bq/L)	<0.010		
Ammonia, Maximum		0.18	0.18
Cd, Maximum (ug/L)		<0.010	<0.010
Fe, Maximum		0.198	0.198
Hg, Maximum (ug/L)		<0.013	<0.013
Nitrate, Maximum		0.77	0.77
TDS, Maximum		73	73
TPH, Maximum	<0.10	<0.10	<0.10
ALT, Pass (RT)	1		1
ALT, Fail (RT)	0		0
ALT, Pass (DM)	1		1
ALT, Fail (DM)	0		0

Table 10 Continued: Wabush Mines 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

East Pit # 2	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	4	5	4	4	5	4	4	4	34
pH, Maximum (Units)	7.39	7.54	7.62	7.68	7.77	7.67	7.59	7.53	7.77
pH, Minimum (Units)	7.04	7.39	7.41	7.56	7.60	7.33	7.08	7.18	7.04
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0
As, Maximum	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
As, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Cu, Maximum	<0.002	0.0029	<0.002	0.0034	<0.002	0.0047	0.0033	<0.002	0.0047
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0
Monthly Average (>0.30)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Pb, Maximum	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.00254	0.00073	0.00254
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0	0
Monthly Average (>0.20)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	
Ni, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ni, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Zn, Maximum	<0.005	0.0103	0.0085	0.0116	<0.005	0.0059	0.0108	0.0077	0.0116
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	

Table 10 Continued: Wabush Mines 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

East Pit # 2	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
TSS, Maximum	14	14	15	7.8	6	2.4	1.4	<1.0	15
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0
Monthly Average(>15.00)	8.4	10.6	7.4	5.3	3.8	<1.0	<1.0	<1.0	
Ra-226, Maximum	<0.010		<0.010			<0.010			<0.010
Ra-226, Exceedance (>1.11 Bq/L)	0		0			0			0
Monthly Average (>0.37 Bq/L)	<0.010		<0.010			<0.010			
Ammonia, Maximum		0.12	0.32	0.096	0.16				0.32
Cd, Maximum (ug/L)		<0.010	<0.010	<0.010	<0.010				<0.010
Fe, Maximum		0.945	0.738	0.494	0.551				0.945
Hg, Maximum (ug/L)		<0.013	<0.013	<0.013	<0.013				<0.013
Nitrate, Maximum		8.3	8.6	8.7	9				9
TDS, Maximum		97	110	120	120				120
TPH, Maximum	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10			<0.10
ALT, Pass (RT)	1		1			1			3
ALT, Fail (RT)	0		0			0			0
ALT, Pass (DM)	1		1			1			3
ALT, Fail (DM)	0		0			0			0

Table 10 Continued: Wabush Mines 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Tailings Line Emergency Dump Basin	May	Jun	Jul	Total
Samples	4	1	1	6
pH, Maximum (Units)	7.75	7.75	7.87	7.87
pH, Minimum (Units)	7.17			7.17
pH, Exceedance (<5.5, >9.0)	0	0	0	0
As, Maximum	<0.001	<0.001	<0.001	<0.001
As, Exceedance (>1.0)	0	0	0	0
Monthly Average (>0.50)	<0.001	<0.001	<0.001	
Cu, Maximum	<0.002	<0.002	<0.002	<0.002
Cu, Exceedance (>0.6)	0	0	0	0
Monthly Average (>0.30)	<0.002	<0.002	<0.002	
Pb, Maximum	<0.0005	<0.0005	<0.0005	<0.0005
Pb, Exceedance (>0.4)	0	0	0	0
Monthly Average (>0.20)	<0.0005	<0.0005	<0.0005	
Ni, Maximum	<0.002	<0.002	<0.002	<0.002
Ni, Exceedance (>1.0)	0	0	0	0
Monthly Average (>0.50)	<0.002	<0.002	<0.002	
Zn, Maximum	0.0134	0.0104	0.0057	0.0134
Zn, Exceedance (>1.0)	0	0	0	0
Monthly Average (>0.50)	0.0122	0.0104	0.0057	

Tailings Line Emergency Dump Basin	May	Jun	Jul	Total
TSS, Maximum	26	4.2	3.4	26
TSS, Exceedance (>30)	0	0	0	0
Monthly Average(>15.00)	8.9	4.2	3.4	
Ra-226, Maximum	<0.01		<0.01	<0.01
Ra-226, Exceedance (>1.11 Bq/L)	0		0	0
Monthly Average (>0.37 Bq/L)	<0.01		<0.01	
Ammonia, Maximum		0.49	0.28	0.49
Cd, Maximum (ug/L)		<0.01	<0.01	<0.01
Fe, Maximum		0.281	0.102	0.281
Hg, Maximum (ug/L)		<0.013	<0.013	<0.013
Nitrate, Maximum		0.21	0.11	0.21
TDS, Maximum		82	90	90
TPH, Maximum		<0.1	<0.1	<0.1
ALT, Pass (RT)		1	1	2
ALT, Fail (RT)		0	0	0
ALT, Pass (DM)		1	1	2
ALT, Fail (DM)		0	0	0

3) Petroleum Refining
a) North Atlantic Refining Ltd

Current COA

Approval #: AA14-115594
Issue date: November 13, 2014
Expiration: December 31, 2016

North Atlantic Refining Limited has one discharge point which releases effluent into Placentia Bay. The effluent monitoring program consists of six compliance parameters, flow monitoring and ALT. The average flow for the month is determined by averaging the measurements taken three times per week. Daily loadings are calculated from the daily flow and measured concentrations (flow measurements are taken at the same time as sample collection). A total of 157 samples were collected in 2015. There were no exceedances reported at this facility in 2015. There were 12 rainbow trout ALTs with no failures performed at this location.

Environmental Effects Monitoring

The NARL 2014 EEM Interpretive Report was submitted in 2015.

See Table 11: North Atlantic Refining Ltd 2015 Effluent Discharge Criteria Summary.

Table 11: North Atlantic Refining Ltd 2015 Effluent Discharge Criteria Summary

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples Taken	13	12	14	13	13	13	13	13	13	13	13	14	157
Reference Crude Rate (bbls / stream day)	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	
Average Flow (Cdn. gal / day)	1,630,000	1,500,000	1,260,000	1,410,000	1,290,000	1,700,000	900,000	1,100,000	1,370,000	1,260,000	1,350,000	1,270,000	
pH													
Average	7.78	7.68	7.78	7.34	7.42	7.71	7.85	7.72	7.54	7.61	7.64	7.59	
Maximum (Units)	8.00	7.90	8.70	7.60	8.10	8.20	8.10	8.30	7.70	8.00	7.80	7.80	8.70
Minimum (Units)	7.40	7.40	7.30	7.10	6.60	7.30	7.60	7.30	7.30	7.20	7.20	7.30	6.60
Exceedances (< 5.5, > 9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Oil & Grease													
Average (Month Limit < 300 lbs)	28.60	28.89	30.11	55.10	26.85	25.91	12.28	19.23	16.94	22.23	30.42	42.21	
Maximum (lbs)	127.56	81.33	76.98	215.98	102.02	77.20	22.34	67.60	53.98	50.82	67.66	123.08	216.0
Daily Limit (550 lbs)*	0	0	0	0	0	0	0	0	0	0	0	0	0
Never to Exceed 750 lbs	0	0	0	0	0	0	0	0	0	0	0	0	0
Phenol													
Average (Monthly Limit < 30 lbs)	0.16	0.17	0.21	0.15	0.20	0.62	0.09	0.33	0.38	0.30	0.17	0.27	
Maximum (lbs)	0.58	0.34	0.62	0.23	0.70	3.89	0.15	1.96	1.50	2.34	0.40	1.25	3.89
Daily Limit (55 lbs)*	0	0	0	0	0	0	0	0	0	0	0	0	0
Never to Exceed 75 lbs	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulphide													
Average (Monthly Limit < 10 lbs)	0.98	0.42	0.39	0.26	0.31	0.42	0.15	0.17	0.25	0.59	0.63	0.37	
Maximum (lbs)	8.70	1.36	1.03	0.69	0.70	1.05	0.35	0.49	1.35	1.01	1.14	0.67	8.70
Daily Limit (30 lbs)*	0	0	0	0	0	0	0	0	0	0	0	0	0
Never to Exceed 50 lbs	0	0	0	0	0	0	0	0	0	0	0	0	0

*Not to exceed more than one day per month

Table 11 Continued: North Atlantic Refining Ltd 2015 Effluent Discharge Criteria Summary

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Ammonia Nitrogen													
Average (Monthly Limit < 360 lbs)	23.03	21.69	69.35	53.27	32.50	12.57	5.15	10.03	13.88	18.14	16.79	23.77	
Maximum (lbs)	144.95	78.57	203.43	81.47	102.02	26.29	8.16	25.40	58.48	32.48	21.59	44.99	203.43
Daily Limit (570 lbs)*	0	0	0	0	0	0	0	0	0	0	0	0	0
Never to Exceed 720 lbs	0	0	0	0	0	0	0	0	0	0	0	0	0
TSS													
Average (Monthly Limit < 720 lbs)	281.13	274.21	190.82	245.06	149.56	211.43	97.33	106.46	164.43	195.20	163.855	140.95	
Maximum (lbs)	697.00	845.73	717.97	998.48	285.51	578.41	235.92	392.57	405.00	531.00	273.51	437.26	998.5
Daily Limit (1200 lbs)*	0	0	0	0	0	0	0	0	0	0	0	0	0
Never to Exceed 1500 lbs	0	0	0	0	0	0	0	0	0	0	0	0	0
pH at Outfall													
Samples	31	28	31	30	30	30	31	31	30	31	30	31	364
Average	7.75	7.68	7.76	7.37	7.39	7.73	7.81	7.71	7.59	7.56	7.62	7.58	
Maximum (Units)	8.30	7.90	8.70	7.60	8.10	8.20	8.30	8.30	7.90	8.00	7.80	7.80	8.70
Minimum (Units)	7.30	7.40	7.20	7.10	6.60	7.30	7.40	7.30	7.30	7.10	7.20	7.30	6.60
Exceedances (< 5.5, > 9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
ALT, pass	1	1	1	1	1	1	1	1	1	1	1	1	12
ALT, fail	0	0	0	0	0	0	0	0	0	0	0	0	0

*Not to exceed more than one day per month

Note: Averages are weighted with flow values

4) Pulp and Paper

a) Corner Brook Pulp and Paper Ltd

Current COA — Approval #: AA13-125584
Issue date: December 23, 2013
Expiration: July 7, 2018

Corner Brook Pulp and Paper has two discharge locations, Effluent Treatment and East Sewer. The effluent monitoring program consists of two parameters for compliance, TSS and BOD along with ALTs. TSS and flow are measured daily while BOD is measured three times per week. The total loadings are reported in tonnes/day and there were no exceedances reported in 2015. There were 13 rainbow trout ALTs with no failures and 51 *Daphnia magna* ALTs with one failure performed at the Effluent Treatment location. There were 13 rainbow trout ALTs with no failures and 51 *Daphnia magna* ALTs with no failures performed at the East Sewer location. It is important to note that the *Daphnia magna* ALT is a required monitoring test but it is not a compliance determining test. It is used as a monitoring tool only.

Environmental Effects Monitoring
The Cycle 7 EEM Study Design was submitted in 2015.

See Table 12: Corner Brook Pulp and Paper 2015 Effluent Discharge Criteria Summary.

b) Grand Falls Mill (Previously Abitibi-Consolidated Company of Canada)

Current Monitoring — As per memo from PPD
Issue date: June 12, 2013
Expiration: No expiration date established

This site is currently owned and monitored by the Province of Newfoundland and Labrador. The Grand Falls Mill has one compliance point, the combined sewer that is monitored for pH and TPH. 12 samples were collected in 2015 and there were no reported exceedances.

Environmental Effects Monitoring
There were no EEM activities at this site in 2015.

See Table 13: Grand Falls Mill 2015 Effluent Discharge Criteria Summary.

Table 12: Corner Brook Pulp and Paper 2015 Effluent Discharge Criteria Summary

				TSS Concentration				BOD Concentration		Monthly Average Maximum Allowable Limit	
	Average Production	Average TSS Discharge		East Sewer	Effluent Treatment	Average BOD Discharge		East Sewer	Effluent Treatment	TSS	BOD
Month	Tonne/Day	Tonne/Day	kg / FMT	mg/L	mg/L	Tonne/Day	kg / FMT	mg/L	mg/L	Tonne/Day	Tonne/Day
Jan	700.5	5.14	7.3	1.55	82.97	1.05	1.5	0.85	17.00	9.58	6.39
Feb	669.1	2.86	4.3	1.96	46.86	0.73	1.1	0.67	12.33	9.58	6.39
Mar	736.5	3.23	4.4	1.35	53.13	0.99	1.3	0.77	16.08	9.58	6.39
Apr	731.1	3.33	4.6	4.13	60.80	0.44	0.6	1.79	8.29	9.58	6.39
May	730.4	3.22	4.4	1.65	64.87	0.48	0.7	0.67	10.08	9.58	6.39
Jun	730.9	1.93	2.6	1.40	38.50	0.52	0.7	0.77	10.31	9.58	6.39
Jul	667.0	3.45	5.2	1.10	67.81	0.70	1.0	0.64	14.07	9.58	6.39
Aug	585.3	2.54	4.3	1.84	45.26	2.31	3.9	1.00	38.7	9.58	6.39
Sep	739.7	2.01	2.7	0.97	33.57	0.79	1.1	0.57	13.3	9.58	6.39
Oct	705.1	0.94	1.3	2.61	16.16	0.24	0.3	0.92	4.2	9.58	6.39
Nov	739.7	2.51	3.4	1.03	55.93	0.40	0.5	1.00	8.8	9.58	6.39
Dec	714.0	4.01	5.6	1.19	91.55	1.02	1.4	1.33	23.33	9.58	6.39

Table 12 Continued: Corner Brook Pulp and Paper 2015 Effluent Discharge Criteria

	Toxicity (% by volume)							
	96 Hr LC50				48 Hr LC50			
	East Sewer		Effluent Treatment		East Sewer		Effluent Treatment	
Month	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail
Jan	1	0	1	0	4	0	4	0
Feb	1	0	1	0	4	0	4	0
Mar	1	0	1	0	5	0	5	0
Apr	2	0	2	0	4	0	3	1
May	1	0	1	0	4	0	4	0
Jun	1	0	1	0	5	0	5	0
Jul	1	0	1	0	4	0	4	0
Aug	1	0	1	0	5	0	5	0
Sep	1	0	1	0	4	0	4	0
Oct	1	0	1	0	4	0	4	0
Nov	1	0	1	0	4	0	4	0
Dec	1	0	1	0	4	0	4	0
Total	13	0	13	0	51	0	50	1

Table 13: Grand Falls Mill 2015 Effluent Discharge Criteria Summary

	Samples	TPH, Maximum	TPH, Exceedance (>15 mg/L)	pH, Maximum (Units)	pH, Minimum (Units)	pH, Exceedance (<5.5, >9.0)
January	1	<0.10	0	7.89		0
February	1	0.18	0	7.91		0
March	1	0.16	0	7.93		0
April	1	<0.10	0	7.42		0
May	1	1.7	0	8.24		0
June	1	0.15	0	7.72		0
August	2	0.22	0	7.77	7.64	0
October	2	0.12	0	7.94	7.93	0
November	1	<0.10	0	7.53		0
December	1	<0.10	0	7.71		0
Total	12	1.7	0	8.24	7.64	0

5) Thermal Generation

a) Newfoundland and Labrador Hydro Thermal Generating Station

Current COA

Approval #: AA11-085563 (HTGS)
Issue date: August 31, 2011
Expiration: August 31, 2016

Approval #: AA14-125602 (Combustion Turbine)
Issue date: December 24, 2014
Expiration: December 24, 2016

The Newfoundland and Labrador Hydro Thermal Generating Station located in Holyrood has three discharge points, the continuous basin outfall, the periodic basin outfall and the combustion turbine oil/water separator. The effluent monitoring program consists of five parameters, and the continuous basin and periodic basin require ALT.

Continuous Basin: 46 samples were collected in 2015 and there was one reported TSS exceedance in October. There were nine rainbow trout ALTs with two failures performed at this location. It is important to note that the ALT is a required monitoring test but it is not a compliance determining test. It is used as a monitoring tool only.

Periodic Basin: 46 samples were collected in 2015. There was one vanadium exceedance in March. There were 32 rainbow trout ALTs with two failures performed at this location. It is important to note that the ALT is a required monitoring test but it is not a compliance determining test. It is used as a monitoring tool only.

Combustion Turbine: 42 samples were collected in 2015. There was one reported TPH exceedance in July. There was no discharge from this location from January to March.

Environmental Effects Monitoring

The Hydro 2013-2014 EEM Interpretive Report was submitted in 2015.

See Table 14: Newfoundland and Labrador Hydro Thermal Generating Station 2015 Effluent Discharge Criteria Summary.

Table 14: Newfoundland and Labrador Hydro Thermal Generating Station 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

CONTINUOUS BASIN	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Samples	4	4	4	5	4	3	4	3	2	4	4	5	46
pH Maximum (Units)	7.30		6.80	6.90	6.40	6.10	6.90	6.80	7.50	7.40	7.10	7.00	7.50
pH Minimum (Units)	6.70		6.60	6.10	6.20	5.90	6.30	6.40	6.70	6.80	6.50	6.80	5.90
pH Exceedance (<5.5, >9.0)	0		0	0	0	0	0	0	0	0	0	0	0
Fe Maximum	0.200	0.190	0.250	0.340	0.051	0.700	0.095	0.160	<0.5	1.500	0.690	0.088	1.500
Fe Exceedance (>10 mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni Maximum	0.0180	0.005	0.075	0.015	0.010	0.100	0.013	<0.004	0.046	0.014	0.0036	<0.002	0.100
Ni Exceedance (>0.5 mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
V Maximum	0.072	0.085	0.070	0.066	0.0360	0.0930	0.150	0.082	0.031	0.036	0.017	0.045	0.150
V Exceedance (>0.5 mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
TSS Maximum	<2		<2	<2	<2	<2	<2	<2	8.00	49	24.5	8.25	49.00
TSS Exceedance (>30 mg/L)	0		0	0	0	0	0	0	0	1	0	0	1
TPH Maximum	1.6	<1.0	<1.0	<1.0	2	0.6	1.3	<5	<0.50	2.3	0.6	<0.50	2.3
TPH Exceedance (>15 mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
ALT, Pass (RT)	1	1	0	1			0		1	1	1	1	7
ALT, Fail (RT)	0	0	1	0			1		0	0	0	0	2

Table 14 Continued: Newfoundland and Labrador Hydro Thermal Generating Station 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

PERIODIC BASIN (WWTP)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Samples	5	5	5	7	4	4	2	2	3	2	3	4	46
pH Maximum (Units)	8.40		8.40	8.40	8.40	8.00	8.30	8.40	8.30	8.50	8.50	8.70	8.70
pH Minimum (Units)	7.50		7.90	7.10	7.00	6.30	8.10	8.20	8.30	8.20	6.70	8.30	6.30
pH Exceedance (<5.5, >9.0)	0		0	0	0	0	0	0	0	0	0	0	0
Fe Maximum	1.41	1.20	1.88	3.63	1.60	2.4	<0.50	0.90	0.87	0.96	1.80	0.84	3.63
Fe Exceedance (>10 mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni Maximum	0.171	0.145	0.26	0.259	0.43	0.21	0.15	0.13	0.16	0.19	0.25	0.15	0.55
Ni Exceedance (>0.5 mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
V Maximum	0.095	0.15	0.83	0.223	0.13	0.22	0.45	0.34	0.19	0.14	0.11	0.069	0.83
V Exceedance (>0.5 mg/L)	0	0	1	0	0	0	0	0	0	0	0	0	1
TSS Maximum	11.0		9.25	26	17.8	6.2	6.4	6.3	11.0	12.5	20	2.5	26.0
TSS Exceedance (>30 mg/L)	0		0	0	0	0	0	0	0	0	0	0	0
ALT, Pass (RT)	3	4	4	5	2	3	0	2	2	1	3	1	30
ALT, Fail (RT)	0	0	0	0	0	1	1	0	0	0	0	0	2

Table 14 Continued: Newfoundland and Labrador Hydro Thermal Generating Station 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Combustion Turbine	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Samples	5	4	4	5	4	6	4	4	6	42
pH Maximum (Units)				7.68	7.56	7.52	7.47	7.50	7.37	7.68
pH Minimum (Units)					6.96			6.80	6.90	6.80
pH Exceedance (<5.5, >9.0)				0	0	0	0	0	0	0
TPH Maximum	3.40	1.2	4.2	24	2.50	8.20	6.6	1.5	4.9	24.0
TPH Exceedance (15 mg/L)	0	0	0	1	0	0	0	0	0	1
TDS Maximum				250	280	180	180	330	630	630
TDS Exceedance (1000 mg/L)				0	0	0	0	0	0	0
TSS Maximum				1.6	2.6	8	1.4	4.4	15	15
TSS Exceedance (30 mg/L)				0	0	0	0	0	0	0
BOD Maximum				<5.0	<5.0	7.7	<5.0	<5.0	<5.0	7.7
BOD Exceedance (20 mg/L)				0	0	0	0	0	0	0

6) Other

a) Atlantic Minerals Ltd (Lower Cove)

Current COA — Approval #: AA14-035590
Issue date: March 31, 2014
Expiration: March 31, 2019

Atlantic Minerals Ltd collected samples at three locations in 2015, DL-HC Quarry, DL Quarry 2 and Highcal-Trench.

DL-HC Quarry: One sample was collected in July with no reported exceedances.

DL Quarry 2: Three samples collected, one in July, one in August and one in December. TSS exceeded in all samples collected.

Highcal-Trench: Eight samples were collected, one in each month from May to December. There was one reported TSS exceedance in November.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 15: Atlantic Minerals Ltd (Lower Cove) 2015 Effluent Discharge Criteria Summary.

b) Atlantic Minerals Ltd (North Star Cement)

Current Monitoring — As per letter from PPD
Issue date: March 10, 2005
Expiration: No expiration date established

Atlantic Minerals Ltd collected five samples at each of two locations in 2015 for effluent monitoring. pH was monitored at Series 1 and there were no exceedances. Six parameters were analysed at the Shale Quarry location and there was one TDS exceedance reported.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 16: Atlantic Minerals Ltd (North Star Cement) 2015 Effluent Discharge Criteria Summary

c) Barite Mud Services Inc.

Current Monitoring — Approval #: AA14-115601
Issue date: November 19, 2014
Expiration: November 19, 2019

Barite Mud Services Inc. began operation in November 2014. This is a seasonal operation that only operated for two months in 2015. Six effluent samples were collected from the discharge at the outflow of Tailings Pond 1. Zinc was reported above the 0.5 mg/L limit. However, due to the existing zinc levels in Tailings Pond 1

prior to the commencement of the operation, this is not considered an exceedance attributable to Barite Mud Services Inc. Lead was in exceedance in all six samples and TSS exceeded in five samples.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 17: Barite Mud Services Inc. 2015 Effluent Discharge Criteria Summary

d) Buchans

Current Monitoring As per internal memo, PPD
Issue date: September 8, 2010
Updated: January 15, 2014
Expiration: No expiration date established

The ENVC has undertaken effluent monitoring at several locations around the town of Buchans. There are four locations that discharge into the environment: Tailings Pond 1 (TP1), Tailings Pond 2 (TP2), the Mucky Ditch and the outflow of the Polishing Pond.

TP1: There were two samples collected at TP1 in 2015. There were two lead exceedances, two zinc exceedances and one TSS exceedance reported.

TP2: There were two samples collected at TP2 in 2015 and there was one zinc exceedance reported.

Mucky Ditch: There were two samples collected at the Mucky Ditch in 2015. There were two copper exceedances, two lead exceedances, two zinc exceedances and two cadmium exceedances reported.

Polishing Pond: There were two samples collected at the Polishing Pond in 2015. There were two zinc exceedances reported.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 18: Buchans 2015 Effluent Discharge Criteria Summary.

e) Capital Ready Mix Ltd – Black Mountain Quarry

Current Monitoring Directed by Environmental Protection Plan
Submitted: June 2009
Expiration: No expiration date established

Monitoring is conducted at three locations on the Capital Ready Mix Ltd - Black Mountain Quarry site. Two of these locations are waterbodies in the vicinity that are monitored for general water chemistry to ensure that the operation is not having an effect on the receiving environment. Additionally, the operation has a series of settling ponds on site to treat generated process effluent. The effluent is recirculated through the process and during 2015 there were no discharges to the environment.

As such, data was collected for information only in the settling pond during 2015 but it is not presented in this report as it was not released to the environment.

Environmental Effects Monitoring
There is no EEM program at this site.

f) Carino Processing Ltd

Current COA
Approval #: AA13-125586
Issue date: December 18, 2013
Expiration: December 18, 2018
Compliance Agreement: November 18, 2014-June 30, 2017

Carino Processing Ltd has one location that discharges effluent directly to the ocean. The effluent monitoring program contains numerous water quality parameters, 14 of which have associated compliance limits. 41 samples were collected in 2015. Exceedances included: 11 pH, three iron, nine TDS, five TSS, 29 BOD, 30 ammonia, nine oil and grease and 32 phenol.

Environmental Effects Monitoring
There were no EEM submissions for 2015.

See Table 19: Carino Processing Ltd 2015 Effluent Discharge Criteria Summary.

g) Central Regional Waste Management Facility

Current COA
Approval #: WMS-15-06-003
Issue date: June 15, 2015
Expiration: June 30, 2016

The Central Regional Waste Management Facility has one discharge location at SW-9. In 2015, there were a total of 12 samples collected with one iron exceedance, three TSS exceedances, two BOD exceedances and one nitrate exceedance.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 20: Central Regional Waste Management Facility 2015 Effluent Discharge Criteria Summary.

h) Country Ribbon Inc.

Current COA
Approval #: WMS-15-02-001
Issue date: February 6, 2015
Expiration: February 29, 2016

Country Ribbon Inc. has one discharge location. In 2015, 51 samples were collected and there were five exceedances reported in TSS, 35 BOD exceedances, and 16 oil and grease exceedances.

Environmental Effects Monitoring

There is no EEM program at this site.

See Table 21: Country Ribbon Inc. 2015 Effluent Discharge Criteria Summary.

i) Crosbie Industrial Services Ltd.

Current COA — Approval #: WMS-07-07-017
Issue date: March 26, 2015
Expiration: March 31, 2018

Crosbie Industrial Services Ltd. has one effluent discharge location. In 2015, there were 38 samples collected with no reported exceedances.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 22: Crosbie Industrial Services Ltd. 2015 Effluent Discharge Criteria Summary.

j) DJ Composites

Current Monitoring — As per letter from PPD
Issue date: March 8, 2012
Expiration: No expiration date established

The monitoring at DJ Composites is directed by a letter from the PPD dated March 8, 2012. DJ Composites occasionally discharges effluent to the municipal sewer in Gander, NL. In 2015, there were seven discharges to the environment and there were no exceedances reported.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 23: DJ Composites 2015 Effluent Discharge Criteria Summary.

k) Gullbridge Mine Site

The Gullbridge mine site is an abandoned mine site that is being managed by the Government of Newfoundland and Labrador. The Department of Natural Resources has undertaken work at this site to maintain the integrity of the tailings impoundment area of the mine site. There were three monitoring events conducted in 2015 and there was one pH exceedance and three copper exceedances reported.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 24: Gullbridge Mine Site 2015 Effluent Discharge Criteria Summary.

l) Hebron Bull Arm Site

Current Monitoring Directed by Environmental Protection Plan
Submitted: February 2011
Expiration: No expiration date established

Effluent from the Hebron Bull Arm Site is monitored as per their Environmental Protection Plan. There was no discharge from this site in 2015.

Environmental Effects Monitoring
There is no EEM program at this site.

m) Hope Brook Mine Site

Current Monitoring As per letter from PPD
Issue date: January 30, 2008
Expiration: No expiration date established

The Hope Brook mine site has been remediated by the Government of Newfoundland and Labrador. The Department of Natural Resources monitors effluent from seven different areas of the mine site to ensure remediation efforts are stable. There were no exceedances reported at the site during the 2015 sampling event. There were five rainbow trout ALTs performed at the site with no failures.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 25: Hope Brook Mine Site 2015 Effluent Discharge Criteria Summary.

n) Husky Oil Operations Ltd-Atlantic Region

Current Monitoring Approval #: AA13-115582A
Issue date: October 3, 2014
Expiration: November 30, 2019

Husky Oil Operations Ltd-Atlantic Region has two effluent discharge locations, the Settling Pond #1 Weir and the Settling Pond #2 Weir at their Argentia Graving Dock site.

Settling Pond #1 Weir: 49 samples were collected and analysed from this location. There were two TDS, four TSS, and 12 ammonia exceedances reported.

Settling Pond #2 Weir: 54 samples were collected and analysed from this location. There were 10 TDS, four TSS, and 12 ammonia exceedances reported.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 26: Husky Oil Operations Ltd-Atlantic Region 2015 Effluent Discharge Criteria Summary.

o) Labatt Breweries Newfoundland

Current COA
Approval #: AA15-075607
Issue date: July 27, 2015
Expiration: July 27, 2020
Compliance Agreement: July 16, 2015 – May 26, 2018

Labatt Breweries Newfoundland has one discharge point that deposits effluent into the City of St. John's municipal sewer. 46 samples were collected and analysed in 2015. There were nine pH samples reported as out of acceptable range, 31 BOD exceedances, 22 TSS exceedances and one zinc exceedance.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 27: Labatt Breweries Newfoundland 2015 Effluent Discharge Criteria Summary.

p) Molson Coors Canada, St. John's

Current COA
Approval #: AA11-125568
Issue date: December 14, 2011
Expiration: December 28, 2016

Molson Coors Canada, St. John's has one discharge point that deposits effluent into the City of St. John's municipal sewer. 50 samples were collected and analysed in 2015. There were 23 pH samples reported as out of acceptable range, 47 BOD exceedances and 19 TSS exceedances.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 28: Molson Coors Canada, St. John's 2015 Effluent Discharge Criteria Summary.

q) Newfoundland Transshipment Terminal

Current COA
Approval #: AA13-035577
Issue date: March 13, 2013
Expiration: March 12, 2018

Newfoundland Transshipment Terminal monitors water quality at nine locations. The effluent monitoring program for discharge criteria compliance consists of three parameters. Additionally, there is an ALT analysis required at the Containment Pond and a TDS analysis required at the Oily Water Separator. There were no exceedances of the allowable discharge criteria. There were two rainbow trout ALTs performed at the Containment Pond location with no reported failures.

Environmental Effects Monitoring
There were no EEM submissions for 2015.

See Table 29: Newfoundland Transshipment Terminal 2015 Effluent Discharge Criteria Summary.

r) Pardy's Waste Management Facility – Incinerator Road

Current COA

Approval #: WMS-15-10-013
Issue date: November 1, 2015
Expiration: November 1, 2020

Approval #: WMS-08-05-007
Issue date: June 13, 2008
Expiration: June 13, 2010
Extension: August 31, 2015

Pardy's operates a waste management facility on Incinerator Road and has one effluent discharge location. In 2015, 17 samples of effluent were collected and analysed. Reported exceedances included: two selenium, nine TSS, 11 BOD, five total coliform, three fecal coliform, 16 orthophosphate, 17 TDS, 11 nitrates and five ammonia. There was one rainbow trout ALT with no failure performed.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 30: Pardy's Waste Management Facility – Incinerator Road 2015 Effluent Discharge Criteria Summary.

s) Robin Hood Bay Regional Waste Management Facility

Current COA

Approval #: WMS-2014-02-002
Issue date: February 28, 2014
Expiration: February 28, 2019

The Robin Hood Bay Regional Waste Management Facility has one discharge location at SW4. In 2015, there were a total of two samples collected with no reported exceedances.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 31: Robin Hood Bay Regional Waste Management Facility 2015 Effluent Discharge Criteria Summary.

t) Vale Newfoundland and Labrador Ltd (Argentia Hydrometallurgical Demonstration Plant)

Current COA

Approval #: AA14-055592
Issue date: May 1, 2014
Expiration: April 30, 2016

Vale Newfoundland and Labrador Ltd Argentia Hydrometallurgical Demonstration Plant has one discharge point at the Polishing Pond. In 2015, there was discharge

from the Polishing Pond in April and June with two samples collected and no reported exceedances. There were two rainbow trout ALTs performed at this location with no failures.

Environmental Effects Monitoring
There is no EEM program at this site.

See Table 32: Vale Newfoundland and Labrador Ltd (Argentia) 2015 Effluent Discharge Criteria Summary.

u) Vale Newfoundland and Labrador Ltd (Long Harbour Hydrometallurgical Plant)

Current COA

Approval #: AA13-125573
Issue date: December 18, 2013
Amendment: July 27, 2015
Expiration: December 18, 2018

Vale Newfoundland and Labrador Ltd Long Harbour Hydrometallurgical Plant had eight active discharge points in 2015 (D2, D3, D5, D11, D13, D18, D20 and D25). The effluent monitoring program consists of numerous parameters, most of which have regulatory compliance limits. Samples are collected only when there is discharge.

It should be noted that the Vale Newfoundland and Labrador Ltd Long Harbour Hydrometallurgical Plant became subject to the MMER in May 2015. As this industry was not subject to MMER at the beginning of 2015, Table 33 represents Schedule A of the ECWSR. Schedule C of the ECWSR was used for compliance determination after the industry was subject to MMER.

D2: A total of 29 samples were taken at this location. There were six TSS exceedances reported.

D3: A total of 24 samples were taken at this location. There were eight TSS exceedances reported.

D5: A total of 13 samples were taken at this location. There were two TSS exceedances reported.

D11: There was one sample taken at this location. There was one TSS exceedance and one iron exceedance reported.

D13: There was one sample taken at this location, with no exceedances reported.

D18: There were two samples taken at this location, with no exceedances reported.

D20: There were two samples taken at this location, with no exceedances reported.

D25: There were 12 samples were taken at this location, with no exceedances reported.

Environmental Effects Monitoring
There were no EEM activities at this site in 2015.

See Table 33: Vale Newfoundland and Labrador Ltd (Long Harbour) 2015 Effluent Discharge Criteria Summary.

Table 15: Atlantic Minerals Ltd (Lower Cove) 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Duck Pond (DL-HC Quarry)	Jul	Total
Samples	1	1
pH, Maximum	8.28	8.28
pH, Minimum		
pH, Exceedance (<5.5, >9.0)	0	0
As, Maximum	<0.001	<0.001
As, Exceedance (>1)	0	0
Cu, Maximum	<0.002	<0.002
Cu, Exceedance (> 0.6)	0	0
Pb, Maximum	0.003	0.003
Pb, Exceedance (>0.4)	0	0
Ni, Maximum	<0.002	<0.002
Ni, Exceedance (>1)	0	0
Zn, Maximum	0.025	0.025
Zn, Exceedance (>1)	0	0
TSS, Maximum	2.6	2.6
TSS, Exceedance (>30)	0	0
Ammonia, Maximum	0.28	0.28
Fe, Maximum	0.086	0.086
Nitrate, Maximum	0.18	0.18
TDS, Maximum	140	140

DL Quarry 2	Jul	Aug	Dec	Total
Samples	1	1	1	3
pH, Maximum	7.64	7.74	7.32	7.74
pH, Minimum				
pH, Exceedance (<5.5, >9.0)	0	0	0	0
As, Maximum	<0.001	<0.001		<0.001
As, Exceedance (>1)	0	0		0
Cu, Maximum	<0.002	<0.002		<0.002
Cu, Exceedance (> 0.6)	0	0		0
Pb, Maximum	0.0019	0.0015		0.0019
Pb, Exceedance (>0.4)	0	0		0
Ni, Maximum	<0.002	<0.002		<0.002
Ni, Exceedance (>1)	0	0		0
Zn, Maximum	0.038	<0.005		0.038
Zn, Exceedance (>1)	0	0		0
TSS, Maximum	36	110	57	110
TSS, Exceedance (>30)	1	1	1	3
Ammonia, Maximum	0.35	0.87		0.87
Fe, Maximum	<0.05	<0.05		<0.05
Nitrate, Maximum	3.5	5.8		5.8
TDS, Maximum	180	220		220

Table 15 Continued: Atlantic Minerals Ltd (Lower Cove) 2015 Effluent Discharge Criteria Summary
(mg/L, unless noted)

Highcal-Trench	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	1	1	1	1	1	1	1	1	8
pH, Maximum	8.03	8.00	8.16	8.07	8.12	8.15	8.05	7.86	8.16
pH, Minimum									
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0
As, Maximum		<0.001	<0.001	<0.001	<0.001				<0.001
As, Exceedance (>1)		0	0	0	0				0
Cu, Maximum		<0.002	<0.002	<0.002	<0.002				<0.002
Cu, Exceedance (> 0.6)		0	0	0	0				0
Pb, Maximum		<0.0005	0.0005	<0.0005	0.00052				0.0005
Pb, Exceedance (>0.4)		0	0	0	0				0
Ni, Maximum		<0.002	0.0021	<0.002	<0.002				0.0021
Ni, Exceedance (>1)		0	0	0	0				0
Zn, Maximum		0.0091	0.018	0.021	0.016				0.021
Zn, Exceedance (>1)		0	0	0	0				0
TSS, Maximum		1.6	7.6	1.6	1.2	1.4	160	12	160
TSS, Exceedance (>30)		0	0	0	0	0	1	0	1
Ammonia, Maximum		<0.050	0.13	0.13	0.52				0.52
Fe, Maximum		<0.05	0.18	<0.05	<0.05				0.18
Nitrate, Maximum		3.5	5.1	5.7	7.9				7.9
TDS, Maximum		210	190	230	260				260

Table 16: Atlantic Minerals Ltd (North Star Cement) 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Series 1	May	Jun	Aug	Oct	Nov	Total
Samples	1	1	1	1	1	5
pH, Maximum	8.92	8.26	8.77	8.29	8.19	8.92
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0

Shale Quarry	May	Jun	Aug	Oct	Nov	Total
Samples	1	1	1	1	1	5
pH, Maximum	8.09	7.87	7.85	7.9	7.97	8.09
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0
TSS, Maximum	<1.0	10	<2.0	<2.0	7.5	10
TSS, Exceedance (>30)	0	0	0	0	0	0
TDS, Maximum	850	740	1000	1300	490	1300
TDS, Exceedance (>1000)	0	0	0	1	0	1
Ca, Maximum	100	79	120	140	64	140
Mg, Maximum	14	11	18	21	10	21
Hardness, Maximum	310	240	360	430	200	430

Table 17: Barite Mud Services Inc. 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

TP1	Oct	Nov	Total
Samples	5	1	6
pH, Maximum (units)	7.71	7.46	7.46
pH, Minimum (units)	7.25		7.25
pH, Exceedance (<5.5, >9.0)	0	0	0
As, Maximum	0.019	0.0061	0.019
As, Exceedance (>0.5)	0	0	0
Ba, Maximum	4.5	2.9	4.5
Ba, Exceedance (>5.0)	0	0	0
B, Maximum	<0.05	<0.05	<0.05
B, Exceedance (>5.0)	0	0	0
Cd, Maximum (ug/L)	6.9	3.8	6.9
Cd, Exceedance(>0.05)	0	0	0
Cr, Maximum	0.012	0.0045	0.012
Cr, Exceedance (>1.0 Cr(III) Limit)	0	0	0
Cu, Maximum	0.17	0.045	0.17
Cu, Exceedance (>0.3)	0	0	0
Fe, Maximum	2.7	1.2	2.7
Fe, Exceedance (>10)	0	0	0
Pb, Maximum	1.4	0.35	1.4
Pb, Exceedance(>0.2)	5	1	6

TP1	Oct	Nov	Total
Hg, Maximum (ug/L)	<0.013	0.025	0.025
Hg, Exceedance (>0.005)	0	0	0
Ni, Maximum	0.0041	0.0028	0.0041
Ni, Exceedance (>0.5)	0	0	0
Zn, Maximum	2.9	1.4	2.9
Zn, Exceedance (>0.5)	5	1	6
Se, Maximum	<0.001	<0.001	<0.001
Se, Exceedance (>0.01)	0	0	0
Ag, Maximum	0.0017	0.001	0.0017
Ag, Exceedance (>0.05)	0	0	0
TDS, Maximum	82	110	110
TDS, Exceedance (>1000)	0	0	0
TSS, Maximum	76	22	76
TSS, Exceedance (>30)	5	0	5
Ammonia, Maximum	0.1	<0.050	0.1
Ammonia, Exceedance (>2.0)	0	0	0
Phenol, Maximum	0.0011	<0.0010	0.0011
Phenol, Exceedance (>0.1)	0	0	0
Cyanide, Maximum	0.0022	0.0045	0.0045
Cyanide, Exceedance (>0.025)	0	0	0

Table 18: Buchans 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

TP1 (Site 1)	Jun	Oct	Total
Samples	1	1	2
pH, Maximum (Units)	7.5	7.34	7.5
pH, Minimum (Units)			
pH, Exceedance (<5.5, >9.0)	0	0	0
As, Maximum	0.002	0.008	0.008
As, Exceedance (>0.5)	0	0	0
Cu, Maximum	0.026	0.039	0.039
Cu, Exceedance (>0.3)	0	0	0
Pb, Maximum	0.297	0.565	0.565
Pb, Exceedance (>0.2)	1	1	2
Ni, Maximum	<0.005	<0.005	<0.005
Ni, Exceedance (>0.5)	0	0	0
Zn, Maximum	1.4	2.9	2.9
Zn, Exceedance (>0.5)	1	1	2
TSS, Maximum	13	49	49
TSS, Exceedance (>30)	0	1	1
Ammonia, Maximum	<0.05	<0.025	<0.05
Ammonia, Exceedance (>2)	0	0	0
Cd, Maximum (ug/L)	4.2	4	4.2
Cd, Exceedance (>0.05)	0	0	0
Fe, Maximum	0.93	1.34	1.34
Fe, Exceedance (>10)	0	0	0
Hg, Maximum (ug/L)	<0.1	<0.1	<0.1
Hg, Exceedance (>0.005)	0	0	0
Nitrate, Maximum	<0.10	<0.10	<0.10
Nitrate, Exceedance (>10)	0	0	0

TP2 (Site 2)	Jun.	Oct.	Total
Samples	1	1	2
pH, Maximum (Units)	7.41	7.25	7.41
pH, Minimum (Units)			
pH, Exceedance (<5.5, >9.0)	0	0	0
As, Maximum	<0.001	<0.001	<0.001
As, Exceedance (>0.5)	0	0	0
Cu, Maximum	0.009	0.008	0.009
Cu, Exceedance (>0.3)	0	0	0
Pb, Maximum	0.047	0.028	0.047
Pb, Exceedance (>0.2)	0	0	0
Ni, Maximum	<0.005	<0.005	<0.005
Ni, Exceedance (>0.5)	0	0	0
Zn, Maximum	0.54	0.44	0.54
Zn, Exceedance (>0.5)	1	0	1
TSS, Maximum	<5	<2	<5
TSS, Exceedance (>30)	0	0	0
Ammonia, Maximum	<0.05	<0.025	<0.05
Ammonia, Exceedance (>2)	0	0	0
Cd, Maximum	1.8	1.7	1.8
Cd, Exceedance (>0.05)	0	0	0
Fe, Maximum	0.34	0.08	0.34
Fe, Exceedance (>10)	0	0	0
Hg, Maximum (ug/L)	<0.1	<0.1	<0.1
Hg, Exceedance (>0.005)	0	0	0
Nitrate, Maximum	<0.10	<0.10	<0.10
Nitrate, Exceedance (>10)	0	0	0

Table 18 Continued: Buchans 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Mucky Ditch (Site 12)	Jun.	Oct.	Total
Samples	1	1	2
pH, Maximum (Units)	6.8	7.1	7.1
pH, Minimum (Units)			
pH, Exceedance (<5.5, >9.0)	0	0	0
As, Maximum	0.002	0.001	0.002
As, Exceedance (>0.5)	0	0	0
Cu, Maximum	1.3	0.631	1.3
Cu, Exceedance (>0.3)	1	1	2
Pb, Maximum	0.736	0.333	0.736
Pb, Exceedance (>0.2)	1	1	2
Ni, Maximum	0.01	0.008	0.01
Ni, Exceedance (>0.5)	0	0	0
Zn, Maximum	45	33	45
Zn, Exceedance (>0.5)	1	1	2
TSS, Maximum	20	8	20
TSS, Exceedance (>30)	0	0	0
Ammonia, Maximum	0.06	<0.025	0.06
Ammonia, Exceedance (>2)	0	0	0
Cd, Maximum	162	107	162
Cd, Exceedance (>0.05)	1	1	2
Fe, Maximum	0.18	0.12	0.18
Fe, Exceedance (>10)	0	0	0
Hg, Maximum	<0.1	<0.1	<0.1
Hg, Exceedance (>0.005)	0	0	0
Nitrate, Maximum	0.4	0.22	0.4
Nitrate, Exceedance (>10)	0	0	0

Polishing Pond (Site 17)	Jun.	Oct.	Total
Samples	1	1	2
pH, Maximum (Units)	7.56	7.91	7.91
pH, Minimum (Units)			
pH, Exceedance (<5.5, >9.0)	0	0	0
As, Maximum	<0.001	<0.001	<0.001
As, Exceedance (>0.5)	0	0	0
Cu, Maximum	0.002	0.002	0.002
Cu, Exceedance (>0.3)	0	0	0
Pb, Maximum	<0.001	<0.001	<0.001
Pb, Exceedance (>0.2)	0	0	0
Ni, Maximum	<0.005	<0.005	<0.005
Ni, Exceedance (>0.5)	0	0	0
Zn, Maximum	1.3	1.2	1.3
Zn, Exceedance (>0.5)	1	1	2
TSS, Maximum	<7	<2	<7
TSS, Exceedance (>30)	0	0	0
Ammonia, Maximum	<0.05	<0.025	<0.05
Ammonia, Exceedance (>2)	0	0	0
Cd, Maximum	1.6	1.5	1.6
Cd, Exceedance (>0.05)	0	0	0
Fe, Maximum	0.47	0.39	0.47
Fe, Exceedance (>10)	0	0	0
Hg, Maximum	<0.1	<0.1	<0.1
Hg, Exceedance (>0.005)	0	0	0
Nitrate, Maximum	<0.10	<0.10	<0.10
Nitrate, Exceedance (>10)	0	0	0

Table 19: Carino Processing Ltd 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Effluent	Jan	Feb	Mar	Apr	May	Jun	Jul	Sept	Oct	Nov	Total
Samples	4	1	4	7	5	3	3	6	4	4	41
pH, Maximum (units)	11.4	6.69	8.93	9.54	8.05	11.10	8.65	9.96	10.30	9.86	11.4
pH, Minimum (units)	6.86		6.56	6.74	7.32	7.06	7.56	8.18	8.74	7.12	6.56
pH, Exceedance (<5.5, >9.0)	1	0	0	3	0	1	0	2	3	1	11
As, Maximum	<0.001			0.0045	<0.001		<0.001	<0.001	<0.001	<0.001	0.0045
As, Exceedance (>0.5)	0			0	0		0	0	0	0	0
Ba, Maximum	0.006			0.006	0.0044		0.01	0.0054	0.0052	0.012	0.012
Ba, Exceedance (>0.5)	0			0	0		0	0	0	0	0
B, Maximum	<0.05			<0.05	<0.5		<0.05	<0.05	<0.05	<0.05	<0.5
B, Exceedance (>5.0)	0			0	0		0	0	0	0	0
Cd, Maximum (ug/L)	0.089			0.042	0.26		0.085	0.096	0.051	0.23	0.26
Cd, Exceedance(0.05)	0			0	0		0	0	0	0	0
Cr, Maximum	0.0054	0.0047	0.11	0.035	0.022		0.013	0.078	0.037	0.0025	0.11
Cr, Exceedance (>1.0 Cr(III) Limit)	0	0	0	0	0		0	0	0	0	0
Cr (III), Maximum	0.005	0.005	0.11								0.11
Cr (III)Exceedance (>1.0)	0	0	0								0
Cr (VI), Maximum	0.0017	<0.0005	0.0046								0.0046
Cr (VI)Exceedance (>0.05)	0	0	0								0
Cu, Maximum	0.095			0.06	0.069		0.0029	0.035	0.048	0.1	0.1
Cu, Exceedance (>0.3)	0			0	0		0	0	0	0	0
Fe, Maximum	1.5		3.2	31	5.5	22	6.8	6.4	3.5	8.7	31
Fe, Exceedance (>10)	0		0	2	0	1	0	0	0	0	3
Pb, Maximum	0.0035			0.0029	0.0086		0.0024	0.0074	0.0035	0.006	0.0086
Pb, Exceedance(>0.2)	0			0	0		0	0	0	0	0
Hg, Maximum (ug/L)	<0.013			0.02	0.04		0.025	<0.013	<0.013	<0.013	0.04
Hg, Exceedance (>0.005)	0			0	0		0	0	0	0	0
Ni, Maximum	0.028			0.1	0.024		0.064	0.032	0.03	0.029	0.1
Ni, Exceedance (>0.5)	0			0	0		0	0	0	0	0

Table 19 Continued: Carino Processing Ltd 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Effluent	Jan	Feb	Mar	Apr	May	Jun	Jul	Sept	Oct	Nov	Total
Zn, Maximum	0.038			0.06	0.13		0.032	0.031	0.045	0.19	0.19
Zn, Exceedance (>0.5)	0			0	0		0	0	0	0	0
Se, Maximum	<0.001			0.0083	0.0023		0.0011	<0.001	0.0014	0.0016	0.0083
Se, Exceedance (>0.5)	0			0	0		0	0	0	0	0
Ag, Maximum	<0.0001			<0.0001	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ag, Exceedance (>0.05)	0			0	0		0	0	0	0	0
TDS, Maximum	4200			3500	4400		8600	4900	6700	10000	10000
TDS, Exceedance (>1000)	1			2	1		1	2	1	1	9
TSS, Maximum	<10	9	13	180	51	41	28	30	22	20	180
TSS, Exceedance (>30)	0	0	0	2	1	2	0	0	0	0	5
BOD, Maximum	130	140	460	870	1200	550	570	140	250	380	1200
BOD, Exceedance (>20)	3	1	3	4	4	3	2	4	3	2	29
Ammonia, Maximum	3.2	1.1	4.4	26	110	44	41	5.5	6.2	2.7	110
Ammonia, Exceedance (>2.0)	1	0	3	4	5	3	3	6	3	2	30
Sulfide, Maximum	<0.020			0.028	<0.020		0.16	0.022	<0.020	<0.020	0.16
Sulfide, Exceedance (>0.5)	0			0	0		0	0	0	0	0
Oil & Grease, Maximum	9.6	1.1	9.7	21	43	34	9.9	22	26	32	43
Oil & Grease, Exceedance (>15)	0	0	0	1	2	3	0	1	1	1	9
Phenol, Maximum	0.18	0.11	0.61	0.59	1.2	0.32	0.43	0.25	0.24	0.52	1.2
Phenol, Exceedance (>0.1)	2	1	4	2	5	2	3	6	4	3	32
Cyanide, Maximum	<0.001			0.0043	0.0049		0.0042	0.0029	<0.0010	0.0021	0.0049
Cyanide, Exceedance (>0.025)	0			0	0		0	0	0	0	0

Table 20: Central Regional Waste Management Facility 2015 Discharge Criteria Summary (mg/L, unless noted)

SW-9	Jan	Feb	Mar	Apr	May	Jun	Aug	Oct	Nov	Dec	Total
Samples	1	1	1	1	2	1	1	1	1	2	12
pH, Maximum (units)	7.86	7.96	7.88	7.98	7.86	8.09			8.37	8.27	8.37
pH, Minimum (units)											
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0			0	0	0
Fe, Maximum		4.6	11	7.7	3.3	1.2			1.7	1.3	11
Fe, Exceedance (>10)		0	1	0	0	0			0	0	1
TSS, Maximum	2	14	60	23	40	19	14	42	23	8	60
TSS, Exceedance (>30)	0	0	1	0	1	0	0	1	0	0	3
BOD, Maximum	<5.0	12	170	110	19	9.2			8.2	3.1	170
BOD, Exceedance (>20)	0	0	1	1	0	0			0	0	2
Oil & Grease, Maximum					<0.10		<0.10	<0.12		<0.10	<0.12
Oil & Grease, Exceedance (>15)					0		0	0		0	0
Nitrate, Maximum	0.88	<0.050	<0.050	0.25	0.12	0.26			6.4	16	16
Nitrate, Exceedance (>10)	0	0	0	0	0	0			0	1	1
Phosphorus, Maximum	0.041	0.27	0.54	0.34	0.36	0.3			0.29	0.15	0.54
Phosphorus, Exceedance (>1.0)	0	0	0	0	0	0			0	0	0

Table 21: Country Ribbon Inc. 2015 Discharge Criteria Summary (mg/L, unless noted)

Treated Wastewater	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	3	4	4	4	4	4	5	4	5	5	4	5	51
pH, Maximum (units)	6.58	6.52	6.52	7.35	6.69	6.22	6.42	6.30	6.34	6.70	6.60	6.38	7.35
pH, Minimum (units)	6.15	6.18	6.16	6.32	6.24	6.10	6.10	6.07	6.07	5.96	6.13	5.94	5.94
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
B, Maximum										<0.05			<0.05
B, Exceedance (>5.0)										0			0
Cd, Maximum (ug/L)										0.015			0.015
Cd, Exceedance(>0.05)										0			0
Cr, Maximum										<0.001			<0.001
Cr, Exceedance (>1.0 Cr(III) Limit)										0			0
Cu, Maximum										0.019			0.019
Cu, Exceedance (>0.3)										0			0
Fe, Maximum										0.29			0.29
Fe, Exceedance (>15)										0			0
Pb, Maximum										<0.0005			<0.0005
Pb, Exceedance (>0.2)										0			0
Ni, Maximum										<0.002			<0.002
Ni, Exceedance (>0.5)										0			0
Zn, Maximum										0.053			0.053
Zn, Exceedance (>0.5)										0			0
TSS, Maximum	340	200	250	290	280	380	340	370	330	280	390	340	390
TSS, Exceedance (>350)	0	0	0	0	0	1	0	1	0	0	3	0	5
BOD, Maximum	430	120	490	510	510	550	640	620	750	550	810	720	810
BOD, Exceedance (>300)	2	0	1	3	3	3	3	4	5	3	3	5	35
Oil & Grease, Maximum	69	46	170	160	130	120	170	100	280	130	210	180	280
Oil & Grease, Exceedance (>100)	0	0	1	2	1	1	2	0	4	1	2	2	16
TDS, Maximum	420	300	370	400	350	370	430	450	420	360	420	410	450

Table 22: Crosbie Industrial Services Ltd. 2015 Discharge Criteria Summary (mg/L, unless noted)

Effluent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Samples	4	1	6	3	4	3	4	1	4	3	1	4	38
pH, Maximum (Units)				7.15	7.27	7.64	7.37	6.28	7.26	6.99	7.37	7.13	7.64
pH, Minimum (Units)				6.31	6.69	6.76	6.26		6.24	6.58		6.41	6.24
pH, Violations (<5.5, >9.0)				0	0	0	0	0	0	0	0	0	0
TSS, Maximum				28	13	9.2	21	14	23	52	3.2	39	52
TSS, Violations (>350)				0	0	0	0	0	0	0	0	0	0
B, Maximum				0.92	1.5	3.5	3.3	1.7	4.7	0.63	<0.5	1.4	4.7
B, Exceedance (>5.0)				0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)				0.15	<0.1	0.07	0.04	<0.10	0.19	0.1	<0.10	0.12	0.19
Cd, Exceedance (>0.05)				0	0	0	0	0	0	0	0	0	0
Cr, Maximum				<0.01	0.0013	0.011	0.0014	0.0017	<0.01	<0.01	<0.01	<0.01	0.011
Cr, Exceedance (>1.0 Cr(III) Limit)				0	0	0	0	0	0	0	0	0	0
Cu, Maximum				0.21	0.0045	<0.002	0.021	<0.002	<0.02	<0.02	<0.02	0.12	0.21
Cu, Exceedance (>0.3)				0	0	0	0	0	0	0	0	0	0
Fe, Maximum				1.6	0.19	1.3	1.2	1.2	0.83	0.64	<0.5	2.6	2.6
Fe, Exceedance (>15)				0	0	0	0	0	0	0	0	0	0
Pb, Maximum				<0.005	0.00058	<0.0005	0.00056	0.00077	<0.005	<0.005	<0.005	0.011	0.011
Pb, Exceedance(>0.2)				0	0	0	0	0	0	0	0	0	0
Hg, Maximum (ug/L)				0.023	0.7	0.18	<0.13	<0.013	<0.13	<0.13	<0.13	<0.13	0.70
Hg, Exceedance (>0.005)				0	0	0	0	0	0	0	0	0	0
Ni, Maximum				0.041	0.042	0.062	0.14	0.018	0.068	0.07	<0.02	0.039	0.14
Ni, Exceedance (>0.5)				0	0	0	0	0	0	0	0	0	0
Zn, Maximum				0.17	0.11	0.39	0.23	0.22	0.23	0.13	<0.05	0.5	0.5
Zn, Exceedance (>0.5)				0	0	0	0	0	0	0	0	0	0
TPH, Maximum	23	33	13	1.3	<0.10	2.5	4.5	12	1.5	3.5	<0.10	8.4	33
TPH, Exceedance (>100)	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 23: DJ Composites 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Effluent	Apr	May	Jun	Jul	Sep	Oct	Nov	Dec	Total
Samples	1	1	1	1	1	1	1	1	7
pH, Maximum (Units)	7.99	7.81	8.67	8.17	7.84	8.90	9	8.34	9.00
pH, Minimum (Units)									
pH, Violations (<5.5, >9.0)	0	0	0	0	0	0	0	0	0
BOD, Maximum	<5.0	15	14	5.1	<2.0	26	31	19	31
BOD, Violations (>300)	0	0	0	0	0	0	0	0	0
TSS, Maximum	20	<1.0	22	130	5.8	12	3.2	<1.0	130
TSS, Violations (>350)	0	0	0	0	0	0	0	0	0
B, Maximum	1.1	0.81	0.74	3.2	2.6	0.82	<0.5	0.55	3.2
B, Exceedance (>5.0)	0	0	0	0	0	0	0	0	0
Cd, Maximum	0.00018	0.0024	0.00064	0.0018	0.00088	0.00038	0.00026	0.0005	0.0024
Cd, Exceedance (>0.05)	0	0	0	0	0	0	0	0	0
Cr, Maximum	0.0027	0.520	0.089	0.1	0.046	0.053	0.11	0.082	0.520
Cr, Exceedance (>1.0 Cr(III) Limit)	0	0	0	0	0	0	0	0	0
Cr (III), Maximum	0.003	0.52	0.09	0.1	0.05	0.05	0.1	0.08	0.52
Cr (III) Exceedance (>1.0)	0	0	0	0	0	0	0	0	0
Cr (VI), Maximum	<0.0005	<0.0005	<0.0005	<0.005	<0.0005	<0.005	0.014	<0.0005	0.014
Cr (VI),Exceedance (>0.05)	0	0	0	0	0	0	0	0	0
Cu, Maximum	<0.002	0.021	0.085	0.05	0.28	<0.02	<0.02	0.038	0.28
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0
Fe, Maximum	<0.05	0.14	1.6	1.3	1.3	0.68	<0.5	<0.5	1.6
Fe, Exceedance (>15)	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.0071	0.0093	<0.05	0.024	0.012	<0.05	0.014	0.069	0.069
Pb, Exceedance(>0.2)	0	0	0	0	0	0	0	0	0

Table 23 Continued: DJ Composites 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Effluent	Apr	May	Jun	Jul	Sep	Oct	Nov	Dec	Total
Hg, Maximum (ug/L)	<1.3	<1.3	<1.3	<1.3	0.022	<0.13	<1.3	<0.013	<1.3
Hg, Exceedance (>0.005)	0	0	0	0	0	0	0	0	0
Ni, Maximum	<0.002	0.0032	<0.02	0.031	0.024	<0.02	<0.02	<0.02	0.031
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0
Zn, Maximum	0.08	0.2	0.34	0.46	0.29	0.43	0.064	0.37	0.46
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0
Orthophosphate, Maximum	0.27	0.4	0.37	1.8	1.9	1.4	1.3	2.1	2.1
Orthophosphate, Exceedance (>4.36)	0	0	0	0	0	0	0	0	0
Oil & Grease, Maximum	0.6	64	9.6	14	35	31	11	30	64
Oil & Grease, Exceedance (>100)	0	0	0	0	0	0	0	0	0
Phenol, Maximum	<0.10	0.39	<0.10	0.24	0.21	0.24	<0.10	0.12	0.39
Phenol, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0
Cyanide, Maximum	0.0032	0.056	0.1	0.1	0.11	0.04	0.11	0.015	0.11
Cyanide, Exceedance (>2.0)	0	0	0	0	0	0	0	0	0
As, Maximum	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ba, Maximum	0.0026	0.01	<0.01	<0.01	<0.01	0.014	<0.01	<0.01	0.014
Se, Maximum	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ag, Maximum	0.00052	0.0022	0.0023	0.01	0.0042	0.0075	0.0017	0.017	0.017

Table 24: Gullbridge Mine Site 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Below Berm	May	Jun	Sept	Total
Samples	1	1	1	3
pH, Maximum (units)		6.32	6.07	6.32
pH, Minimum (units)	4.53			4.53
pH, Exceedance (<5.5, >9.0)	1	0	0	1
As, Maximum	<0.002	<0.002	<0.002	<0.002
As, Exceedance (>0.5)	0	0	0	0
Ba, Maximum	0.018	0.047	0.037	0.047
Ba, Exceedance (>0.5)	0	0	0	0
B, Maximum	<0.005	<0.005	0.005	0.005
B, Exceedance (>5.0)	0	0	0	0
Cd, Maximum (ug/L)	0.233	0.704	0.737	0.737
Cd, Exceedance(>0.05)	0	0	0	0
Cr, Maximum	<0.001	0.001	<0.001	0.001
Cr, Exceedance (>1.0 Cr(III) Limit)	0	0	0	0
Cu, Maximum	0.526	0.8	0.902	0.902
Cu, Exceedance (>0.3)	1	1	1	3

Below Berm	May	Jun	Sept	Total
Fe, Maximum	0.88	0.135	0.115	0.88
Fe, Exceedance (>10)	0	0	0	0
Pb, Maximum	<0.0005	<0.0005	<0.0005	<0.0005
Pb, Exceedance (>0.2)	0	0	0	0
Ni, Maximum	0.042	0.094	0.175	0.175
Ni, Exceedance (>0.5)	0	0	0	0
Zn, Maximum	0.038	0.062	0.124	0.124
Zn, Exceedance (>0.5)	0	0	0	0
Se, Maximum	<0.001	<0.001	<0.001	<0.001
Se, Exceedance (>0.5)	0	0	0	0
Ag, Maximum	<0.0001	<0.0001	<0.0001	<0.0001
Ag, Exceedance (>0.05)	0	0	0	0
TDS, Maximum	88	362	298	362
TDS, Exceedance (>1000)	0	0	0	0
TSS, Maximum	<5	6	12	12
TSS, Exceedance (>30)	0	0	0	0

Table 25: Hope Brook Mine Site 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Inlet to Boat Hole Brook	Sept	Total
Samples	1	1
pH, Maximum (units)	7.3	7.3
pH, Minimum (units)		
pH, Exceedance (<5.5, >9.0)	0	0
TSS, Maximum	<5	<5
TSS, Exceedance (>30)	0	0
Ba, Maximum	0.011	0.011
Ba, Exceedance (>0.5)	0	0
B, Maximum	0.009	0.009
B, Exceedance (>5.0)	0	0
Cd, Maximum (ug/L)	0.03	0.03
Cd, Exceedance (50 ug/L)	0	0
Cr, Maximum	<0.001	<0.001
Cr, Exceedance (>1.0)	0	0
Cu, Maximum	0.009	0.009
Cu, Exceedance (>0.3)	0	0
Fe, Maximum	0.279	0.279
Fe, Exceedance (>10.0)	0	0
Pb, Maximum	<0.0005	<0.0005
Pb, Exceedance(>0.2)	0	0
Ni, Maximum	<0.002	<0.002
Ni, Exceedance (>0.5)	0	0
Zn, Maximum	<0.005	<0.005
Zn, Exceedance (>0.5)	0	0

Open Pit Spillway	Sept	Total
Samples	1	1
pH, Maximum (units)	7.72	7.72
pH, Minimum (units)		
pH, Exceedance (<5.5, >9.0)	0	0
TSS, Maximum	7	7
TSS, Exceedance (>30)	0	0
Ba, Maximum	0.014	0.014
Ba, Exceedance (>0.5)	0	0
B, Maximum	0.01	0.01
B, Exceedance (>5.0)	0	0
Cd, Maximum (ug/L)	0.073	0.073
Cd, Exceedance (>50 ug/L)	0	0
Cr, Maximum	<0.001	<0.001
Cr, Exceedance (>1.0)	0	0
Cu, Maximum	0.004	0.004
Cu, Exceedance (>0.3)	0	0
Fe, Maximum	1.81	1.81
Fe, Exceedance (>10.0)	0	0
Pb, Maximum	0.0007	0.0007
Pb, Exceedance (>0.2)	0	0
Ni, Maximum	0.004	0.004
Ni, Exceedance (>0.5)	0	0
Zn, Maximum	0.006	0.006
Zn, Exceedance (>0.5)	0	0

Polishing Pond	Sept	Total
Samples	1	1
pH, Maximum (units)	7.15	7.15
pH, Minimum (units)		
pH, Exceedance (<5.5, >9.0)	0	0
TSS, Maximum	<5	<5
TSS, Exceedance (>30)	0	0
Ba, Maximum	0.025	0.025
Ba, Exceedance (>0.5)	0	0
B, Maximum	0.014	0.014
B, Exceedance (>5.0)	0	0
Cd, Maximum (ug/L)	0.022	0.022
Cd, Exceedance (>50 ug/L)	0	0
Cr, Maximum	<0.001	<0.001
Cr, Exceedance (>1.0)	0	0
Cu, Maximum	0.014	0.014
Cu, Exceedance (>0.3)	0	0
Fe, Maximum	0.294	0.294
Fe, Exceedance (>10.0)	0	0
Pb, Maximum	<0.0005	<0.0005
Pb, Exceedance(>0.2)	0	0
Ni, Maximum	<0.002	<0.002
Ni, Exceedance (>0.5)	0	0
Zn, Maximum	<0.005	<0.005
Zn, Exceedance (>0.5)	0	0

Table 25 Continued: Hope Brook Mine Site 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Inlet to Boat Hole Brook	Sept	Total
Ag, Maximum	<0.0001	<0.0001
Ag, Exceedance (>0.05)	0	0
TDS, Maximum	6	6
TDS, Exceedance (>1000)	0	0
ALT, Pass (RT)	1	1
ALT, Fail (RT)	0	0

Open Pit Spillway	Sept	Total
Ag, Maximum	<0.0001	<0.0001
Ag, Exceedance (>0.05)	0	0
TDS, Maximum	848	848
TDS, Exceedance (>1000)	0	0
ALT, Pass (RT)	1	1
ALT, Fail (RT)	0	0

Polishing Pond	Sept	Total
Ag, Maximum	<0.0001	<0.0001
Ag, Exceedance (>0.05)	0	0
TDS, Maximum	<5	<5
TDS, Exceedance (>1000)	0	0
ALT, Pass (RT)	1	1
ALT, Fail (RT)	0	0

BH6	Sept	Total
Samples	1	1
pH, Maximum (units)	6.32	6.32
pH, Minimum (units)		
pH, Exceedance (<5.5, >9.0)	0	0
TSS, Maximum	6	6
TSS, Exceedance (>30)	0	0
Ba, Maximum	0.025	0.025
Ba, Exceedance (>0.5)	0	0
B, Maximum	0.019	0.019
B, Exceedance (>5.0)	0	0
Cd, Maximum (ug/L)	0.521	0.521
Cd, Exceedance (>50 ug/L)	0	0
Cr, Maximum	<0.001	<0.001
Cr, Exceedance (>1.0)	0	0
Cu, Maximum	0.235	0.235
Cu, Exceedance (>0.3)	0	0
Fe, Maximum	0.113	0.113
Fe, Exceedance (>10.0)	0	0

Banana Pond	Sept	Total
Samples	1	1
pH, Maximum (units)	7.28	7.28
pH, Minimum (units)		
pH, Exceedance (<5.5, >9.0)	0	0
TSS, Maximum	<5	<5
TSS, Exceedance (>30)	0	0
Ba, Maximum	0.019	0.019
Ba, Exceedance (>0.5)	0	0
B, Maximum	0.016	0.016
B, Exceedance (>5.0)	0	0
Cd, Maximum (ug/L)	0.066	0.066
Cd, Exceedance (>50 ug/L)	0	0
Cr, Maximum	<0.001	<0.001
Cr, Exceedance (>1.0 mg/L)	0	0
Cu, Maximum	0.019	0.019
Cu, Exceedance (>0.3)	0	0
Fe, Maximum	0.448	0.448
Fe, Exceedance (>10.0)	0	0

Pine Pond Outflow	Sept	Total
Samples	1	1
pH, Maximum (units)	6.96	6.96
pH, Minimum (units)		
pH, Exceedance (<5.5, >9.0)	0	0
TSS, Maximum	<5	<5
TSS, Exceedance (>30)	0	0
Ba, Maximum	0.023	0.023
Ba, Exceedance (>0.5)	0	0
B, Maximum	0.005	0.005
B, Exceedance (>5.0)	0	0
Cd, Maximum (ug/L)	<0.017	<0.017
Cd, Exceedance (>50 ug/L)	0	0
Cr, Maximum	0.001	0.001
Cr, Exceedance (>1.0)	0	0
Cu, Maximum	0.008	0.008
Cu, Exceedance (>0.3)	0	0
Fe, Maximum	0.229	0.229
Fe, Exceedance (>10.0)	0	0

Table 25 Continued: Hope Brook Mine Site 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

BH6	Sept	Total
Pb, Maximum	0.0012	0.0012
Pb, Exceedance(>0.2)	0	0
Ni, Maximum	0.006	0.006
Ni, Exceedance (>0.5)	0	0
Zn, Maximum	0.089	0.089
Zn, Exceedance (>0.5)	0	0
Ag, Maximum	<0.0001	<0.0001
Ag, Exceedance (>0.05)	0	0
TDS, Maximum	90	90
TDS, Exceedance (>1000)	0	0

Banana Pond	Sept	Total
Pb, Maximum	<0.0005	<0.0005
Pb, Exceedance (>0.2)	0	0
Ni, Maximum	<0.002	<0.002
Ni, Exceedance (>0.5)	0	0
Zn, Maximum	0.015	0.015
Zn, Exceedance (>0.5)	0	0
Ag, Maximum	<0.0001	<0.0001
Ag, Exceedance (>0.05)	0	0
TDS, Maximum	30	30
TDS, Exceedance (>1000)	0	0

Pine Pond Outflow	Sept	Total
Pb, Maximum	0.001	0.001
Pb, Exceedance(>0.2)	0	0
Ni, Maximum	<0.002	<0.002
Ni, Exceedance (>0.5)	0	0
Zn, Maximum	<0.005	<0.005
Zn, Exceedance (>0.5)	0	0
Ag, Maximum	<0.0001	<0.0001
Ag, Exceedance (>0.05)	0	0
TDS, Maximum	<5	<5
TDS, Exceedance (>1000)	0	0
ALT, Pass (RT)	1	1
ALT, Fail (RT)	0	0

Catch Basin	Sept	Total
Samples	1	1
pH, Maximum (units)	7.36	7.36
pH, Minimum (units)		
pH, Exceedance (<5.5, >9.0)	0	0
TSS, Maximum	<5	<5
TSS, Exceedance (>30)	0	0
Ba, Maximum	0.015	0.015
Ba, Exceedance (>0.5)	0	0
B, Maximum	0.006	0.006
B, Exceedance (>5.0)	0	0

Catch Basin	Sept	Total
Cd, Maximum (ug/L)	0.021	0.021
Cd, Exceedance (50 ug/L)	0	0
Cr, Maximum	<0.001	<0.001
Cr, Exceedance (>1.0)	0	0
Cu, Maximum	0.007	0.007
Cu, Exceedance (>0.3)	0	0
Fe, Maximum	0.325	0.325
Fe, Exceedance (>10.0)	0	0
Pb, Maximum	<0.0005	<0.0005
Pb, Exceedance(>0.2)	0	0

Catch Basin	Sept	Total
Ni, Maximum	<0.002	<0.002
Ni, Exceedance (>0.5)	0	0
Zn, Maximum	0.007	0.007
Zn, Exceedance (>0.5)	0	0
Ag, Maximum	<0.0001	<0.0001
Ag, Exceedance (>0.05)	0	0
TDS, Maximum	270	270
TDS, Exceedance (>1000)	0	0
ALT, Pass (RT)	1	1
ALT, Fail (RT)	0	0

Table 26: Husky Oil Operations Ltd-Atlantic Region 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Settling Pond 1 Weir	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples	4	4	3	4	5	5	3	4	4	4	4	5	49
pH, Maximum (Units)	7.81	7.70	7.61	7.66	7.67	7.59	7.52	7.58	7.61	7.6	7.56	7.58	7.81
pH, Minimum (Units)	7.45	7.44	7.54	7.50	7.51	7.54	7.48	7.48	7.53	7.48	7.46	7.47	7.44
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	0.0017	<0.01	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
As, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ba, Maximum	0.11	0.096	0.12	0.1	0.075	0.071	0.071	0.067	0.061	0.064	0.061	0.059	0.12
Ba, Exceedance (>5.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
B, Maximum	2.3	2.7	2.7	2.9	2.9	3	3.1	3.3	3.2	3.1	3.5	3.4	3.5
B, Exceedance (>5.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)	1.2	1.1	1.3	1.3	1.4	1.1	1.3	1.4	1.3	1.5	1.5	1.3	1.5
Cd, Exceedance(>0.05)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cr, Maximum	<0.001	<0.01	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cr, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cu, Maximum	0.012	0.027	0.03	0.035	0.026	0.027	0.023	0.024	0.023	<0.02	<0.02	<0.02	0.035
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0	0	0	0
Fe, Maximum	0.78	0.55	0.93	0.89	1	1.2	1.1	1.1	1.2	0.87	0.89	1	1.2
Fe, Exceedance (>10.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.00069	<0.005	0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Pb, Exceedance (>0.2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Hg, Maximum (ug/L)	0.018	<0.013		0.013	0.013	0.015	0.018	0.018		0.035	0.017	<0.013	0.035
Hg, Exceedance (>5 ug/L)	0	0		0	0	0	0	0		0	0	0	0

*Husky is pumping the graving dock area with perimeter wells. These wells are drawing salt water from the marine environment. As such, if the inflow TDS is subtracted from the final discharge TDS and the resulting TDS is considered to be attributed to Husky activity.

Table 26 Continued: Husky Oil Operations Ltd-Atlantic Region 2015 Effluent Discharge Criteria Summary
(mg/L, unless noted)

Settling Pond 1 Weir	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Ni, Maximum	<0.002	<0.02	<0.002	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn, Maximum	0.011	<0.05	0.016	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.016
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Se, Maximum	<0.001	<0.01	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Exceedance (>0.01)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ag, Maximum	0.00021	<0.001	0.00028	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Exceedance (>0.05)	0	0	0	0	0	0	0	0	0	0	0	0	0
TDS, Maximum	23000	25000	21000	27000	28000	27000	26000	26000	28000	26000	28000	29000	29000
TDS, Maximum attributed to operations*	2000	1000	1000	5000	0	0	0	0	0	0	0	1000	5000
Exceedance (>1000)	1	0	0	1	0	0	0	0	0	0	0	0	2
TSS, Maximum	54	57	38	4	5.4	13	5.6	13	3.4	5.2	3	2.4	57
TSS, Exceedance (>30)	1	2	1	0	0	0	0	0	0	0	0	0	4
Ammonia, Maximum	8.5	9	9.9	9	9.1	9.7	9.6	8.3	8.8	9	8.8	8.3	9.9
Exceedance (>2.0)	1	1	1	1	1	1	1	1	1	1	1	1	12
Sulfide, Maximum	<0.020	<0.020		<0.020	<0.020	<0.020	<0.020	<0.020		<0.020	<0.020	<0.020	<0.020
Exceedance (>0.5)	0	0		0	0	0	0	0		0	0	0	0
TPH, Maximum	<0.10	<0.10	<0.10							<0.10			<0.10
Exceedance (>15)	0	0	0							0			0
Phenol	<0.010	<0.010		<0.010	<0.010	<0.010	0.042	0.048	0.037	0.027	<0.010	0.014	0.048
Exceedance (>0.1)	0	0		0	0	0	0	0	0	0	0	0	0
Ra-226, Maximum	<0.010	0.013	0.014	0.017	<0.010	0.024	<0.010		<0.010	<0.010		<0.010	0.024
Ra-226, Exceedance (>0.37 Bq/l)	0	0	0	0	0	0	0		0	0		0	0
Nitrate, Maximum	0.072	0.063	0.15	0.12	0.14	0.13	0.14	0.17	0.15	0.23	0.17	0.28	0.28
Exceedance (10mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0

*Husky is pumping the graving dock area with perimeter wells. These wells are drawing salt water from the marine environment. As such, if the inflow TDS is subtracted from the final discharge TDS and the resulting TDS is considered to be attributed to Husky activity.

Table 26 Continued: Husky Oil Operations Ltd-Atlantic Region 2015 Effluent Discharge Criteria Summary
(mg/L, unless noted)

Settling Pond 2 Weir	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples	4	4	3	6	4	5	5	4	4	5	4	6	54
pH, Maximum (Units)	7.97	7.72	7.83	7.75	8.25	7.84	7.95	7.68	7.71	7.61	7.56	7.62	8.25
pH, Minimum (Units)	7.74	7.67	7.66	7.58	7.67	7.56	7.54	7.61	7.55	7.52	7.51	7.50	7.5
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	<0.001	<0.01	<0.001	<0.001	<0.01	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
As, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ba, Maximum	0.13	0.17	0.22	0.26	0.27	0.26	0.22	0.21	0.21	0.19	0.2	0.18	0.27
Ba, Exceedance (>5.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
B, Maximum	0.74	0.79	0.81	0.9	0.84	0.84	0.84	0.91	0.88	1	1	1	1
B, Exceedance (>5.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)	0.45	0.48	0.46	0.56	0.57	0.73	0.810	0.96	0.92	1	1.1	1.1	1.1
Cd, Exceedance(> 0.05)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cr, Maximum	<0.001	<0.01	0.0011	<0.001	<0.01	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cr, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cu, Maximum	0.026	<0.02	0.0021	0.0027	<0.02	0.0023	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.026
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0	0	0	0
Fe, Maximum	0.36	1.2	0.57	0.21	<0.5	0.11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2
Fe, Exceedance (>10.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.00052	<0.005	0.00066	0.00061	<0.005	<0.0005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Pb, Exceedance (>0.2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Hg, Maximum (ug/L)	<0.013	<0.013		0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	0.013
Hg, Exceedance (>5 ug/L)	0	0		0	0	0	0	0	0	0	0	0	0

Table 26 Continued: Husky Oil Operations Ltd-Atlantic Region 2015 Effluent Discharge Criteria Summary
(mg/L, unless noted)

Settling Pond 2 Weir	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Ni, Maximum	<0.002	<0.02	<0.002	<0.002	<0.02	<0.002	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn, Maximum	<0.005	<0.05	0.005	<0.005	<0.05	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Se, Maximum	<0.001	<0.01	<0.001	<0.001	<0.01	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001
Se, Exceedance (>0.01)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ag, Maximum	<0.0001	<0.001	0.0001	<0.0001	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0001
Ag, Exceedance (>0.05)	0	0	0	0	0	0	0	0	0	0	0	0	0
TDS, Maximum	7000	7800	8000	9000	9100	9400	9800	10000	10000	13000	13000	13000	13000
TDS, Maximum attributed to operations*	2100	3300	0	4400	100	2400	3100	2900	2200	4600	3000	3300	4600
Exceedance (>1000)	1	1	0	1	0	1	1	1	1	1	1	1	10
TSS, Maximum	81	61	11	96	12	4.4	6.4	6	5.6	3.6	3.2	3.2	96
TSS, Exceedance (>30)	1	2	0	1	0	0	0	0	0	0	0	0	4
Ammonia, Maximum	2.1	2.4	2.3	2.3	2.5	2.3	2.8	2.3	2.4	2.7	2.6	2.6	2.8
Ammonia, Exceedance (>2.0)	1	1	1	1	1	1	1	1	1	1	1	1	12
Sulfide, Maximum	<0.020	<0.020		<0.020	<0.020	0.039	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.039
Sulfide, Exceedance (>0.5)	0	0		0	0	0	0	0	0	0	0	0	0
TPH, Maximum	<0.10	<0.11	<0.10								<0.10		<0.11
TPH, Exceedance (>15)	0	0	0								0		0
Phenol, Maximum	<0.010	<0.0010		<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	<0.010	0.011
Phenol, Exceedance (>0.1)	0	0		0	0	0	0	0	0	0	0	0	0
Ra-226, Maximum	<0.010	<0.010		0.017	<0.010	<0.010	<0.010		<0.010	<0.010		<0.010	0.017
Ra-226, Exceedance (>0.37 Bq/l)	0	0		0	0	0	0		0	0		0	0
Nitrate, Maximum	0.085	0.24	0.21	0.21	0.18	0.16	0.16	0.19	0.22	0.32	0.33	0.23	0.33
Nitrate, Exceedance (>10.0)	0	0	0	0	0	0	0	0	0	0	0	0	0

*Husky is pumping the graving dock area with perimeter wells. These wells are drawing salt water from the marine environment. As such, if the inflow TDS is subtracted from the final discharge TDS and the resulting TDS is considered to be attributed to Husky activity.

Table 27: Labatt Breweries Newfoundland 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Effluent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Samples	3	2	3	4	4	4	5	4	4	4	4	5	46
pH Maximum (Units)	9.57	10.30	6.83	6.89	6.70	6.60	6.60	6.74	6.78	7.83	7.16	9.54	10.3
pH Minimum (Units)	5.77	7.56	6.50	5.82	4.90	5.38	5.24	5.32	6.14	4.94	6.00	5.25	4.9
pH Violations (<5.5, >9.0)	1	1	0	0	1	1	1	1	0	1	0	2	9
BOD Maximum	800	560	800	870	1900	1200	3100	700	830	3800	1700	1100	3800
BOD Violations (>300)	2	1	2	4	3	2	3	3	2	4	3	2	31
TSS, Maximum	740	380	250	660	800	640	2300	610	220	2100	840	550	2300
TSS Violations (>350)	3	1	0	3	2	2	3	1	0	3	2	2	22
B, Maximum			<0.05				<0.5						<0.5
B, Exceedance (>5.0)			0				0						0
Cd, Maximum (ug/L)			<0.10				0.16						0.16
Cd, Exceedance(>0.05)			0				0						0
Cr, Maximum			0.012				0.017						0.017
Cr, Exceedance (>1.0 Cr(III) Limit)			0				0						0
Cu, Maximum			0.12				0.150						0.15
Cu, Exceedance (>0.3)			0				0						0
Fe, Maximum			0.87				1.2						1.2
Fe, Exceedance (>15)			0				0						0
Pb, Maximum			0.0049				<0.005						<0.005
Pb, Exceedance(>0.2)			0				0						0
Hg, Maximum (ug/L)			0.033				0.027						0.033
Hg, Exceedance (>0.005)			0				0						0
Ni, Maximum			0.0057				<0.002						0.0057
Ni, Exceedance (>0.5)			0				0						0
Zn, Maximum			0.17				0.620						0.62
Zn, Exceedance (>0.5)			0				1						1
Phenol, Maximum			<0.010				0.13						0.13
Phenol, Exceedance (>0.5)			0				0						0

Table 27 Continued: Labatt Breweries Newfoundland 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Se, Maximum			<0.001				<0.01						<0.01
As, Maximum			<0.001				<0.01						<0.01
Ba, Maximum			0.019				0.021						0.021
Ag, Maximum			<0.0001				<0.001						<0.001
TDS, Maximum			710				1100						1100
Ammonia, Maximum			1				2.7						2.7
Sulfide, Maximum			<0.020				0.22						0.22

Table 28: Molson Coors Canada, St. John's 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Samples	4	4	5	4	4	5	4	3	5	4	4	4	50
pH Maximum (Units)	10.20	11.20	11.40	11.20	11.10	11.70	11.80	12.00	12.20	11.2	11.40	11.40	12.20
pH Minimum (Units)	5.40	5.69	5.25	6.88	5.77	6.30	6.41	6.6	6.76	6.31	7.91	6.20	5.25
pH Violations (<5.5, >9.0)	2	1	4	3	1	1	1	2	2	1	3	2	23
BOD Maximum	840	1100	7100	1500	1600	1700	1800	1400	1600	1600	1700	1500	7100
BOD Violations (>300)	4	4	4	4	4	5	4	3	4	3	4	4	47
TSS, Maximum	710	390	1200	1600	440	4900	2000	950	320	570	1800	720	4900
TSS Violations (>350l)	2	1	2	2	1	2	3	1	0	2	2	1	19
B, Maximum	<0.05			<0.05			<0.05			<0.05			<0.05
B, Exceedance (>5.0)	0			0			0			0			0
Cd, Maximum	0.11			0.17			0.44			0.024			0.44
Cd, Exceedance(>0.05)	0			0			0			0			0
Cr, Maximum	0.2			0.068			0.07			0.03			0.2
Cr, Exceedance (>1.0 Cr(III) Limit)	0			0			0			0			0
Cu, Maximum	0.035			0.069			0.150			0.038			0.15
Cu, Exceedance (>0.3)	0			0			0			0			0
Fe, Maximum	0.7			2.1			5.9			0.46			5.9
Fe, Exceedance (>15)	0			0			0			0			0
Pb, Maximum	0.0034			0.015			0.027			0.0058			0.027
Pb, Exceedance (>0.2)	0			0			0			0			0
Hg, Maximum (ug/L)	<0.013			0.03			<0.013			<0.013			0.03
Hg, Exceedance (>0.005)	0			0			0			0			0
Ni, Maximum	0.0032			0.011			0.036			0.0021			0.036
Ni, Exceedance (>0.5)	0			0			0			0			0
Zn, Maximum	0.34			0.34			1.6			0.11			1.6
Zn, Exceedance (>0.5)	0			0			0			0			0
Phenol, Maximum	0.038			0.12			0.23			0.11			0.23
Phenol, Exceedance (>0.5)	0			0			0			0			0

Table 28 Continued: Molson Coors Canada, St. John's 2015 Effluent Discharge Criteria Summary
(mg/L, unless noted)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
As, Maximum	<0.0010			<0.001			0.0015			<0.001			0.0015
Ba, Maximum	0.0087			0.038			0.23			0.0051			0.23
Se, Maximum	<0.001			<0.001			0.001			<0.001			0.001
Ag, Maximum	<0.0001			<0.0001			<0.0001			<0.0001			<0.0001
TDS, Maximum	610			900			770			410			900
Ammonia, Maximum	1.9			1.7			2.1			1.1			2.1
Sulfide, Maximum	0.08			0.035			0.045			0.035			0.08

Table 29: Newfoundland Transshipment Terminal 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Tank No. 1- Sump No. 1	Jan	Apr	Jul	Oct	Total
Samples	1	1	1	1	4
TSS, Maximum	3.4	<1.6	<1.6	<1.6	3.4
TSS, Exceedance (>30)	0	0	0	0	0
pH, Maximum (Units)	7.6	7.2	7.4	7.1	7.60
pH, Minimum (Units)					
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TPH, Maximum	5.7	6.2	7.3	5.7	7.30
TPH, Exceedance (>15)	0	0	0	0	0

Tank No. 2- Sump No. 2	Jan	Apr	Jul	Oct	Total
Samples	1	1	1	1	4
TSS, Maximum	<1.6	<1.6	<1.6	<1.6	<1.6
TSS, Exceedance (>30)	0	0	0	0	0
pH, Maximum (Units)	7.7	7.6	7.5	7.6	7.70
pH, Minimum (Units)					
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TPH, Maximum	6.6	8.9	9.5	7.3	9.50
TPH, Exceedance (>15)	0	0	0	0	0

Tank No. 3- Sump No. 3	Jan	Apr	Jul	Oct	Total
Samples	1	1	1	1	4
TSS, Maximum	<1.6	<1.6	<1.6	<1.6	<1.6
TSS, Exceedance (>30)	0	0	0	0	0
pH, Maximum (Units)	7.7	7.8	7.6	7.8	7.80
pH, Minimum (Units)					
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TPH, Maximum	6.9	7.1	8.8	7.9	8.80
TPH, Exceedance (>15)	0	0	0	0	0

Tank No. 4- Sump No. 4	Jan	Apr	Jul	Oct	Total
Samples	1	1	1	1	4
TSS, Maximum	<1.6	<1.6	<1.6	<1.6	<1.6
TSS, Exceedance (>30)	0	0	0	0	0
pH, Maximum (Units)	7.5	7.8	7.7	7.8	7.80
pH, Minimum (Units)					
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TPH, Maximum	8	1.1	9.4	5.8	9.40
TPH, Exceedance (>15)	0	0	0	0	0

Tank No. 5- Sump No. 5	Jan	Apr	Jul	Oct	Total
Samples	1	1	1	1	4
TSS, Maximum	<1.6	<1.6	<1.6	<1.6	<1.6
TSS, Exceedance (>30)	0	0	0	0	0
pH, Maximum (Units)	7.3	7.6	7.8	7.2	7.8
pH, Minimum (Units)					
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TPH, Maximum	8.6	7.3	7.6	10	10
TPH, Exceedance (>15)	0	0	0	0	0

Tank No. 6- Sump No. 6	Jan	Apr	Jul	Oct	Total
Samples	1	1	1	1	4
TSS, Maximum	<1.6	<1.6	<1.6	<1.6	<1.6
TSS, Exceedance (>30)	0	0	0	0	0
pH, Maximum (Units)	7.4	7.6	7.5	7.2	7.60
pH, Minimum (Units)					
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TPH, Maximum	6.4	5	3	6.1	6.4
TPH, Exceedance (>15)	0	0	0	0	0

Table 29 Continued: Newfoundland Transshipment Terminal 2015 Effluent Discharge Criteria Summary
(mg/L, unless noted)

Containment Pond	May	Nov	Total
Samples	1	1	2
TSS, Maximum	<1.6	<1.6	<1.6
TSS, Exceedance (>30)	0	0	0
pH, Maximum (Units)	8.5	6.2	8.50
pH, Minimum (Units)			
pH, Exceedance (<5.5, >9.0)	0	0	0
TPH, Maximum	9.2	5.1	9.2
TPH, Exceedance (>15)	0	0	0
ALT, Pass (RT)	1	1	2
ALT, Fail (RT)	0	0	0

Oily Water Separator	May	Nov	Total
Samples	1	1	2
TSS, Maximum	<1.6	<1.6	<1.6
TSS, Exceedance (>30)	0	0	0
pH, Maximum (Units)	6.8	6.5	6.80
pH, Minimum (Units)			
pH, Exceedance (<5.5, >9.0)	0	0	0
TPH, Maximum	9.7	8.7	9.7
TPH, Exceedance (>15)	0	0	0
TDS, Maximum	1632	1126	1632
TDS, Exceedance (>36000 mg/L)	0	0	0

Tank No. 7- Sump No. 7	Jan	Apr	Jul	Oct	Total
Samples	1	1	1	1	4
TSS, Maximum	<1.6	<1.6	<1.6	<1.6	<1.6
TSS, Exceedance (>30)	0	0	0	0	0
pH, Maximum (Units)	7.4	7.6	7.5	7.8	7.80
pH, Minimum (Units)					
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TPH, Maximum	8.6	7.6	3.2	3.7	8.6
TPH, Exceedance (>15)	0	0	0	0	0

Table 30: Pardy's Waste Management Facility – Incinerator Road 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

Effluent	Feb.	Mar.	Apr.	May	Jul.	Aug.	Sept.	Oct.	Dec.	Total
Samples	1	3	3	2	3	2	1	1	1	17
pH, Maximum (Units)	7.79	7.92	7.85	7.56	7.26	7.71	7.92	6.25	6.40	7.92
pH, Minimum (Units)		7.72	7.72	7.28	6.46	7.34				6.46
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0
As, Maximum	0.01	0.007	0.009	0.06	0.006	0.004		0.006		0.01
As, Exceedance (>0.5)	0	0	0	0	0	0		0		0
Ba, Maximum	0.059	0.026	0.031	0.032	0.054	0.048		0.041		0.059
Ba, Exceedance (>5.0)	0	0	0	0	0	0		0		0
B, Maximum	0.296	0.411	0.203	1.49	0.41	0.174		0.142		1.49
B, Exceedance (>5.0)	0	0	0	0	0	0		0		0
Cd, Maximum (ug/L)	0.101	0.092	0.164	0.162	0.151	<0.017		0.049		0.164
Cd, Exceedance (>50ug/L)	0	0	0	0	0	0		0		0
Cr, Maximum	0.002	0.002	0.002	0.006	0.001	<0.001		0.001		0.006
Cr, Exceedance (>1.0)	0	0	0	0	0	0		0		0
Cu, Maximum	0.024	0.234	0.029	0.016	0.024	0.014	0.010	0.021	0.019	0.234
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0
Fe, Maximum	1.36	5.37	0.779	0.902	1.18	1.8	2.02	0.627	0.53	5.37
Fe, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.002	<0.0005	0.0006	0.0005	0.0007	0.0008		<0.0005		0.002
Pb, Exceedance (>0.2)	0	0	0	0	0	0		0		0
Ni, Maximum	0.023	0.032	0.03	0.026	0.017	0.015		0.016		0.032
Ni, Exceedance (>0.5)	0	0	0	0	0	0		0		0
Se, Maximum	0.009	0.015	0.017	0.01	0.009	0.003		0.003		0.017
Se, Exceedance (>0.01)	0	1	1	0	0	0		0		2

Table 30 Continued: Pardy's Waste Management Facility – Incinerator Road 2015 Effluent Discharge Criteria Summary
(mg/L, unless noted)

Effluent	Feb.	Mar.	Apr.	May	Jul.	Aug.	Sept.	Oct.	Dec.	Total
Ag, Maximum	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001		<0.0001
Ag, Exceedance (>0.05)	0	0	0	0	0	0		0		0
Zn, Maximum	0.07	0.193	0.053	0.053	0.061	0.029	0.018	0.066	0.065	0.193
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0
TSS, Maximum	68	342	92	42	68	40	57	24	29	342
TSS, Exceedance (>30)	1	2	1	1	2	1	1	0	0	9
BOD, Maximum	39	257	36	161	47	144	127	3	28	257
BOD, Exceedance (>20)	1	2	1	2	2	1	1	0	1	11
Total Coliform, Maximum		33	23	140	230	>16000	>16000	4.9	3.3	>16000
Total Coliform, Exceedance (>50)		0	0	1	2	1	1	0	0	5
Fecal Coliform, Maximum		0.39	7.9	1.1	49	9200	790	<0.018	3.3	9200
Fecal Coliform, Maximum (>10)		0	0	0	1	1	1	0	0	3
Orthophosphate, Maximum	23.3	20.1	17.3	35.9	22	31.3	8.59	16.3	0.32	35.9
Orthophosphate, Maximum (>0.436)	1	3	3	2	3	2	1	1	0	16
TDS, Maximum	1890	3820	2360	1920	2050	1520	1720	1650	1590	3820
TDS, Exceedance (>1000)	1	3	3	2	3	2	1	1	1	17
Nitrate, Maximum	19.5	7.12	20.4	34.7	172	48	<0.05	11.5	4.15	172
Nitrate, Exceedance (>10)	1	0	2	2	3	2	0	1	0	11
TPH, Maximum	1.4	2.6	2.1	1.9	2.4	1.4	1.5	<1.0	4.9	4.9
TPH, Exceedance (>15)	0	0	0	0	0	0	0	0	0	0
Ammonia, Maximum	0.15	120	0.36	0.49	0.88	120	126	30	31.2	126
Ammonia, Exceedance (>2.0)	0	1	0	0	0	1	1	1	1	5
ALT, Pass (RT)		1								1
ALT, Fail (RT)		0								0

Table 31: Robin Hood Bay Regional Waste Management Facility 2015 Discharge Criteria Summary (mg/L unless noted)

	Jan	May	Total
SW4	1	1	2
pH Maximum (Units)	7.09	7.37	7.37
pH Minimum (Units)			
pH Violations (<5.5, >9.0)	0	0	0
BOD Maximum		150	150
BOD Violations (>300)		0	0
TSS, Maximum		24	24
TSS Violations (>350)		0	0
B, Maximum	0.8	0.67	0.8
B, Exceedance (>5.0)	0	0	0
Cd, Maximum (ug/L)	0.2	0.028	0.2
Cd, Exceedance(>0.05)	0	0	0
Cr, Maximum	0.0074	0.0059	0.0074
Cr, Exceedance (>1.0 Cr(III) Limit)	0	0	0
Cu, Maximum	0.0088	<0.002	0.0088
Cu, Exceedance (>0.3)	0	0	0
Fe, Maximum	13	9.1	13
Fe, Exceedance (>15)	0	0	0

	Jan	May	Total
SW4	1	1	2
Pb, Maximum	0.0032	0.00089	0.0032
Pb, Exceedance (>0.2)	0	0	0
Hg, Maximum (ug/L)	0.02	<0.013	0.02
Hg, Exceedance (>0.005)	0	0	0
Ni, Maximum	0.011	0.0079	0.011
Ni, Exceedance (>0.5)	0	0	0
Zn, Maximum	0.11	0.1	0.11
Zn, Exceedance (>0.5)	0	0	0
Phenol, Maximum	0.052	0.11	0.11
Phenol, Exceedance (>0.5)	0	0	0
As, Maximum	0.0027	0.0016	0.0027
Ba, Maximum	0.34	0.29	0.34
Se, Maximum	<0.001	<0.001	<0.001
Ag, Maximum	<0.0001	<0.0001	<0.0001
TDS, Maximum	980	880	980
Ammonia, Maximum	41	48	48
Sulfide, Maximum	0.026	<0.020	0.026

Table 32: Vale Newfoundland and Labrador Ltd (Argentia) 2015 Effluent Discharge Criteria Summary
(mg/L, unless noted)

Polish Pond Discharge	Apr	Jun	Total
Samples	1	1	2
pH, Maximum (Units)	7.14	7.72	7.72
pH, Minimum (Units)			
pH, Exceedance (<5.5, >9.0)	0	0	0
As, Maximum	<0.0002	<0.0002	<0.0002
As, Exceedance (>0.5)	0	0	0
Cd, Maximum (ug/L)	0.09	0.019	0.09
Cd, Exceedance (>0.05)	0	0	0
Cu, Maximum	0.00124	0.00563	0.00563
Cu, Exceedance (>0.3)	0	0	0
Fe, Maximum	0.04	0.044	0.044
Fe, Exceedance (> 10)	0	0	0
Pb, Maximum	0.00006	0.00008	0.00008
Pb, Exceedance (>0.2)	0	0	0
Hg, Maximum (ug/L)	<0.01	<0.01	<0.01
Hg, Exceedance (>0.005)	0	0	0

Polish Pond Discharge	Apr	Jun	Total
Ni, Maximum	0.303	0.191	0.303
Ni, Exceedance (>0.5)	0	0	0
Zn, Maximum	0.004	0.006	0.006
Zn, Exceedance (>0.5)	0	0	0
Ammonia, Maximum	<0.1	<0.1	<0.1
Ammonia, Exceedance (>2)	0	0	0
Nitrate, Maximum	0.06	<0.06	0.06
Nitrate, Exceedance (>10)	0	0	0
TDS, Maximum	447	529	529
TDS, Exceedance (>1000)	0	0	0
TPH, Maximum	<0.10	<0.10	<0.10
TPH, Exceedance (>15)	0	0	0
TSS, Maximum	<2	<2	<2
TSS, Exceedance (>30)	0	0	0
ALT, Pass (RT)	1	1	2
ALT, Fail (RT)	0	0	0

Table 33: Vale Newfoundland and Labrador Ltd (Long Harbour) 2015 Effluent Discharge Criteria Summary
(mg/L, unless noted)

D2	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	4	5	5	3	4	2	1	1	1	1	1	1	29
pH, Maximum (Units)	6.90	7.47	7.55	7.50	7.57	7.38	7.52	7.64	7.50	7.71	7.67	7.40	7.71
pH, Minimum (Units)													
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
As, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cu, Maximum	0.006	0.001	<0.001	0.001	0.001	0.001	0.008	0.001	0.001	<0.001	0.001	0.001	0.008
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.0035	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0035
Pb, Exceedance (>0.2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni, Maximum	0.002	0.003	<0.002	<0.002	0.068	0.120	0.076	0.059	0.07	0.043	0.038	0.057	0.12
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn, Maximum	0.037	0.014	0.01	0.008	0.013	0.018	0.02	0.017	0.019	0.008	0.014	0.022	0.037
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
TSS, Maximum	30	155	42	82	38	<5	<5	<5	<5	10	<5	<5	155
TSS, Exceedance (>30)	1	2	1	1	1	0	0	0	0	0	0	0	6
Ammonia, Maximum	<0.05	0.05	<0.05	0.09	<0.03	0.17	<0.03	<0.03	0.06	<0.03	<0.03	<0.03	0.17
Ammonia, Exceedance (>2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)	0.073	0.05	<0.017	0.022	0.074	0.166	0.131	0.128	0.146	0.096	0.079	0.157	0.166
Cd, Exceedance (>50 ug/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
Fe, Maximum	1.57	0.304	0.304	0.235	0.259	0.29	0.316	0.217	0.13	0.198	0.241	0.138	1.57
Fe, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0
Hg, Maximum (ug/L)	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026
Hg, Exceedance (>5 ug/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate, Maximum	<0.05	0.08	0.19	<0.05	0.11	0.15	0.11	<0.05	<0.05	0.07	0.08	0.1	0.19
Nitrate, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 33 Continued: Vale Newfoundland and Labrador Ltd (Long Harbour) 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

D3	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	3	3	2	3	4	2	1	2	1	1	1	1	24
pH, Maximum (Units)	6.71	7.12	7.53	7.28	7.42	7.25	7.29	7.45	7.39	7.70	7.63	7.55	7.70
pH, Minimum (Units)													
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
As, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cu, Maximum	0.005	0.003	0.002	0.003	0.002	0.003	0.007	0.003	0.003	0.003	0.003	0.002	0.007
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.0044	0.0037	0.0014	0.0024	0.0016	0.0018	0.0103	0.0015	0.0016	0.002	0.0017	0.0008	0.0103
Pb, Exceedance (>0.2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni, Maximum	<0.002	<0.002	<0.002	0.004	0.003	0.003	0.007	<0.002	0.004	0.008	<0.002	0.004	0.008
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn, Maximum	0.023	0.014	0.007	0.019	<0.005	0.007	0.018	0.01	0.011	0.006	0.007	0.014	0.023
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
TSS, Maximum	32	97	32	135	33	8	77	<5	<5	14	<5	<5	135
TSS, Exceedance (>30)	1	2	1	2	1	0	1	0	0	0	0	0	8
Ammonia, Maximum	<0.05	0.09	0.09	0.07	<0.03	0.05	<0.03	<0.03	0.03	<0.03	0.12	0.05	0.12
Ammonia, Exceedance (>2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)	0.078	0.068	0.031	0.039	0.028	0.034	0.092	<0.017	0.045	0.045	0.034	0.04	0.092
Cd, Exceedance (>50 ug/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
Fe, Maximum	1.45	0.901	1.34	0.937	1.04	1.09	1.73	1.09	1.79	1.91	1.63	1.93	1.93
Fe, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0
Hg, Maximum (ug/L)	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026
Hg, Exceedance (>5 ug/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate, Maximum	0.34	0.07	0.11	0.09	0.14	0.12	0.06	0.07	<0.05	<0.05	0.07	0.07	0.34
Nitrate, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 33 Continued: Vale Newfoundland and Labrador Ltd (Long Harbour) 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

D5	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	1	1	1	1	1	1	1	2	1	1	1	1	13
pH, Maximum (Units)	6.72	6.67	6.51	6.91	6.78	7.09	7.11	7.21	7.19	7.35	7.08	7.11	7.35
pH, Minimum (Units)													
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
As, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cu, Maximum	0.016	0.003	<0.001	0.002	0.002	0.01	0.009	0.002	0.003	0.003	0.001	0.001	0.016
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.008	0.0016	<0.0005	0.001	0.0008	0.0142	0.0118	0.001	0.0009	0.0011	<0.0005	0.0009	0.0142
Pb, Exceedance (>0.2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni, Maximum	0.005	<0.002	<0.002	<0.002	<0.002	0.007	0.011	<0.002	0.003	0.002	0.013	0.012	0.013
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn, Maximum	0.039	0.018	0.005	0.008	<0.005	0.029	0.024	0.009	0.008	0.01	0.013	0.011	0.039
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
TSS, Maximum	18	<5	7	6	<5	139	224	28	19	21	<5	<5	224
TSS, Exceedance (>30)	0	0	0	0	0	1	1	0	0	0	0	0	2
Ammonia, Maximum	0.05	0.09	0.06	0.07	<0.03	<0.03	0.08	<0.03	0.11	<0.03	<0.03	<0.03	0.11
Ammonia, Exceedance (>2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)	0.06	0.033	<0.017	0.04	0.024	0.124	0.138	<0.017	0.03	0.034	<0.017	0.031	0.138
Cd, Exceedance (>50 ug/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
Fe, Maximum	6.17	0.819	0.43	0.488	0.374	9.33	7.57	0.376	0.797	1.26	0.275	0.238	9.33
Fe, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0
Hg, Maximum (ug/L)	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026
Hg, Exceedance (>5 ug/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate, Maximum	<0.05	0.15	0.07	0.2	0.16	0.26	0.16	0.13	0.12	0.13	0.1	0.12	0.26
Nitrate, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 33 Continued: Vale Newfoundland and Labrador Ltd (Long Harbour) 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

D11	Jan	Total
Samples	1	1
pH, Maximum (Units)	6.68	6.68
pH, Minimum (Units)		
pH, Exceedance (<5.5, >9.0)	0	0
As, Maximum	0.005	0.005
As, Exceedance (>0.5)	0	0
Cu, Maximum	0.027	0.027
Cu, Exceedance (>0.3)	0	0
Pb, Maximum	0.0379	0.0379
Pb, Exceedance (>0.2)	0	0
Ni, Maximum	0.011	0.011
Ni, Exceedance (>0.5)	0	0
Zn, Maximum	0.113	0.113
Zn, Exceedance (>0.5)	0	0
TSS, Maximum	199	199
TSS, Exceedance (>30)	1	1
Ammonia, Maximum	0.05	0.05
Ammonia, Exceedance (>2)	0	0
Cd, Maximum (ug/L)	0.679	0.679
Cd, Exceedance (>50 ug/L)	0	0
Fe, Maximum	25.9	25.9
Fe, Exceedance (>10)	1	1
Hg, Maximum (ug/L)	<0.026	<0.026
Hg, Exceedance (>5 ug/L)	0	0
Nitrate, Maximum	<0.05	<0.05
Nitrate, Exceedance (>10)	0	0

D13	Jan	Total
Samples	1	1
pH, Maximum (Units)	6.35	6.35
pH, Minimum (Units)		
pH, Exceedance (<5.5, >9.0)	0	0
As, Maximum	<0.002	<0.002
As, Exceedance (>0.5)	0	0
Cu, Maximum	0.003	0.003
Cu, Exceedance (>0.3)	0	0
Pb, Maximum	0.0019	0.0019
Pb, Exceedance (>0.2)	0	0
Ni, Maximum	<0.002	<0.002
Ni, Exceedance (>0.5)	0	0
Zn, Maximum	0.019	0.019
Zn, Exceedance (>0.5)	0	0
TSS, Maximum	17	17
TSS, Exceedance (>30)	0	0
Ammonia, Maximum	0.09	0.09
Ammonia, Exceedance (>2)	0	0
Cd, Maximum (ug/L)	<0.017	<0.017
Cd, Exceedance (>50 ug/L)	0	0
Fe, Maximum	2.86	2.86
Fe, Exceedance (>10)	0	0
Hg, Maximum (ug/L)	<0.026	<0.026
Hg, Exceedance (>5 ug/L)	0	0
Nitrate, Maximum	<0.05	<0.05
Nitrate, Exceedance (>10)	0	0

Table 33 Continued: Vale Newfoundland and Labrador Ltd (Long Harbour) 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

D18	Mar	Jun	Total
Samples	1	1	2
pH, Maximum (Units)	6.64	6.77	6.77
pH, Minimum (Units)			
pH, Exceedance (<5.5, >9.0)	0	0	0
As, Maximum	<0.002	<0.002	<0.002
As, Exceedance (>0.5)	0	0	0
Cu, Maximum	0.007	0.002	0.007
Cu, Exceedance (>0.3)	0	0	0
Pb, Maximum	0.0083	0.0005	0.0083
Pb, Exceedance (>0.2)	0	0	0
Ni, Maximum	0.004	<0.002	0.004
Ni, Exceedance (>0.5)	0	0	0
Zn, Maximum	0.012	0.007	0.012
Zn, Exceedance (>0.5)	0	0	0
TSS, Maximum	23	<5	23
TSS, Exceedance (>30)	0	0	0
Ammonia, Maximum	<0.05	<0.03	<0.05
Ammonia, Exceedance (>2)	0	0	0
Cd, Maximum (ug/L)	0.078	<0.017	0.078
Cd, Exceedance (>50 ug/L)	0	0	0
Fe, Maximum	4.94	0.443	4.94
Fe, Exceedance (>10)	0	0	0
Hg, Maximum (ug/L)	<0.026	<0.026	<0.026
Hg, Exceedance (>5 ug/L)	0	0	0
Nitrate, Maximum	0.08	0.07	0.08
Nitrate, Exceedance (>10)	0	0	0

D20	May	Total
Samples	2	2
pH, Maximum (Units)	7.8	7.8
pH, Minimum (Units)	7.77	7.77
pH, Exceedance (<5.5, >9.0)	0	0
As, Maximum	<0.002	<0.002
As, Exceedance (>0.5)	0	0
Cu, Maximum	0.005	0.005
Cu, Exceedance (>0.3)	0	0
Pb, Maximum	0.0012	0.0012
Pb, Exceedance (>0.2)	0	0
Ni, Maximum	0.01	0.01
Ni, Exceedance (>0.5)	0	0
Zn, Maximum	0.02	0.02
Zn, Exceedance (>0.5)	0	0
TSS, Maximum	11	11
TSS, Exceedance (>30)	0	0
Ammonia, Maximum	0.09	0.09
Ammonia, Exceedance (>2)	0	0
Cd, Maximum (ug/L)	0.055	0.055
Cd, Exceedance (>50 ug/L)	0	0
Fe, Maximum	0.51	0.51
Fe, Exceedance (>10)	0	0
Hg, Maximum (ug/L)	0.028	0.028
Hg, Exceedance (>5 ug/L)	0	0
Nitrate, Maximum	0.2	0.2
Nitrate, Exceedance (>10)	0	0

Table 33 Continued: Vale Newfoundland and Labrador Ltd (Long Harbour) 2015 Effluent Discharge Criteria Summary (mg/L, unless noted)

D25	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples	1	1	1	1	1	1	1	1	1	1	1	1	12
pH, Maximum (Units)	6.28	6.30	6.36	6.54	6.45	6.55	6.71	6.62	6.63	6.96	6.80	6.94	6.96
pH, Minimum (Units)													
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
As, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cu, Maximum	0.002	<0.001	0.001	0.001	0.002	<0.001	0.002	0.001	0.002	<0.001	0.001	0.001	0.002
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.0006	0.0006	0.0007	0.0007	<0.0005	<0.0005	0.0017	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	0.0017
Pb, Exceedance (>0.2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	0.005	<0.002	<0.002	<0.002	<0.002	0.004	0.005
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn, Maximum	0.018	0.008	0.009	0.008	0.009	<0.005	0.011	0.009	0.005	<0.005	0.005	0.014	0.018
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
TSS, Maximum	8	<5	7	6	<5	25	25	<5	<5	7	<5	<5	25
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia, Maximum	0.1	0.07	0.07	0.13	0.06	0.03	0.13	<0.03	0.1	0.07	<0.03	0.07	0.13
Ammonia, Exceedance (>2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)	<0.017	0.018	0.031	<0.017	0.018	0.028	0.06	<0.017	<0.017	<0.017	<0.017	0.06	0.06
Cd, Exceedance (>50 ug/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
Fe, Maximum	1.09	0.471	0.333	0.648	0.659	0.679	4.06	0.547	0.631	0.708	1.03	1.18	4.06
Fe, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0
Hg, Maximum (ug/L)	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026
Hg, Exceedance (>5 ug/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate, Maximum	<0.05	<0.05	0.22	<0.05	0.12	0.14	<0.05	0.1	0.15	0.19	0.13	0.1	0.22
Nitrate, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0

7) Conclusion

The ENVC regulates effluent discharged from the industrial sectors of the province. The nature of these industries and the types of effluent generated are very different and specific; no two industries can be viewed exactly the same. Differences within the industrial facilities and the receiving environment make this a dynamic field that has to be constantly monitored.

The industries operating within Newfoundland and Labrador are diligent in working with the ENVC to achieve the mutual goals of environmental sustainability and protection.

Additional effluent monitoring and water quality monitoring data from the industrial sector is available upon request.

For further information related to industrial effluent quality and monitoring, please contact the Pollution Prevention Division at:

Pollution Prevention Division
Newfoundland and Labrador
Department of Environment and Conservation
PO Box 8700
St. John's, NL A1B 4J6

(709) 729-4273
angelaburridge@gov.nl.ca

8) Appendix A: Abbreviations and Acronyms

ALT – Acute Lethality Test

BOD – Biological Oxygen Demand

COA – Certificate of Approval

ECWSR – Environmental Control Water and Sewage Regulations, 2003 (NLR 65/03)

EEM – Environmental effects Monitoring

ENVC – Newfoundland and Labrador Department of Environment and Conservation

MMER – Metal Mining Effluent Regulations

PPD – Pollution Prevention Division

TDS – Total Dissolved Solids

TIA – Tailings Impoundment Area

TPH – Total Petroleum Hydrocarbons

TSS – Total Suspended Solids