



**Department of Environment and Conservation**

**Industrial Effluent Compliance  
2014 Annual Report**

Pollution Prevention Division

October 2015

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## **1) Executive Summary**

The Newfoundland and Labrador Department of Environment and Conservation (NL 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.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 2014 there were more than 25 industries reporting effluent quality to the NL 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 2014.

### **Disclaimer:**

- The data presented is based upon reports submitted to the NL ENVC by industry, as of February 28<sup>th</sup>, 2015.
- 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 analysed at a different frequency.
- *Daphnia magna* acute lethality tests (ALTs) are a required monitoring test but it is not a compliance determining test. It is a monitoring tool only.

## **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 environmental limits. Acute Lethality Test (ALT) is also required as part of the COA. 41 samples were collected at the outflow of the Polishing Pond in 2014. There were no reported exceedances in any grab samples. The cyanide monthly average limit was exceeded in March. There were four rainbow trout ALTs with no failures and four *Daphnia magna* ALTs with no failures performed at this location.

#### Environmental Effects Monitoring

The Cycle 2 EEM Interpretive Report was submitted in 2014.

See Table 1: Anaconda Mining Inc 2014 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 2014, there were a total of 51 samples collected with one reported total suspended solids (TSS) exceedance in December. There were seven rainbow trout ALTs with no failures and seven *Daphnia magna* ALTs with no failures performed at this location.

It is important to note that operations were ceased at Beaver Brook Antimony Inc during 2014. Monitoring continued as part of the Care and Maintenance Plan for the facility.

#### Environmental Effects Monitoring

The Cycle 1 EEM Interpretive Report was submitted in 2014.

See Table 2: Beaver Brook Antimony Inc 2014 Effluent Discharge Criteria Summary.

### **c) Iron Ore Company of Canada**

Current COA Approval #: AA13-045575  
Issue date: April 9, 2013  
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-19, PD-20 and PD-24. The effluent monitoring program for the FDP locations requires analysis of numerous parameters; eight of these have environmental limits. PD-19 requires monitoring for total petroleum hydrocarbons

(TPH) only, PD-20 requires monitoring for three parameters and PD-24 requires monitoring for five parameters.

FDP-MD5: Discharge of effluent occurred at this location between May and December 2014. During this time, 33 samples were collected with one reported TSS exceedance. The monthly average limit was exceeded for TSS in September. There were nine rainbow trout ALTs with no failures and nine *Daphnia magna* ALTs with no failures performed at this location.

FDP-TIA: A total of 51 samples were collected at this location in 2014 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: A total of 53 samples were collected at this location in 2014. There were two TSS exceedances reported and the monthly average TSS limit was exceeded in May. There were 13 rainbow trout ALTs with no failures and 13 *Daphnia magna* ALTs with no failures performed at this location.

FDP-MD30: 52 samples were collected at FDP-MD30 in 2014 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.

PD-19: 12 TPH samples were collected in 2014 and all were analysed below the detection limit.

PD-20: One sample was collected in 2014. There were no exceedances reported.

PD-24: Eight samples were collected at PD-24 between March and October 2014. There was one TSS exceedance reported and the monthly average limit was exceeded in June.

#### Environmental Effects Monitoring

The Cycle 4 EEM Interpretive Report was submitted in 2014.

See Table 3: Iron Ore Company of Canada 2014 Effluent Discharge Criteria Summary.

#### **d) Labrador Iron Mines**

<u>Current COA</u>	Approval #: AA10-095537 (James)
	Issue date: September 8, 2010
	Expiration: September 8, 2015
	Approval #: AA14-025588 (Houston)
	Issue date: February 17, 2014
	Expiration: February 17, 2016

Labrador Iron Mines has 3 discharge locations: Ruth Pit Outlet, JSP-Out-1 and JSP-Out-2. The effluent monitoring program for these locations requires analysis of numerous parameters, eight of which have associated compliance limits. There were no mining operations at this facility in 2014.

Ruth Pit: 54 samples were collected in 2014 at Ruth Pit. There were no exceedances reported at this site. There were nine rainbow trout ALTs with no failures and nine *Daphnia magna* ALTs with no failures performed at this location.

JSP-Out-1: 23 samples were collected at JSP-Out-1 in 2014. There were no reported exceedances. There were five rainbow trout ALTs with no failures performed at this location. Discharge stopped at this location in May 2014.

JSP-Out-2: There were 14 samples collected at JSP-Out-2 in 2014. There was one TSS exceedance reported. There were three rainbow trout ALTs with no failures performed at this location. Discharge stopped at this location in March 2014.

#### Environmental Effects Monitoring

The Cycle 1 EEM Interpretive Report was submitted in 2014.

See Table 4: Labrador Iron Mines 2014 Effluent Discharge Criteria Summary.

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

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

Rambler Metals and Mining has one 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 48 samples collected in 2014 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. There was no discharge from the site in August.

#### Environmental Effects Monitoring

There were no EEM submissions for 2014.

See Table 5: Rambler Metals and Mining Canada Ltd 2014 Effluent Discharge Criteria Summary.

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

<u>Current COA</u>	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 2014, a total of 28 samples were collected and analysed at the Polishing Pond with no exceedances reported. There were 10 rainbow trout ALTs with no failures and 10 *Daphnia magna* ALTs with no failures performed at this location. No sampling was conducted in March and August as there was no discharge from the Polishing Pond.

#### Environmental Effects Monitoring

The Cycle 4 EEM Study Design was submitted in 2014.

See Table 6: Rambler Metals and Mining Canada Ltd (Nugget Pond Facility) 2014 Effluent Discharge Criteria Summary.

#### **g) Tata Steel Minerals Canada Ltd**

<u>Current COA</u>	Approval #: AA12-085571A
	Issue date: August 10, 2012
	Amendment: August 1, 2014
	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 2014 at discharge locations SW2, SW11 and SW12. The effluent monitoring program requires analysis of numerous parameters, eight of which have associated compliance limits

SW2: One sample was collected in May at SW2. The reported TSS exceeded the daily grab limit and the monthly average limit.

SW11: There were four samples collected at SW11. There was one TSS exceedance reported and the monthly average limit was exceeded in May. There was one rainbow trout ALT with one failure and one *Daphnia magna* ALT with no failure performed at this location.

SW12: One sample was collected in May at SW12. The reported TSS exceeded the daily grab limit and the monthly average limit.

#### Environmental Effects Monitoring

The Cycle 1 EEM Study Design was submitted in 2014.

See Table 7: Tata Steel Minerals Canada Ltd 2014 Effluent Discharge Criteria Summary.

#### **h) Teck Resources Ltd**

<u>Current COA</u>	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 2014, 37 samples were collected. There were no exceedances reported in 2014. There were 13 rainbow trout ALTs with no failures and 13 *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

The Cycle 3 EEM Interpretive Report was submitted in 2014.

See Table 8: Teck Resources Ltd 2014 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 51 samples were collected during the year, with no reported exceedances. There were 12 rainbow trout ALTs with no failures and 12 *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.

#### Environmental Effects Monitoring

The Cycle 3 EEM Study Design was submitted in 2014.

See Table 9: Vale Newfoundland and Labrador Ltd (Mine Site) 2014 Effluent Discharge Criteria Summary.

### **j) Wabush Mines**

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

Wabush Mines has five discharge points: Flora Lake, Knoll Lake, West Pit Settling Pond, East Pit #2 and the Deep Well Discharge. The effluent monitoring program consists of several parameters, eight of which have compliance limits. There are ALT requirements at all of these locations with the exception of the Deep Well Discharge.

Flora Lake: 53 samples were collected at the Flora Lake discharge in 2014. Three TSS exceedances were reported, one in May and two in June. The monthly average for 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 no failures performed at this location.

Knoll Lake: 46 samples were collected at the Knoll Lake discharge location in 2014 with no exceedances reported. There were four rainbow trout ALTs with no failures and four *Daphnia magna* ALTs with no failures performed. There was no discharge in December from this location.

West Pit Settling Pond: 49 samples were collected at the West Pit Settling Pond in 2014. There were no reported exceedances. There were four rainbow trout ALTs with no failures and four *Daphnia magna* ALTs with no failures performed at this location.

East Pit #2: 53 samples were analysed at the East Pit #2 location in 2014 with no exceedances reported. There were four rainbow trout ALTs with no failures and four *Daphnia magna* ALTs with no failures performed at this location.

Deep Well Discharge: 4 samples were taken at this location with no exceedances reported.

See Table 10: Wabush Mines 2014 Effluent Discharge Criteria Summary.

Environmental Effects Monitoring

The Cycle 4 EEM Interpretive Report was submitted in 2014.

**Table 1: Anaconda Mining Inc 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Polishing Pond Discharge	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples	1	2	2	4	6	2	3	2	2	2	3	12	41
pH, Maximum (Units)		7.91	7.93	7.89	8.00	7.94	8.05	8.02	8.12	8.02	8.00	8.03	8.12
pH, Minimum (Units)		7.79	7.9	7.40	7.86		7.88	7.93	8.08	7.95	7.99	7.89	7.40
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
As, Exceedance (>1.0)			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		
Cu, Maximum			0.068		0.008		0.012	0.011	0.020	0.028	0.035		0.068
Cu, Exceedance (>0.6)			0		0		0	0	0	0	0		0
Monthly Average (>0.30)			0.0485		0.008		0.012	0.011	0.020	0.028	0.035		
CN, Maximum		0.058	2	1.2	1.1	0.13	0.058	0.056	0.091	0.13	0.067	0.15	2
CN, Exceedance (>2.0)		0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>1.00)		0.054	1.6	0.470	0.763	0.13	0.036	0.052	0.081	0.098	0.067	0.061	1
Pb, Maximum			<0.0005		0.0007		<0.0005	0.0024	<0.0005	<0.0005	0.0006		0.0024
Pb, Exceedance (>0.4)			0		0		0	0	0	0	0		0
Monthly Average (>0.20)			<0.0005		0.0007		<0.0005	0.0024	<0.0005	<0.0005	0.0006		
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		0
Monthly Average (>0.50)			<0.002		<0.002		<0.002	<0.002	<0.002	<0.002	<0.002		
Zn, Maximum			0.0055		<0.005		0.009	0.007	<0.005	0.009	<0.005		0.009
Zn, Exceedance (>1.0)			0		0		0	0	0	0	0		0
Monthly Average (>0.50)			<0.005		<0.005		0.009	0.007	<0.005	0.009	<0.005		
TSS, Maximum		1.8	4	6	10	13	5	3.8	4.4	4.8	4.6	9.1	13
TSS, Exceedance (>30)		0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>15.00)		1.7	2.8	5.45	6.16	13	4.07	2.9	2.8	3.9	4.5	7.3	
Ra-226, Maximum			0.014		<0.010								0.014
Ra-226, Exceedance (>1.11 Bq/L)			0		0								0
Monthly Average (>0.37 Bq/L)			0.014		<0.010								

**Table 1 Continued: Anaconda Mining Inc 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Polishing Pond Discharge	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Ammonia, Maximum			8.5		3.5		5.6	5.4	5.5	6.9			8.5
Cd, Maximum (ug/L)			0.022		<0.01		0.013	0.024	<0.010	0.012			0.024
Fe, Maximum			0.224		0.733		0.233	0.109	0.275	0.259			0.733
Hg, Maximum (ug/L)													
Nitrate, Maximum			4.3		3.2		3.2	3	3.8	5.1			5.1
TDS, Maximum			630		360					740			740
TPH, Maximum	<0.10	<0.10	<0.10		<0.10			<0.01		<0.01			<0.10
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 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Site 16	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples	4	4	4	4	4	5	4	4	4	5	4	5	51
pH, Maximum (units)	8.22	7.99	8.18	8.17	8.33	8.36	8.29	8.26	8.21	8.14	8.09	8.22	8.36
pH, Minimum (units)	8.06	7.97	7.91	6.54	8.29	8.06	8.00	8.07	7.25	7.27	7.97	7.84	6.54
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	0.094	0.131	0.093	0.095	0.103	0.095	0.125	0.181	0.13	0.116	0.122	0.162	0.181
As, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.089	0.104	0.091	0.085	0.092	0.078	0.101	0.166	0.124	0.109	0.105	0.119	
Cu, Maximum	0.011	0.002	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.005	0.011
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.30)	0.00325	0.00163	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Pb, Maximum	0.003	0.0026	0.0013	0.0042	0.0005	0.0012	0.0009	0.0041	0.0016	0.0007	0.0027	0.0125	0.0125
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.20)	0.0015	0.002	0.0008	0.0018	<0.0005	0.0008	0.0006	0.0016	0.0008	<0.0005	0.0017	0.0054	
Ni, Maximum	0.016	0.013	0.014	0.016	0.016	0.013	0.007	0.017	0.011	0.013	0.02	0.016	0.02
Ni, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.014	0.011	0.014	0.014	0.015	0.010	0.005	0.013	0.011	0.011	0.016	0.014	
Zn, Maximum	0.065	0.024	0.150	0.016	0.014	0.015	0.010	0.005	0.007	0.006	0.011	0.013	0.15
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.029	0.021	0.052	0.014	0.010	0.007	0.007	<0.005	0.006	<0.005	0.008	0.009	
TSS, Maximum	7	11	3	19	4	10	10	18	7	5	9	31	31
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	1	1
Monthly Average (>15.00)	3.0	6.3	2	10	2.5	6	8	8.8	7	2.8	5.5	11.6	
Ra-226, Maximum					<0.005	<0.05			<0.005		0.007		<0.05
Ra-226, Exceedance (>1.11 Bq/l)					0	0			0		0		0
Monthly Average (>0.37)					<0.005	<0.05			<0.005		0.007		
Ammonia, Maximum					<0.03	<0.03			<0.03		<0.03		<0.03
Cd, Maximum (ug/L)	<0.017	0.266	0.04	<0.5	0.02	<0.017	0.02		<0.017		<0.017	<0.017	<0.5
Fe, Maximum	0.426	0.621	0.188	0.141	0.262	0.196	0.2		0.301		0.415	0.459	0.621

**Table 2 Continued: Beaver Brook Antimony Inc 2014 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)					0.038	<0.026			<0.026		<0.026		0.038
Nitrate, Maximum					1.29	0.43			0.35		0.84		1.29
TDS, Maximum					290	180			176		232		290
TPH, Maximum				<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			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: Iron Ore Company of Canada 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

FDP-MD5	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	3	5	4	4	5	4	4	4	33
pH, Maximum (Units)	7.41	7.77	8.09	8.08	7.98	7.89	8.06	7.94	8.09
pH, Minimum (Units)	7.32	7.24	7.76	7.90	7.51	7.74	7.62	7.60	7.24
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	0.002	<0.001	<0.001	<0.001	0.002
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	<0.002	<0.002	<0.002	0.018	<0.002	<0.002	<0.002	0.018
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	0.0044	<0.002	<0.002	<0.002	
Pb, Maximum	<0.0005	<0.0005	<0.0005	<0.0005	0.0058	<0.0005	<0.0005	0.0006	0.0058
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	<0.005	<0.0005	<0.0005	<0.0005	
Ni, Maximum	<0.002	<0.002	<0.002	<0.002	0.0076	<0.002	<0.002	<0.002	0.0076
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	0.0023	<0.002	<0.002	<0.002	
Zn, Maximum	0.014	0.011	0.0056	0.0082	0.069	0.015	0.01	0.0082	0.069
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.013	0.005	<0.005	0.005	0.018	0.008	0.007	<0.005	
TSS, Maximum	24	5.6	5.8	3.8	140	6.4	6.2	4.2	140
TSS, Exceedance (>30)	0	0	0	0	1	0	0	0	1
Monthly Average (>15.00)	15.33	3.2	3.85	2.9	34.2	4.1	3.45	2.8	1
Ra-226, Maximum	<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
Monthly Average (>0.37 Bq/L)	<0.010	<0.010	<0.010		<0.010	<0.010	<0.010	<0.010	
Ammonia, Maximum		0.13	0.25	0.82	0.83				0.83
Cd, Maximum (ug/L)		0.024	<0.010	<0.010	0.019				0.024
Fe, Maximum		1	0.65	0.77	1.4				1.4
Hg, Maximum (ug/L)		<0.013	<0.013	<0.013	<0.013				<0.013
Nitrate, Maximum		0.069	<0.050	<0.050	<0.050				0.069

**Table 3 Continued: Iron Ore Company of Canada 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

FDP-MD5	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
TDS, Maximum	93	110	140	130	140	140	170	190	190
TPH, Maximum	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ALT, Pass (RT)		2	1	1	2	1	1	1	9
ALT, Fail (RT)		0	0	0	0	0	0	0	0
ALT, Pass (DM)		2	1	1	2	1	1	1	9
ALT, Fail (DM)		0	0	0	0	0	0	0	0

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	4	4	4	4	5	51
pH, Maximum (units)	7.79	7.82	7.80	7.82	7.86	7.80	7.98	8.07	8.00	7.99	7.99	7.89	8.07
pH, Minimum (units)	7.69	7.75	7.62	7.69	7.68	7.63	7.66	7.87	7.84	7.95	7.71	7.68	7.62
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	<0.001
Cu, Maximum	<0.002	0.0026	0.0028	0.0051	0.0037	<0.002	0.0028	<0.002	<0.002	<0.002	<0.002	<0.002	0.0051
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	0
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	<0.0005
Ni, Maximum	<0.002	<0.002	<0.002	<0.002	<0.0020	<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	<0.0020	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Zn, Maximum	0.011	0.0094	0.02	0.015	0.0099	0.045	0.0071	0.0063	0.0055	0.0082	<0.005	0.0066	0.045
Zn, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.006	0.0061	0.0089	0.0072	0.0057	0.011	<0.005	<0.005	<0.005	0.0053	<0.005	<0.005	0

**Table 3 Continued: Iron Ore Company of Canada 2014 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
TSS, Maximum	1.2	1.2	<1.0	<1.0	1.6	6.6	2.2	1.4	1.6	1.4	2	4.2	6.6
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	<1.0	2.84	1.15	<1.0	1.3	1.2	1.28	1.52	
Ra-226, Maximum		<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
Monthly Average (>0.37)		<0.010	<0.010	<0.010					<0.010	<0.010	<0.010	<0.010	<0.010
Ammonia, Maximum						0.14	0.1	0.06	0.14				0.14
Cd, Maximum (ug/L)						0.17	0.031	<0.010	<0.010				0.17
Fe, Maximum						0.19	0.1	<0.050	<0.050				0.19
Hg, Maximum (ug/L)						<0.013	<0.013	<0.013	<0.013				<0.013
Nitrate, Maximum						0.81	0.62	0.54	0.67				0.81
TDS, Maximum	75	84	75	81	73	82	69	83	64	79	73	81	84
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

FDP-Hakim Culvert	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	4	4	5	4	4	5	4	4	6	4	4	5	53
pH, Maximum (units)	7.84	7.97	7.91	7.86	7.88	7.96	8.01	8.05	8.02	8.02	8.04	7.92	8.05
pH, Minimum (units)	7.75	7.79	7.71	7.76	7.78	7.76	7.80	7.95	7.74	7.76	7.64	7.58	7.58
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	<0.001
Cu, Maximum	<0.002	<0.002	<0.002	<0.002	0.0022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0022
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0	0	0

**Table 3 Continued: Iron Ore Company of Canada 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

FDP-Hakim Culvert	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Cu Monthly Average (>0.30)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0020	<0.0020	<0.0020	<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	<0.002	0.0022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0022
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	0.059	0.037	0.015	0.0079	0.01	0.013	0.0093	0.0098	<0.005	0.0078	0.006	<0.005	0.059
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.056	0.0180	0.0082	<0.005	0.0076	0.0055	0.0067	0.0057	<0.005	<0.005	<0.005	<0.005	
TSS, Maximum	2.4	17	1.6	1.4	63	41	5.8	3.2	25	4.4	1.2	<1.0	63
TSS, Exceedance (>30)	0	0	0	0	1	1	0	0	0	0	0	0	2
Monthly Average (>15.00)	1.15	5.15	1	<1.0	27.5	11.43	2.73	2.25	5.17	2.13	<1.0	<1.0	1
Ra-226, Maximum		<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
Monthly Average (>0.37 Bq/L)		<0.010	<0.010	<0.010			<0.010		<0.010	<0.010	<0.010	<0.010	
Ammonia, Maximum	9.3	7.7	6.3	3.7	7.5	7.1	9.1	7.9	3.7	5.1	5.7	3.2	9.3
Cd, Maximum (ug/L)						<0.01	0.027	<0.01	<0.01				0.027
Fe, Maximum						1.3	1	0.22	1.7	0.72	0.18	0.08	1.7
Hg, Maximum (ug/L)						<0.013	<0.013	<0.013	<0.013				<0.013
Nitrate, Maximum	20	20	16	15	19	19	27	23	14	19	24	16	27
TDS, Maximum	240	330	220	240	260	230	320	260	230	270	300	290	330
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
ALT, Pass (RT)	1	1	1	1	1	1	1	1	2	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	1	1	1	1	1	2	1	1	1	13
ALT, Fail (DM)	0	0	0	0	0	0	0	0	0	0	0	0	0

**Table 3 Continued: Iron Ore Company of Canada 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

FDP-MD30	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	3	4	5	4	4	6	4	4	5	4	4	5	52
pH, Maximum (Units)	7.58	7.79	7.68	7.59	7.57	7.63	7.69	7.81	7.92	7.91	7.92	7.87	7.92
pH, Minimum (Units)	7.25	7.36	7.33	7.38	7.45	7.40	7.44	7.66	7.68	7.84	7.60	7.58	7.25
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	<0.001
Cu, 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
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	<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	<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	<0.002
Zn, Maximum	0.011	0.011	0.01	0.0063	0.0073	0.0057	0.0093	0.0064	<0.005	0.042	<0.005	0.0075	0.042
Zn, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.0068	0.0098	0.007	0.0051	0.0062	<0.005	<0.005	<0.005	<0.005	0.0139	<0.005	<0.005	<0.005
TSS, Maximum	3.2	2	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	1.8	1	1.6	3.2
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>15.00)	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.04	
Ra-226, Maximum		<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
Monthly Average (>0.37)		<0.010	<0.010	<0.010			<0.010		<0.010	<0.010	<0.010	<0.010	<0.010
Ammonia, Maximum						0.35	0.11	0.092	0.1				0.35
Cd, Maximum (ug/L)						<0.010	<0.010	<0.010	<0.010				<0.010
Fe, Maximum						0.06	<0.05	<0.05	<0.05				0.06
Hg, Maximum (ug/L)						<0.013	<0.013	<0.013	<0.013				<0.013
Nitrate, Maximum						6.9	8.1	13	7.5				13

**Table 3 Continued: Iron Ore Company of Canada 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

FDP-MD30	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
TDS, Maximum	150	160	150	160	120	160	150	150	150	150	160	180	180
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

PD 19	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
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 20	Sept	Total
Samples	1	1
pH, Maximum (Units)	8.3	8.3
pH, Minimum (Units)		
pH, Exceedance (<5.5, >9.0)	0	0
TPH, Maximum	<0.10	<0.10
TSS, Maximum	<2.0	<2.0
TSS, Exceedance (>30)	0	0
Monthly Average (>15.00)	<2.0	<2.0

**Table 3 Continued: Iron Ore Company of Canada 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

PD 24	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Total
Samples	1	1	1	1	1	1	1	1	8
pH, Maximum (units)	7.54			7.67	7.77	7.81	7.88		7.88
pH, Minimum (units)				0	0	0	0		0
pH, Exceedance (<5.5, >9.0)	0			0	0	0	0		0
Fe, Maximum	1.4			8.7	0.18	0.15	0.087		8.7
TDS, Maximum	660			420	340	330	260		660
TPH, Maximum	0.43	0.19	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.43
TSS, Maximum	6.2			41	<1.0	<1.0	<1.0		41
TSS, Exceedance (>30)	0			1	0	0	0		1
Monthly Average (>15.00)	6.2			41	<1.0	<1.0	<1.0		1

**Table 4: Labrador Iron Mines 2014 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	6	5	4	4	5	4	4	5	4	5	54
pH, Maximum (units)	7.90	7.98	7.77	7.73	7.64	7.78	7.87	7.88	7.92	7.95	7.87	8.03	8.03
pH, Minimum (units)	7.81	7.74	7.57	7.61	7.13	6.65	7.31	7.71	7.59	7.47	7.6	7.36	6.65
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
As, Exceedance (>1.0)	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			
Cu, Maximum	0.0014	<0.001	<0.001	<0.001	<0.001	<0.001	0.0087	<0.001	<0.001	<0.001			0.0087
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0			0
Monthly Average (>0.30)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00214	<0.001	<0.001	<0.001			
Pb, Maximum	<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
Monthly Average(>0.20)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			
Ni, Maximum	0.0052	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002				0.0052
Ni, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0				0
Monthly Average (>0.50)	0.0021	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002				
Zn, Maximum	<0.007	<0.007	0.0084	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007			0.0084
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0			0
Monthly Average (>0.50)	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007			
TSS, Maximum	<2	4	3	2	5	6	3	3	15	2	<2	<2	15
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>15.00)	<2	2.25	<2	<2	2	2.25	<2	<2	4.5	<2	<2	<2	
Ra-226, Maximum	<0.002	0.062	0.004	0.003	<0.002	<0.002	<0.002	<0.002	0.003				0.062
Ra-226, Exceedance (>1.11 Bq/l)	0	0	0	0	0	0	0	0	0				0
Monthly Average (>0.37)	<0.002	0.062	0.004	0.003	<0.002	<0.002	<0.002	<0.002	0.003				
Ammonia, Maximum	<0.02	0.03	<0.02	<0.02	0.09	<0.02	0.03		<0.02	<0.02			0.09
Cd, Maximum (ug/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2			<0.2
Fe, Maximum	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06		<0.06	0.066			0.066
Hg, Maximum (ug/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01			<0.01

**Table 4 Continued: Labrador Iron Mines 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Ruth Pit Outlet	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Nitrate, Maximum	0.31	0.31	0.34	0.39	0.32	0.31	0.26		0.25	0.28			0.39
TDS, Maximum	70	70	55	74	64	82	73		110	86			110
ALT, Pass (RT)	1	1	1	1	1	1	1	1	1				9
ALT, Fail (RT)	0	0	0	0	0	0	0	0	0				0
ALT, Pass (DM)	1	1	1	1	1	1	1	1	1				9
ALT, Fail (DM)	0	0	0	0	0	0	0	0	0				0

JSP-Out-1	Jan	Feb	Mar	Apr	May	Total
Samples	4	4	6	5	4	23
pH, Maximum (units)	7.09	7.18	6.97	6.91	6.75	7.18
pH, Minimum (units)	6.79	6.86	6.79	6.69	6.53	6.53
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0
As, Maximum	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
As, Exceedance (>1.0)	0	0	0	0	0	0
Monthly Average (>0.50)	<0.001	<0.001	<0.001	<0.001	<0.001	
Cu, Maximum	<0.001	<0.001	<0.001	<0.001	0.0019	0.0019
Cu, Exceedance (>0.6)	0	0	0	0	0	0
Monthly Average (>0.30)	<0.001	<0.001	<0.001	<0.001	0.0019	
Pb, Maximum	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pb, Exceedance (>0.4)	0	0	0	0	0	0
Monthly Average(>0.20)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Ni, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ni, Exceedance (>1.0)	0	0	0	0	0	0
Monthly Average (>0.50)	<0.002	<0.002	<0.002	<0.002	<0.002	
Zn, Maximum	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Zn, Exceedance (>1.0)	0	0	0	0	0	0
Monthly Average (>0.50)	<0.007	<0.007	<0.007	<0.007	<0.007	
TSS, Maximum	4	4	2	5	16	16
TSS, Exceedance (>30)	0	0	0	0	0	0
Monthly Average (>15.00)	<2	<2	<2	2.4	6	

**Table 4 Continued: Labrador Iron Mines 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

JSP-Out-1	Jan	Feb	Mar	Apr	May	Total
Ra-226, Maximum	<0.002	<0.002	<0.002	0.006	<0.002	0.006
Ra-226, Exceedance (>1.11 Bq/L)	0	0	0	0	0	0
Monthly Average (>0.37 Bq/L)	<0.002	<0.002	<0.002	0.006	<0.002	
Ammonia, Maximum	<0.02	0.02	<0.02	<0.02	<0.02	0.02
Cd, Maximum (ug/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fe, Maximum	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Hg, Maximum (ug/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate, Maximum	0.24	0.28	0.3	0.19	0.19	0.3
TDS, Maximum	29	40	17	25	20	40
ALT, Pass (RT)	1	1	1	1	1	5
ALT, Fail (RT)	0	0	0	0	0	0

JSP-Out-2	Jan	Feb	Mar	Total
Samples	4	4	6	14
pH, Maximum (units)	7.36	7.42	7.02	7.42
pH, Minimum (units)	6.92	6.93	6.85	6.85
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	<0.001	0.0018	<0.001	0.0018
Cu, Exceedance (>0.6)	0	0	0	0
Monthly Average (>0.30)	<0.001	0.0018	<0.001	
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	

**Table 4 Continued: Labrador Iron Mines 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

JSP-Out-2	Jan	Feb	Mar	Total
Ni, Maximum	<0.002	0.0027	<0.002	0.0027
Ni, Exceedance (>1.0)	0	0	0	0
Monthly Average (>0.50)	<0.002	0.0027	<0.002	
Zn, Maximum	<0.007	<0.007	<0.007	<0.007
Zn, Exceedance (>1.0)	0	0	0	0
Monthly Average (>0.50)	<0.007	<0.007	<0.007	
TSS, Maximum	25	21	60	60
TSS, Exceedance (>30)	0	0	1	1
Monthly Average (>15.00)	8.5	9.75	13.5	
Ra-226, Maximum	<0.002	<0.002	0.039	0.0390
Ra-226, Exceedance (>1.11 Bq/L)	0	0	0	0
Monthly Average (>0.37 Bq/L)	<0.002	<0.002	0.039	
Ammonia, Maximum	<0.02	0.02	<0.02	0.02
Cd, Maximum (ug/L)	<0.2	<0.2	<0.2	<0.2
Fe, Maximum	0.13	0.12	<0.06	0.13
Hg, Maximum (ug/L)	<0.01	<0.01	<0.01	<0.01
Nitrate, Maximum	0.21	0.19	0.2	0.21
TDS, Maximum	34	36	<10	36
ALT, Pass (RT)	1	1	1	3
ALT, Fail (RT)	0	0	0	0

**Table 5: Rambler Metals and Mining Canada Ltd (Ming Mine) 2014 Effluent Discharge Criteria Summary (mg/L, unless noted)**

Treated Mine Effluent	Jan	Feb	Mar	Apr	May	Jun	Jul	Sept	Oct	Nov	Dec	Total
Samples	5	4	5	5	5	5	5	3	2	4	5	48
pH, Maximum (units)	8.48	8.46	8.49	8.73	8.60	8.36	8.32	8.47	8.25	8.49	8.24	8.73
pH, Minimum (units)	7.29	7.79	7.89	6.32	7.61	7.71	6.58	8.24	7.51	7.39	7.11	6.32
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	0.0017	<0.001	<0.001	0.013	0.0011	<0.001	0.002	0.0013	<0.001	0.0027	0.0018	0.013
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	0.00384	<0.001	<0.001	<0.001	<0.001	<0.001	0.00208	0.00108	
Cu, Maximum	0.0194	0.0082	0.0201	0.05	0.0521	0.0262	0.0565	0.0343	0.0154	0.0873	0.06	0.0873
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.30)	0.01356	0.00768	0.00962	0.0256	0.02212	0.01508	0.0388	0.01793	0.01165	0.048	0.03102	
CN, Maximum	0.009	<0.005	0.014	0.017	0.021	0.028	0.0084	0.026	0.0098	0.011	0.018	0.028
CN, Exceedance (>2.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<1.00)	0.003	<0.005	0.00762	0.01172	0.01176	0.01088	0.00572	0.01377	0.00865	0.0075	0.00934	
Pb, Maximum	<0.0005	0.00289	0.00156	0.00053	<0.0005	<0.0005	0.0029	<0.0005	0.00061	0.013	0.0095	0.013
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.20)	<0.0005	0.00091	0.00069	<0.0005	<0.0005	<0.0005	0.00078	<0.0005	<0.0005	0.00585	0.00551	
Ni, Maximum	0.0094	0.0077	0.0316	0.0118	0.0077	0.0128	0.0217	0.0059	0.0197	0.0089	0.0238	0.0316
Ni, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.50)	0.00552	0.00375	0.01512	0.005	0.00588	0.0068	0.00882	0.0052	0.0127	0.00565	0.01124	
Zn, Maximum	0.284	0.0469	0.187	0.364	0.0952	0.0894	0.351	0.109	0.342	0.114	0.343	0.364
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.50)	0.0916	0.03333	0.08838	0.10482	0.0577	0.03796	0.15876	0.0707	0.01898	0.06165	0.11202	
TSS, Maximum	2.5	<5.0	<10	10	11	<5.0	27	<5	<5	10	<10	27
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<15.00)	<5.0	<5.0	<10	<10	<5.0	<5.0	7.3	<5	<5.0	<5.0	<10	
Ra-226, Maximum	0.021	<0.010	0.079	0.019	<0.010	0.013	0.015	0.013	0.019	0.014	<0.010	0.079
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)	<0.01	<0.010	0.0264	0.0112	<0.010	<0.010	<0.010	<0.010	0.012	0.01033	<0.010	

**Table 5 Continued: Rambler Metals and Mining Canada Ltd (Ming Mine) 2014 Effluent Discharge Criteria Summary**  
 (mg/L, unless noted)

Treated Mine Effluent	Jan	Feb	Mar	Apr	May	Jun	Jul	Sept	Oct	Nov	Dec	Total
Ammonia, Maximum		7.6		14				16			18	18
Cd, Maximum (ug/L)		0.717		0.727				0.595			2.75	2.75
Fe, Maximum		0.146		0.21				0.063			0.253	0.253
Hg, Maximum (ug/L)		<0.013		<0.013				<0.013			<0.013	<0.013
Nitrate, Maximum		12		18				24			30	30
TDS, Maximum		2100		2800				2300			3000	3000
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 6: Rambler Metals and Mining (Nugget Pond) 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Polishing Pond	Jan.	Feb.	Apr.	May	Jun.	Jul.	Sept.	Oct.	Nov.	Dec.	Total
Samples	2	3	3	4	5	2	1	2	4	2	28
pH, Maximum (Units)	7.34	7.34	7.37	7.28	7.57	7.48	7.57	7.57	7.62	7.28	7.62
pH, Minimum (Units)	7.03	7.27	7.03	6.91	7.28	7.41		7.5	7.40	6.98	6.91
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	0.0024	0.0026	0.0026	0.002	0.0029	0.0025	0.0024	0.002	0.0018	0.0015	0.0029
As, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.0019	0.0023	0.0014	<0.0010	0.0024	0.0024	0.0024	0.002	0.001275	0.00145	
Cu, Maximum	0.0127	0.0289	0.008	0.0138	0.0093	0.0117	0.0043	0.0064	0.0167	0.0093	0.0289
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.30)	0.0106	0.0150	0.0062	0.0099	0.00702	0.0109	0.0043	0.0052	0.0104	0.0083	
CN, Maximum	0.003	<0.005	0.36	0.170	0.180	0.056	0.017	<0.10	0.029	0.023	<1.0
CN, Exceedance (>2.0)	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>1.00)	0.002	<0.005	0.1667	0.09	0.0731	0.035	0.017	<0.10	0.0146	0.0134	
Pb, Maximum	0.00083	0.00147	0.00127	0.00171	0.00271	0.00213	0.00056	0.00401	0.0089	0.00497	0.0089
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.20)	0.0007	0.0010	0.0009	0.0010	0.0021	0.0017	0.0006	0.0035	0.0030	0.0037	
Ni, Maximum	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.0024	0.0035	0.0035
Ni, Exceedance (>1.0)	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	0.0023	
Zn, Maximum	0.0201	0.0178	0.0156	0.0566	0.016	0.0398	0.0072	0.0153	0.135	0.0133	0.135
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.01695	0.0165333	0.011233	0.030875	0.0104	0.0299	0.0072	0.0112	0.04275	0.01175	
TSS, Maximum	<2.0	1.6	5.60	<2.0	<2.0	1.4	<1.0	4.8	2.6	4	5.6
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>15.00)	<2.0	1.03	2.2	<2.0	<2.0	1.2	<1.0	3.4	1.28	2.7	

**Table 6 Continued: Rambler Metals and Mining (Nugget Pond) 2014 Effluent Discharge Criteria Summary (mg/L, unless noted)**

Polishing Pond	Jan.	Feb.	Apr.	May	Jun.	Jul.	Sept.	Oct.	Nov.	Dec.	Total
Ra-226, Maximum	<0.010	<0.010	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.01
Ra-226, Exceedance (>1.11 Bq/L)	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	
Ammonia, Maximum		2.1	0.6			2.1		1.3			2.1
Cd, Maximum (ug/L)		0.06	0.025			0.176		0.076			0.176
Fe, Maximum		0.097	0.188			0.095		0.105			0.188
Hg, Maximum (ug/L)		<0.013	<0.013			0.013		<0.013			0.013
Nitrate, Maximum		1.6	0.6			2.2		2.2			2.2
TDS, Maximum		240	91			290		290			290
TPH, Maximum		<0.10	<0.1			<0.10		<0.1			<0.10
ALT, Pass (RT)	1	1	1	1	1	1	1	1	1	1	10
ALT, Fail (RT)	0	0	0	0	0	0	0	0	0	0	0
ALT, Pass (DM)	1	1	1	1	1	1	1	1	1	1	10
ALT, Fail (DM)	0	0	0	0	0	0	0	0	0	0	0

**Table 7: Tata Steel Minerals Canada Ltd 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

SW 2	May	Total	SW 11	May	Total	SW 12	May	Total
Samples	1	1	Samples	4	4	Samples	1	1
pH, Maximum (Units)	6.45	6.45	pH, Maximum (Units)	7.84	7.84	pH, Maximum (Units)	5.85	5.85
pH, Minimum (Units)			pH, Minimum (Units)	5.77	5.77	pH, Minimum (Units)		
pH, Exceedance (<5.5, >9.0)	0	0	pH, Exceedance (<5.5, >9.0)	0	0	pH, Exceedance (<5.5, >9.0)	0	0
As, Maximum	0.0048	0.0048	As, Maximum	0.0081	0.0081	As, Maximum	0.0028	0.0028
As, Exceedance (>1.0)	0	0	As, Exceedance (>1.0)	0	0	As, Exceedance (>1.0)	0	0
Monthly Average (>0.50)	0.0048		Monthly Average (>0.50)	0.002675		Monthly Average (>0.50)	0.0028	
Cu, Maximum	0.0095	0.0095	Cu, Maximum	0.04	0.04	Cu, Maximum	0.0058	0.0058
Cu, Exceedance (>0.6)	0	0	Cu, Exceedance (>0.6)	0	0	Cu, Exceedance (>0.6)	0	0
Monthly Average (>0.30)	0.0095		Monthly Average (>0.30)	0.011725		Monthly Average (>0.30)	0.0058	
Pb, Maximum	0.0032	0.0032	Pb, Maximum	0.013	0.013	Pb, Maximum	0.0014	0.0014
Pb, Exceedance (>0.4)	0	0	Pb, Exceedance (>0.4)	0	0	Pb, Exceedance (>0.4)	0	0
Monthly Average(>0.20)	0.0032		Monthly Average(>0.20)	0.003743		Monthly Average(>0.20)	0.0014	
Ni, Maximum	0.0077	0.0077	Ni, Maximum	0.028	0.028	Ni, Maximum	0.004	0.004
Ni, Exceedance (>1.0)	0	0	Ni, Exceedance (>1.0)	0	0	Ni, Exceedance (>1.0)	0	0
Monthly Average (>0.50)	0.0077		Monthly Average (>0.50)	<0.002		Monthly Average (>0.50)	0.004	
Zn, Maximum	0.029	0.0290	Zn, Maximum	0.12	0.12	Zn, Maximum	0.022	0.022
Zn, Exceedance (>1.0)	0	0	Zn, Exceedance (>1.0)	0	0	Zn, Exceedance (>1.0)	0	0
Monthly Average (>0.50)	0.029		Monthly Average (>0.50)	0.0795		Monthly Average (>0.50)	0.022	
TSS, Maximum	230	230	TSS, Maximum	510	510	TSS, Maximum	120	120
TSS, Exceedance (>30)	1	1	TSS, Exceedance (>30)	1	1	TSS, Exceedance (>30)	1	1
Monthly Average (>15.00)	230	1	Monthly Average (>15.00)	142	1	Monthly Average (>15.00)	120	1
Radium, Maximum	0.002	0.002	Radium, Maximum	0.044	0.044	Radium, Maximum	<0.002	<0.002
Radium, Exceedance (>1.11 Bq/L)	0	0	Radium, Exceedance (>1.11 Bq/L)	0	0	Radium, Exceedance (>1.11 Bq/L)	0	0
Monthly Average (>0.37 Bq/L)	0.002		Monthly Average (>0.37 Bq/L)	0.012		Monthly Average (>0.37 Bq/L)	<0.002	
ALT, Pass (RT)	0	0	ALT, Fail (RT)	1	1	ALT, Fail (DM)	1	1
ALT, Fail (RT)	1	1	ALT, Fail (DM)	0	0	ALT, Fail (DM)	0	0

**Table 8: Teck Resources Ltd 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

DPM - Dam C	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples	2	4	4	1	2	3	2	4	5	4	2	4	37
pH, Maximum (units)	7.56	7.64	7.71	6.88	7.50	6.63	6.87	7.24	7.21	7.13	7.08	7.21	7.71
pH, Minimum (units)	7.42	7.56	7.34		7.23	6.54	5.92	7.09	6.97	6.32	6.73	6.84	5.92
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	0.005	0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	0.01	0.02	0.02	0.01	0.02
As, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.50)	0.0045	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.0125	<0.01	
Cu, Maximum	0.069	0.097	0.102	0.07	0.106	0.169	0.172	0.114	0.169	0.062	0.05	0.272	0.272
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.30)	0.0645	0.09	0.0848	0.07	0.069	0.148	0.1285	0.093	0.1134	0.0583	0.047	0.147	
CN, Maximum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.01	0.007	<0.01	<0.005	<0.005	<0.005	<0.01
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	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	
Pb, Maximum	0.0102	0.01	0.01	<0.007	0.009	0.017	0.013	0.025	0.026	0.011	<0.007	0.009	0.026
Pb, Exceedance (>0.4)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.20)	0.0086	0.0076	<0.007	<0.007	<0.007	0.013	0.0125	0.0178	0.016	0.007	<0.007	<0.007	
Ni, Maximum	0.0044	0.006	0.005	<0.004	<0.004	0.006	<0.004	<0.004	0.006	0.004	<0.004	0.006	0.006
Ni, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.50)	0.0035	0.005	<0.004	<0.004	<0.004	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0048	
Zn, Maximum	0.259	0.29	0.214	0.158	0.138	0.296	0.459	0.201	0.404	0.245	0.312	0.661	0.661
Zn, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<0.50)	0.2435	0.2663	0.188	0.158	0.1015	0.260	0.301	0.1335	0.3504	0.2355	0.307	0.4938	
TSS, Maximum	2	3	3	3	3	2	5	5	4	6	2	<2	6
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (<15.00)	2	<2	<2	3	2.5	<2	4.5	3.5	2.6	3.25	2	<2	
Ra-226, Maximum		<0.005	0.014	0.013	<0.005	0.011	0.01	0.036	0.02	0.026	<0.005	<0.005	0.036
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)		<0.005	0.014	0.013	<0.005	0.011	0.01	0.0355	0.0145	0.0165	<0.005	<0.005	

**Table 8 Continued: Teck Resources Ltd 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

DPM - Dam C	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Ammonia, Maximum	1.3	2.2	2	1.9	0.9	1.7	2.3	3.4	4.7	4.8	2.9	2.8	4.8
Cd, Maximum (ug/L)	1.76	3	2	<1	<1	2	3	2	4	3	2	4	4
Fe, Maximum	0.96	0.17	0.306	0.547	0.458	0.365	0.515	0.427	0.193	0.217	0.197	0.402	0.96
Hg, Maximum (ug/L)	0.02	<0.01	<0.01	<0.01	0.02	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02
Nitrate, Maximum	0.98	1.3	1.67	0.64	0.31	0.59	0.69	0.55	0.84	0.83	0.66	4.76	4.76
TDS, Maximum	731	1070	1050	931	369	689	894	1150	1380	1420	974	1060	1420
ALT, Pass (RT)	1	1	1	1	1	1	1	1	1	2	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	1	1	1	0	1	1	2	1	1	12
ALT, Fail (DM)	0	0	0	0	0	0	1	0	0	0	0	0	1

**Table 9: Vale Newfoundland and Labrador Ltd (Voisey's Bay) 2014 Effluent Discharge Criteria Summary (mg/L, unless noted)**

Treated Effluent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	4	4	5	4	4	5	4	4	5	4	3	5	51
pH, Maximum (units)	8.69	8.80	8.36	8.81	8.45	7.20	7.54	7.58	7.07	8.60	7.97	8.35	8.81
pH, Minimum (units)	6.34	7.62	7.59	7.94	7.08	6.57	6.79	6.72	6.81	7.25	7.24	6.86	6.34
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	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	<0.001
Cu, Maximum	0.0026	0.0041	<0.002	<0.002	0.0024	0.0056	0.002	0.0025	0.002	<0.002	<0.002	0.0032	0.0056
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	0.00206	<0.002
Pb, Maximum	<0.0005	0.0007	<0.0005	0.00056	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007
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	<0.0005
Ni, Maximum	0.053	0.048	0.056	0.041	0.089	0.1800	0.095	0.033	0.029	0.038	0.054	0.027	0.18
Ni, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.046	0.0445	0.0502	0.041	0.0573	0.0782	0.0693	0.0215	0.0262	0.0305	0.036	0.0238	<0.005
Zn, Maximum	0.0061	0.021	0.029	0.01	0.0061	0.0063	0.006	0.0076	<0.005	0.008	<0.005	<0.005	0.029
Zn, Exceedance (>1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.005	0.009	0.0092	0.00695	<0.005	<0.005	<0.005	<0.005	<0.005	0.00505	<0.005	<0.005	<0.005
TSS, Maximum	1.8	2.6	1.8	2.4	4.8	7.1	2	3.6	2.4	2.8	4.2	2.8	7.1
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>15.00)	1.10	1.3	1.36	<5.0	1.75	1.96	1.15	2.125	1.42	1.4	3.2	1.88	<0.005
Ra-226, Maximum (Bq/l)	<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
Monthly Average (>0.37)	<0.010	<0.010	<0.010			<0.010	<0.010		<0.010			<0.010	<0.010
Ammonia, Maximum	1	0.99	1.20	1.1	1.4	1.3	1.3	1.1	1	0.91	1.1	1.2	1.4
Cd, Maximum (ug/L)	0.029	0.037	0.015	0.095	0.016	0.018	0.013	<0.010	0.012	<0.010	0.017	0.019	0.095

**Table 9 Continued: Vale Newfoundland and Labrador Ltd (Voisey's Bay) 2014 Effluent Discharge Criteria Summary**  
 (mg/L, unless noted)

Treated Effluent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Fe, Maximum	0.9	0.63	0.61	0.35	0.45	2.2	0.28	1.1	0.33	0.41	0.66	0.92	2.2
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	<0.013
Nitrate, Maximum	0.97	0.98	1.10	1.1	1.60	1.5	1.50	1.5	1.3	1.3	1.5	1.6	1.6
TDS, Maximum	1600	1600	1600	1700	1700	1200	1300	1300	1300	1700	1400	1400	1700
TPH, Maximum	0.3	0.31	0.31	0.29	0.34	0.25	0.38	0.38	0.24	0.27	0.22	0.28	0.38
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	0	1	1	1	0	1	1	1	10
ALT, Fail (DM)	0	0	0	0	1	0	0	0	1	0	0	0	2

**Table 10: Wabush Mines 2014 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	4	5	4	4	5	4	6	4	4	5	53
pH, Maximum (units)	7.57	7.52	7.57	7.54	7.58	7.47	7.71	7.78	7.78	7.78	7.73	7.56	7.78
pH, Minimum (units)	7.45	7.37	7.39	7.38	7.34	7.24	7.39	7.68	7.69	7.66	7.58	7.44	7.24
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	0.0013	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0013
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	<0.002	<0.002	<0.002	<0.002	0.0023	<0.002	0.003	0.0026	<0.002	<0.002	<0.002	<0.002	0.003
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	0.0006	<0.0005	<0.0005	<0.0005	0.00072	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.00072
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	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0024
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	<0.0020	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Zn, Maximum	<0.005	0.028	0.0068	0.0054	0.0108	0.0078	0.0151	0.0064	0.0052	0.0193	0.0093	<0.005	0.028
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.005	0.01065	<0.005	<0.005	0.00575	<0.005	0.0073	<0.005	<0.005	0.010125	0.006375	<0.005	
TSS, Maximum	1.2	3.8	2.8	2.4	38	43	12	8.6	14	15	13	4.2	43
TSS, Exceedance (>30)	0	0	0	0	1	2	0	0	0	0	0	0	3
Monthly Average(>15.00)	<1.0	2.0	2.3	<2.0	14.3	36.5	6.7	5.5	5.7	11.0	7.8	3.16	1
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						<0.050	<0.050	0.083	0.29				0.29
Cd, Maximum (ug/L)						0.039	<0.010	<0.010	<0.010				0.039
Fe, Maximum						6.48	0.578	0.37	0.312				6.48
Hg, Maximum (ug/L)						<0.013	<0.013	<0.013	<0.013				<0.013

**Table 10 Continued: Wabush Mines 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Flora Lake Discharge	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Nitrate, Maximum						0.28	0.29	0.29	0.27				0.29
TDS, Maximum						50	38	42	40				50
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)	1			1			1		1				4
ALT, Fail (DM)	0			0			0		0				0

Knoll Lake	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Total
Samples	4	4	4	5	4	4	5	4	6	4	2	46
pH, Maximum (units)	7.33	7.24	7.10	7.12	7.52	7.26	7.50	7.47	7.58	7.56	7.39	7.58
pH, Minimum (units)	7.18	6.80	6.90	6.97	7.11	6.99	7.20	7.27	7.45	7.22	7.30	6.80
H, 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	<0.001
Cu, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	0.0028	<0.002	<0.002	<0.002	<0.002	0.003
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	<0.0020	<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	<0.0005
Ni, Maximum	0.0025	<0.002	0.007	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.007
Ni, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.002	<0.002	0.0025	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Zn, Maximum	0.0096	0.0149	0.0129	0.012	0.0084	0.007	0.0121	0.0098	0.013	0.017	0.0181	0.0181
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	0.008625	0.013475	0.01225	0.00896	0.007875	0.0056	0.00912	0.00718	0.00703	0.010175	0.0103	

**Table 10 Continued: Wabush Mines 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Knoll Lake	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Total
TSS, Maximum	22	1.8	3.2	4.5	5.6	1.4	1.6	3.2	4.4	<2.0	2.6	22
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average(>15.00)	11.10	<1.0	1.88	1.66	2.425	<1.0	1.10	2	1.55	<2.0	1.55	
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						0.092	0.069	0.23	0.44			0.44
Cd, Maximum (ug/L)						<0.010	<0.010	<0.010	<0.010			<0.010
Fe, Maximum						0.053	<0.050	<0.050	0.272			0.272
Hg, Maximum (ug/L)						<0.013	<0.013	<0.013	<0.013			<0.013
Nitrate, Maximum						1.8	1.9	2	1.7			2
TDS, Maximum						53	53	56	55			56
TPH, Maximum	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.010	<0.010	<0.10
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

West Pit Settling Pond	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	4	4	4	5	4	4	5	4	6	4	4	1	49
pH, Maximum (units)	7.20	7.25	7.04	7.18	7.35	7.32	7.39	7.59	7.74	7.58	7.58	7.67	7.74
pH, Minimum (units)	7.00	6.93	6.92	7.08	7.13	7.00	7.24	7.28	7.43	7.41	7.31		6.92
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	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	<0.002	<0.002	0.0043	<0.002	<0.002	0.0043
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	

**Table 10 Continued: Wabush Mines 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

West Pit Settling Pond	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
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	<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	<0.002
Zn, Maximum	<0.005	0.009	0.0279	0.0084	0.0068	<0.005	0.011	0.0065	0.0053	0.0292	<0.0050	<0.0050	0.0292
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average (>0.50)	<0.005	0.005775	0.00995	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.011825	<0.0050	<0.0050	<0.0050
TSS, Maximum	1	1.4	1	1.3	3	2.2	1	1.8	1.8	2.4	14	<1.0	14
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	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	3.875	<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			<0.010
Ammonia, Maximum						<0.050	<0.050	0.13	0.33				0.33
Cd, Maximum (ug/L)						<0.010	<0.010	<0.010	<0.010				<0.010
Fe, Maximum						<0.050	<0.050	<0.050	<0.050				<0.050
Hg, Maximum (ug/L)						<0.013	<0.013	<0.013	<0.013				<0.013
Nitrate, Maximum						0.13	0.59	0.54	0.82				0.82
TDS, Maximum						49	43	43	45				49
TPH, Maximum	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.010		<0.10
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 10 Continued: Wabush Mines 2014 Effluent Discharge Criteria Summary (mg/L, unless noted)**

East Pit # 2	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	4	4	4	5	4	4	5	4	6	4	4	5	53
pH, Maximum (units)	7.60	7.64	7.67	7.73	7.67	7.72	7.89	7.90	7.95	7.96	7.88	7.73	7.96
pH, Minimum (units)	7.48	7.51	7.52	7.59	7.47	7.59	7.62	7.78	7.83	7.86	7.58	7.00	7.00
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	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	<0.001
Cu, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0041	<0.002	<0.002	<0.002	<0.002	<0.002	0.0041
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	<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	<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	<0.002
Zn, Maximum	<0.005	0.0061	0.0058	0.0053	0.0072	0.0089	0.0095	0.0061	0.0075	0.0133	0.0138	0.0073	0.0138
Zn, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn, Monthly Average (>0.50)	<0.005	0.0057	<0.005	<0.005	<0.005	0.0067	<0.005	<0.005	0.0086	0.0053	<0.0050		
TSS, Maximum	5	2.2	<2.0	3.2	9.5	2.8	8	5.8	6.8	<2.0	1.8	8.2	9.5
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Average(>15.00)	2.55	1.05	<2.0	1.18	6.775	1.95	3	2.65	2.3	<2.0	1.325	3.04	
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			<0.010
Ammonia, Maximum						0.094	<0.050	0.26	0.19				0.26
Cd, Maximum (ug/L)						<0.010	<0.010	<0.010	<0.010				<0.010
Fe, Maximum						0.073	0.072	<0.050	0.427				0.427

**Table 10 Continued: Wabush Mines 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

East Pit # 2	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Hg, Maximum (ug/L)						<0.013	<0.013	<0.013	<0.013				<0.013
Nitrate, Maximum						3.2	2.2	1.9	1.6				3.2
TDS, Maximum						100	93	93	88				100
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)	1			1			1		1				4
ALT, Fail (DM)	0			0			0		0				0

Deep Well Discharge	Jun	Jul	Aug	Sept	Total
Samples	1	1	1	1	4
pH, Maximum (units)	7.07	7.25	7.34	7.21	7.34
pH, Minimum (units)					
pH, Exceedance (<5.5, >9.0)	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	0
Monthly Average (>0.50)	<0.001	<0.001	<0.001	<0.001	
Cu, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002
Cu, Exceedance (>0.6)	0	0	0	0	0
Monthly Average (>0.30)	<0.002	<0.002	<0.002	<0.002	
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	0
Monthly Average (>0.50)	<0.002	<0.002	<0.002	<0.002	

Deep Well Discharge	Jun	Jul	Aug	Sept	Total
Samples	1	1	1	1	4
Zn, Maximum	<0.005	<0.005	<0.005	<0.005	<0.005
Zn, Exceedance (>1.0)	0	0	0	0	0
Monthly Average (>0.50)	<0.005	<0.005	<0.005	<0.005	<0.005
TSS, Maximum	<1.0	<1.0	1	<1.0	1
TSS, Exceedance (>30)	0	0	0	0	0
Monthly Average(>15.00)	<1.0	<1.0	1	<1.0	<1.0
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	<0.050	<0.050	0.053	0.077	0.077
Cd, Maximum (ug/L)	<0.010	<0.010	<0.010	<0.010	<0.010
Fe, Maximum	<0.050	<0.050	<0.050	<0.050	<0.050
Hg, Maximum (ug/L)	<0.013	<0.013	<0.013	<0.013	<0.013
Nitrate, Maximum	0.71	0.13	0.16	0.24	0.71
TDS, Maximum	42	48	47	46	48
TPH, Maximum	<0.10				<0.10

### **3) Petroleum Refining**

#### **a) North Atlantic Refining Ltd**

Current COA

Approval #: AA13-115583

Issue date: November 15, 2013

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 156 samples were collected in 2014. There were three pH measurements that exceeded the upper pH limit in 2014. Note that pH is analysed daily at this facility.

#### Environmental Effects Monitoring

There were no EEM submissions for 2014.

See Table 11: North Atlantic Refining Ltd 2014 Effluent Discharge Criteria Summary.

**Table 11: North Atlantic Refining Ltd 2014 Effluent Discharge Criteria Summary**

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
<b>Samples Taken</b>	13	12	13	13	13	13	14	13	13	13	13	13	156
Reference Crude Rate (bbls / stream day)	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	
Avg Flow (Cdn. gal day)	1,360,000	920,000	1,540,000	1,510,000	1,340,000	1,260,000	980,000	1,390,000	1,190,000	1,780,000	1,530,000	1,600,000	
<b>Oil &amp; Grease</b>													
Average (300 lbs)	155.04	41.08	61.45	30.32	32.27	15.44	12.19	18.87	23.44	30.54	32.94	46.06	
Maximum (lbs)	324.72	88.13	291.91	87.47	69.46	27.71	20.87	51.46	69.74	95.25	63.68	121.88	324.7
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
<b>Phenol</b>													
Average (30 lbs)	1.56	0.14	0.15	0.66	0.17	0.13	0.22	0.60	0.24	0.21	0.23	0.25	
Maximum (lbs)	9.07	0.28	0.39	4.30	0.29	0.23	0.80	3.25	0.82	0.79	0.89	0.65	9.07
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
<b>Sulphide</b>													
Average (10 lbs)	0.80	0.40	0.78	0.44	0.42	0.20	0.70	0.58	0.45	0.55	0.41	0.45	
Maximum (lbs)	3.11	0.80	4.31	0.93	1.10	0.49	4.79	2.40	1.65	2.38	1.12	1.09	4.79
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
<b>Ammonia Nitrogen</b>													
Average (360 lbs)	66.06	88.37	125.74	73.71	14.52	7.59	6.19	7.52	7.50	19.74	13.46	16.76	
Maximum (lbs)	145.47	268.55	231.21	181.19	41.98	14.30	10.88	22.04	15.60	95.25	44.39	38.39	268.55
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

\*Not to exceed more than one day per month

**Table 11 Continued: North Atlantic Refining Ltd 2014 Effluent Discharge Criteria Summary**

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
<b>TSS</b>													
Average (720 lbs)	325.11	114.68	247.24	271.00	196.92	132.66	136.50	126.31	140.12	231.91	246.598	319.24	
Maximum (lbs)	696.38	407.00	917.71	510.00	486.04	438.76	960.00	428.86	475.05	1031.87	822.94	911.74	1031.9
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
<b>pH at Outfall</b>													
Samples	30	28	31	29	31	30	31	31	30	30	29	31	361
Average (units)	7.66	7.47	7.10	7.26	7.53	7.93	8.06	7.98	7.96	7.85	7.66	7.69	
Maximum (units)	9.30	7.90	8.30	7.70	8.30	9.20	8.80	8.70	8.30	8.60	7.90	8.00	9.30
Minimum (units)	7.10	7.00	6.60	6.80	7.00	7.40	7.40	7.30	7.60	7.20	7.30	7.50	6.60
Exceedances (< 5.5, > 9.0)	2	0	0	0	0	1	0	0	0	0	0	0	3
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

\*Not to exceed more than one day per month

**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 2014. There were 12 rainbow trout ALTs with no failures and 51 *Daphnia magna* ALTs with no failures performed at the Effluent Treatment location. There were 12 rainbow trout ALTs with no failures and 51 *Daphnia magna* ALTs with no failures performed at the East Sewer location.

Environmental Effects Monitoring

There were no EEM submissions for 2014.

See Table 12: Corner Brook Pulp and Paper 2014 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. 13 samples were collected in 2014 and there were no reported exceedances.

Environmental Effects Monitoring

There were no EEM activities at this site in 2014.

See Table 13: Grand Falls Mill 2014 Effluent Discharge Criteria Summary.

**Table 12: Corner Brook Pulp and Paper 2014 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
Month	Tonne/Day	Tonne/Day	kg / FMT	mg/L	mg/L	Tonne/Day	kg / FMT	mg/L	mg/L	Tonne/Day	Tonne/Day
Jan-14	604.4	2.24	3.7	4.84	42.94	0.39	0.7	2.36	7.21	9.58	6.39
Feb-14	704.1	4.07	5.8	3.14	75.64	0.98	1.4	1.75	18.42	9.58	6.39
Mar-14	638.4	3.21	5.0	3.58	58.68	0.54	0.8	1.46	10.08	9.58	6.39
Apr-14	603.4	3.53	5.8	7.57	63.57	0.31	0.5	12.43	2	9.58	6.39
May-14	713.4	2.17	3.0	7.68	38.90	0.28	0.4	1.00	5	9.58	6.39
Jun-14	717.3	1.78	2.5	1.50	32.30	0.34	0.5	0.25	6.5	9.58	6.39
Jul-14	707.3	1.09	1.5	1.39	19.32	0.39	0.6	0.13	7.2	9.58	6.39
Aug-14	699.8	1.16	1.7	1.39	20.77	0.32	0.5	0.67	6.1	9.58	6.39
Sep-14	596.8	1.90	3.2	1.50	48.80	0.32	0.5	1.38	11.3	9.58	6.39
Oct-14	669.0	2.30	3.4	1.39	41.00	0.37	0.6	0.33	6.8	9.58	6.39
Nov-14	731.9	2.79	3.8	1.47	50.43	0.48	0.6	1.25	8.3	9.58	6.39
Dec-14	694.8	3.15	4.5	3.87	53.16	0.7	1.0	0.64	12.07	9.58	6.39

**Table 12 Continued: Corner Brook Pulp and Paper 2014 Effluent Discharge Criteria**

Month	96 Hr LC50 (Rainbow Trout)				48 Hr LC50 ( <i>Daphnia magna</i> )			
	East Sewer		Effluent Treatment		East Sewer		Effluent Treatment	
	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail
Jan-14	1	0	1	0	4	0	4	0
Feb-14	1	0	1	0	4	0	4	0
Mar-14	1	0	1	0	4	0	4	0
Apr-14	1	0	1	0	4	0	4	0
May-14	1	0	1	0	4	0	4	0
Jun-14	1	0	1	0	5	0	5	0
Jul-14	1	0	1	0	4	0	4	0
Aug-14	1	0	1	0	4	0	4	0
Sep-14	1	0	1	0	5	0	5	0
Oct-14	1	0	1	0	4	0	4	0
Nov-14	1	0	1	0	4	0	4	0
Dec-14	1	0	1	0	5	0	5	0

**Table 13: Grand Falls Mill 2014 Effluent Discharge Criteria Summary**

	Samples	TPH, Maximum	TPH, Exceedance (>15 mg/L)	pH, Maximum (units)	pH, Minimum (units)	pH, Exceedance (<5.5, >9.0 pH units)
January	2	0.74	0	7.62	7.41	0
February	1	0.11	0	8.09		0
March	1	<0.10	0	7.67		0
April	1	0.12	0	7.39		0
May	1	0.11	0	7.35		0
June	1	0.59	0	7.45		0
July	1	0.37	0	7.90		0
August	1	0.32	0	7.61		0
September	1	0.26	0	7.98		0
October	1	0.12	0	7.74		0
November	1	0.24	0	7.44		0
December	1	0.18	0	7.19		0
Total	13	0.74	0	8.09	7.41	0

## **5) Thermal Generation**

### **a) Newfoundland and Labrador Hydro Thermal Generating Station**

Current COA Approval #: AA11-085563  
Issue date: August 31, 2011  
Expiration: August 31, 2016

The Newfoundland and Labrador Hydro Thermal Generating Station located in Holyrood has two discharge points, the continuous basin outfall and the periodic basin outfall. The effluent monitoring program consists of five parameters and ALT.

Continuous Basin: 61 samples were collected in 2014 and there was one reported TSS exceedance in September. There were 12 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: 63 samples were collected in 2014. There were 37 rainbow trout ALTs with one failure 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.

#### Environmental Effects Monitoring

The Revised EEM Study Design was submitted in 2014.

See Table 14: Newfoundland and Labrador Hydro Thermal Generating Station 2014 Effluent Discharge Criteria Summary.

**Table 14: Newfoundland and Labrador Hydro Thermal Generating Station 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

CONTINUOUS BASIN	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Samples	5	4	6	5	6	4	6	5	5	6	4	5	61
pH Maximum (units)	7.10	6.70	8.00	7.30	6.89	6.70	7.00	7.18	7.10	7.22	7.20	7.50	8.0
pH Minimum (units)	6.60	6.50	6.40	6.50	6.60	6.30	6.10	6.70	6.80	6.10	6.70	6.60	6.10
pH Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Fe Maximum	0.160	0.120	0.130	0.120	0.150	0.079	0.500	0.440	1.860	0.760	0.230	0.253	1.860
Fe Exceedance (>10 mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni Maximum	0.003	0.002	0.017	0.003	0.006	0.007	0.024	0.010	0.024	0.079	0.020	0.009	0.079
Ni Exceedance (>0.5 mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
V Maximum	0.022	0.038	0.0140	0.0150	0.0150	0.0430	0.043	0.021	0.129	0.075	0.134	0.059	0.134
V Exceedance (>0.5 mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
TSS Maximum	6.0	6.0	12.8	24.5	22.3	7.0	2.3	6.5	144.3	24.9	4.8	3.0	144.3
TSS Exceedance (>30 mg/L)	0	0	0	0	0	0	0	0	1	0	0	0	1
ALT, Pass (RT)	1	1	1	1		1	1	1	1	0	1	1	10
ALT, Fail (RT)	0	1	0	0		0	0	0	0	1	0	0	2

**Table 14 Continued: Newfoundland and Labrador Hydro Thermal Generating Station 2014 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	6	6	4	11	4	5	3	4	4	2	9	5	63
pH Maximum (units)	8.70	8.70	8.70	8.60	8.60	8.50	8.60	8.70	9.00	8.40	8.70	8.60	9.00
pH Minimum (units)	8.60	8.60	8.50	8.40	8.50	8.50	7.50	7.90	8.30	8.00	7.90	8.00	7.50
pH Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
Fe Maximum	1.07	0.40	0.560	0.770	0.670	0.360	0.360	0.385	0.760	0.697	2.61	0.28	2.610
Fe Exceedance (>10 mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni Maximum	0.165	0.071	0.150	0.065	0.055	0.046	0.066	0.061	0.081	0.081	0.138	0.082	0.165
Ni Exceedance (>0.5 mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
V Maximum	0.124	0.018	0.030	0.153	0.070	0.096	0.142	0.249	0.290	0.110	0.058	0.048	0.290
V Exceedance (>0.5 mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
TSS Maximum	6.0	2.5	11.5	13.5	5.5	4.8	6.0	11.1	4.0	4.3	11.2	2.6	13.5
TSS Exceedance (>30 mg/L)	0	0	0	0	0	0	0	0	0	0	0	0	0
ALT, Pass (RT)	5	2	2	5	4	1	2	2	2	1	7	3	36
ALT, Fail (RT)	0	0	0	0	0	0	1	0	0	0	0	0	1

## **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 three samples at each of two locations in 2014 for effluent monitoring. There were no reported exceedances during the year.

#### Environmental Effects Monitoring

There is no EEM program at this site.

See Table 15: Atlantic Minerals Ltd (Lower Cove) 2014 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 four samples at each of two locations in 2014 for effluent monitoring. pH was monitored at Series 1 and there was one exceedance. Six parameters were analysed at the Shale Quarry location and there was one pH exceedance and three TDS exceedances reported.

#### Environmental Effects Monitoring

There is no EEM program at this site.

See Table 16: Atlantic Minerals Ltd (North Star Cement) 2014 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 one month in 2014. Two 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 Tailing Pond 1 prior to the commencement of the operation, this is not considered an exceedance attributable to Barite Mud Services Inc.

#### Environmental Effects Monitoring

There is no EEM program at this site.

See Table 17: Barite Mud Services Inc 2014 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 NL ENVC has undertaken effluent monitoring at several locations around the town of Buchans. The intent of this monitoring is to evaluate the efficiency of remediation efforts undertaken in the area following the closure of the mine. 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 2014. There were two zinc exceedances reported.

TP2: There were two samples collected at TP2 in 2014 and there was one zinc exceedance reported.

Mucky Ditch: There were two samples collected at the Mucky Ditch in 2014. There was one copper exceedance, one lead exceedance, two zinc exceedances and two cadmium exceedances reported.

Polishing Pond: There were two samples collected at the Polishing Pond in 2014. There were two zinc exceedances reported.

Environmental Effects Monitoring

There is no EEM program at this site.

See Table 18: Buchans 2014 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 2014 there were no discharges to the environment. As such, data was collected for information only in the settling pond during 2014 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. 44 samples were collected in 2014. Exceedances included: four pH, four iron, 10 TDS, two TSS, 35 BOD, 14 ammonia, 14 oil and grease and 18 phenol.

### Environmental Effects Monitoring

The EEM Interpretive Report was reviewed in 2014.

See Table 19: Carino Processing Ltd 2014 Effluent Discharge Criteria Summary.

## **g) 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 2014, there were nine discharges to the environment and monitoring indicated that all discharges were compliant with the exception of one zinc and one lead exceedance.

### Environmental Effects Monitoring

There is no EEM program at this site.

See Table 20: DJ Composites 2014 Effluent Discharge Criteria Summary.

## **h) 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 tailing impoundment area of the mine site. There was one monitoring event conducted in 2014 and there was one copper exceedance reported.

### Environmental Effects Monitoring

There is no EEM program at this site.

See Table 21: Gullbridge Mine Site 2014 Effluent Discharge Criteria Summary.

### **i) Hebron Bull Arm Site**

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

Hebron monitors effluent discharge from the site located at Bull Arm as per their Environmental Protection Plan. In 2014, TSS and TPH were measured at two discharge locations, the Trench and the Filters. Both of these locations discharge into the ocean. There was one TSS exceedance reported at the Trench location. The discharge from these locations ceased in April and May 2014.

Environmental Effects Monitoring

There is no EEM program at this site.

See Table 22: Hebron Bull Arm Site 2014 Effluent Discharge Criteria Summary

### **j) 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 2014 sampling event. There were five rainbow trout ALTs with no failures performed at the site.

Environmental Effects Monitoring

There is no EEM program at this site.

See Table 23: Hope Brook Mine Site 2014 Effluent Discharge Criteria Summary.

### **k) 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. Discharge commenced from Settling Pond #1 in April and Settling Pond #2 in October.

Settling Pond #1 Weir:    60 samples were collected and analysed from this location. There were three TDS, three iron, 18 TSS, and five ammonia exceedances reported.

Settling Pond #2 Weir:    13 samples were collected and analysed from this location. There was one TSS exceedance reported.

#### Environmental Effects Monitoring

There is no EEM program at this site.

See Table 24: Husky Oil Operations Ltd-Atlantic Region 2014 Effluent Discharge Criteria Summary.

#### **I) Labatt Breweries Newfoundland**

##### Current COA

Approval #: AA09-125523  
Issue date: December 10, 2009  
Expiration: December 10, 2014  
Extension: February 10, 2015

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 2014. There were 12 pH samples reported as out of acceptable range, 38 BOD exceedances and 17 TSS exceedances.

#### Environmental Effects Monitoring

There is no EEM program at this site.

See Table 25: Labatt Breweries Newfoundland 2014 Effluent Discharge Criteria Summary.

#### **m) 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 2014. There were 23 pH samples reported as out of acceptable range, 45 BOD exceedances and 16 TSS exceedances.

#### Environmental Effects Monitoring

There is no EEM program at this site.

See Table 26: Molson Coors Canada, St. John's 2014 Effluent Discharge Criteria Summary.

#### **n) 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 EEM Interpretive Report was received in 2014.

See Table 27: Newfoundland Transshipment Terminal 2014 Effluent Discharge Criteria Summary.

**o) Pardy's Waste Management Facility – Incinerator Road**

<u>Current COA</u>	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 2014, 43 samples of effluent were collected and analysed. Reported exceedances included: three TSS, nine BOD, 12 total coliform, 11 fecal coliform, 28 orthophosphate, 29 TDS, 16 nitrate, four TPH and 14 ammonia. There was one rainbow trout ALT with no failure performed at this location.

Environmental Effects Monitoring

There is no EEM program at this site.

See Table 28: Pardy's Waste Management Facility – Incinerator Road 2014 Effluent Discharge Criteria Summary.

**p) 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 2014, there was discharge from the Polishing Pond in June, July and December with three samples collected and no reported exceedances. There were three rainbow trout ALTs with no failures performed at this location.

Environmental Effects Monitoring

There is no EEM program at this site.

See Table 29: Vale Newfoundland and Labrador Ltd (Argentia) 2014 Effluent Discharge Criteria Summary.

**q) Vale Newfoundland and Labrador Ltd (Long Harbour Hydrometallurgical Plant)**

Current COA

Approval #: AA13-125573  
Issue date: December 18, 2013  
Expiration: December 18, 2018

Vale Newfoundland and Labrador Ltd Long Harbour Hydrometallurgical Plant had seven active discharge points in 2014 (D2, D3, D5, D11, D13, D18 and D25). The effluent monitoring program consists of numerous parameters, most of which have regulatory environmental limits. Samples are collected only when there is discharge.

D2: A total of 25 samples were taken at this location. There were five TSS exceedances reported.

D3: A total of 22 samples were taken at this location. There were three TSS exceedances reported.

D5: A total of 22 samples were taken at this location. There were three TSS exceedances reported.

D11: There were 19 samples taken at this location. There was one pH exceedance and three TSS exceedances reported.

D13: A total of 22 samples were taken at this location with one pH exceedance and one TSS exceedance reported.

D18: A total of four samples were taken at this location in 2014 with no reported exceedances.

D25: 24 samples were taken at this location. There were three ammonia exceedances reported.

Environmental Effects Monitoring

There were no EEM activities at this site in 2014.

See Table 30: Vale Newfoundland and Labrador Ltd (Long Harbour) 2014 Effluent Discharge Criteria Summary.

**Table 15: Atlantic Minerals Ltd (Lower Cove) 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Duck Pond (DL-HC Quarry)	Jun	Sept	Nov	Total	DL Quarry 2	Jun	Sept	Nov	Total
Samples	1	1	1	3	Samples	1	1	1	3
pH, Maximum (units)	7.88	8.18	7.99	8.18	pH, Maximum (units)	8.60	8.13	8.00	8.6
pH, Minimum (units)					pH, Minimum (units)				
pH, Exceedance (<5.5, >9.0)	0	0	0	0	pH, Exceedance (<5.5, >9.0)	0	0	0	0
As, Maximum	<0.001	<0.001	<0.001	<0.001	As, Maximum	<0.001	<0.001	<0.001	<0.001
As, Exceedance (>1)	0	0	0	0	As, Exceedance (>1)	0	0	0	0
Cu, Maximum	<0.002	<0.002	<0.002	<0.002	Cu, Maximum	<0.002	<0.002	<0.002	<0.002
Cu, Exceedance (> 0.6)	0	0	0	0	Cu, Exceedance (> 0.6)	0	0	0	0
Pb, Maximum	0.00051	0.00067	0.011	0.011	Pb, Maximum	0.0037	0.018	0.0036	0.018
Pb, Exceedance (>0.4)	0	0	0	0	Pb, Exceedance (>0.4)	0	0	0	0
Ni, Maximum	<0.002	0.0027	<0.002	0.0027	Ni, Maximum	<0.002	<0.002	0.0025	0.0025
Nii, Exceedance (>1)	0	0	0	0	Ni, Exceedance (>1)	0	0	0	0
Zn, Maximum	<0.005	<0.005	<0.005	<0.005	Zn, Maximum	<0.005	0.0082	0.0065	0.0082
Zn, Exceedance (>1)	0	0	0	0	Zn, Exceedance (>1)	0	0	0	0
TSS, Maximum	2.3	2.8	<1.0	2.8	TSS, Maximum	<2.0	3.9	11	11
TSS, Exceedance (>30)	0	0	0	0	TSS, Exceedance (>30)	0	0	0	0
Ammonia, Maximum	<0.050	1.3	<0.050	1.3	Ammonia, Maximum	<0.050	0.24	0.23	0.24
Fe, Maximum	<0.05	<0.05	<0.05	<0.05	Fe, Maximum	0.054	<0.05	0.23	0.23
Nitrate, Maximum	<0.050	8.8	4.9	8.8	Nitrate, Maximum	<0.050	4.2	3.9	4.2
TDS, Maximum	92	260	230	260	TDS, Maximum	120	250	190	250

**Table 16: Atlantic Minerals Ltd (North Star Cement) 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Series 1	Jul	Aug	Oct	Nov	Total
Samples	1	1	1	1	4
pH, Maximum	9.06	8.69	8.47	8.25	9.06
pH, Exceedance (<5.5, >9.0)	1	0	0	0	1

Shale Quarry	Jul	Aug	Oct	Nov	Total
Samples	1	1	1	1	4
pH, Maximum	8.08	7.99	7.95	7.92	8.08
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TSS, Maximum	9.6	41	5.4	21	41
TSS, Exceedance (>30)	0	1	0	0	1
TDS, Maximum	1200	1100	870	1200	1200
TDS, Exceedance (>1000)	1	1	0	1	3
Ca, Maximum	160	160	130	110	160
Mg, Maximum	25	26	17	15	26
Hardness, Maximum	510	520	390	330	520

**Table 17: Barite Mud Services Inc 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

TP1	Nov	Total
Samples	2	2
pH, Maximum (units)	7.38	7.38
pH, Minimum (units)	7.29	7.29
pH, Exceedance (<5.5, >9.0)	0	0
As, Maximum	<0.002	<0.002
Exceedance (0.5)	0	0
Ba, Maximum	0.24	0.24
Exceedance (5.0)	0	0
B, Maximum	0.006	0.006
Exceedance (5.0)	0	0
Cd, Maximum (ug/L)	7.6	7.6
Exceedance( 0.05)	0	0
Cr, Maximum	<0.002	<0.002
Exceedance (1.0)	0	0
Cu, Maximum	0.006	0.006
Exceedance (0.3)	0	0
Fe, Maximum	0.067	0.067
Exceedance (10 )	0	0
Pb, Maximum	0.19	0.19
Exceedance( 0.2)	0	0
Hg, Maximum (ug/L)	0.015	0.015
Exceedance (0.005)	0	0
Ni, Maximum	<0.002	<0.002
Exceedance (0.5)	0	0

\* Above existing background

TP1	Nov	Total
Samples	2	2
Zn, Maximum	2.6	2.6
Exceedance (0.5)*	0	0
Se, Maximum	<0.002	<0.002
Exceedance (0.01)	0	0
Ag, Maximum	<0.0005	<0.0005
Exceedance (0.05)	0	0
TDS, Maximum	102	102
Exceedance (1000)	0	0
TSS, Maximum	12	12
Exceedance (30)	0	0
Ammonia, Maximum	<0.05	<0.05
Exceedance (2.0)	0	0
Phenol	0.002	0.002
Exceedance (0.1)	0	0
Cyanide	0.003	0.003
Exceedance (0.025)	0	0

**Table 18: Buchans 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

TP1 (Site 1)	Jun	Oct	Total
Samples	1	1	2
pH, Maximum (Units)	7.27	7.32	7.32
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	0.013	0.015	0.015
Cu, Exceedance (>0.3)	0	0	0
Pb, Maximum	0.07	0.106	0.106
Pb, Exceedance (>0.2)	0	0	0
Ni, Maximum	<0.005	<0.005	<0.005
Ni, Exceedance (>0.5)	0	0	0
Zn, Maximum	1.5	1.9	1.9
Zn, Exceedance (>0.5)	1	1	2
TSS, Maximum	<2	<2	<2
TSS, Exceedance (>30)	0	0	0
Ammonia, Maximum	0.07	0.1	0.1
Ammonia, Exceedance (>2)	0	0	0
Cd, Maximum	0.0043	0.0055	0.0055
Cd, Exceedance (>0.05)	0	0	0
Fe, Maximum	0.5	0.25	0.5
Fe, Exceedance (>10)	0	0	0
Hg, Maximum	<0.0001	<0.0001	<0.0001
Hg, Exceedance (>0.005)	0	0	0
Nitrate, Maximum	<0.10	<0.10	<0.1
Nitrate, Exceedance (>10)	0	0	0
TP2 (Site 2)	Jun.	Oct.	Total
Samples	1	1	2
pH, Maximum (Units)	7.33	7.36	7.36
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	0.008	0.007	0.008
Cu, Exceedance (>0.3)	0	0	0
Pb, Maximum	0.027	0.036	0.036
Pb, Exceedance (>0.2)	0	0	0
Ni, Maximum	<0.005	<0.005	<0.005
Ni, Exceedance (>0.5)	0	0	0
Zn, Maximum	0.6	0.49	0.6
Zn, Exceedance (>0.5)	1	0	1
TSS, Maximum	<2	<2	<2
TSS, Exceedance (>30)	0	0	0
Ammonia, Maximum	0.11	0.04	0.11
Ammonia, Exceedance (>2)	0	0	0
Cd, Maximum	0.002	0.0019	0.002
Cd, Exceedance (0.05)	0	0	0
Fe, Maximum	0.2	0.11	0.2
Fe, Exceedance (>10)	0	0	0
Hg, Maximum	<0.0001	<0.0001	<0.0001
Hg, Exceedance (0.005)	0	0	0
Nitrate, Maximum	<0.10	<0.10	<0.1
Nitrate, Exceedance (>10)	0	0	0

**Table 18 Continued: Buchans 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Mucky Ditch (Site 17)	Jun	Oct	Total	Polishing Pond (Site 17)	Jun.	Oct.	Total
Samples	1	1	2	Samples	1	1	2
pH, Maximum (Units)	7.02	7.23	7.23	pH, Maximum (Units)	7.93	7.94	7.94
pH, Minimum (Units)				pH, Minimum (Units)			
pH, Exceedance (<5.5, >9.0)	0	0	0	pH, Exceedance (<5.5, >9.0)	0	0	0
As, Maximum	0.001	<0.001	0.001	As, Maximum	<0.001	<0.001	<0.001
As, Exceedance (>0.5)	0	0	0	As, Exceedance (>0.5)	0	0	0
Cu, Maximum	0.591	0.3	0.591	Cu, Maximum	0.004	0.003	0.004
Cu, Exceedance (>0.3)	1	0	1	Cu, Exceedance (>0.3)	0	0	0
Pb, Maximum	0.276	0.167	0.276	Pb, Maximum	0.002	0.001	0.002
Pb, Exceedance (>0.2)	1	0	1	Pb, Exceedance (>0.2)	0	0	0
Ni, Maximum	0.006	0.007	0.007	Ni, Maximum	<0.005	<0.005	<0.005
Ni, Exceedance (>0.5)	0	0	0	Ni, Exceedance (>0.5)	0	0	0
Zn, Maximum	19	27	27	Zn, Maximum	1.8	0.9	1.8
Zn, Exceedance (>0.5)	1	1	2	Zn, Exceedance (>0.5)	1	1	2
TSS, Maximum	2	<2	2	TSS, Maximum	<2	4	4
TSS, Exceedance (>30)	0	0	0	TSS, Exceedance (>30)	0	0	0
Ammonia, Maximum	0.13	0.11	0.13	Ammonia, Maximum	0.08	0.2	0.2
Ammonia, Exceedance (>2)	0	0	0	Ammonia, Exceedance (>2)	0	0	0
Cd, Maximum	0.0682	0.0817	0.0817	Cd, Maximum	0.0029	0.0018	0.0029
Cd, Exceedance (>0.05)	1	1	2	Cd, Exceedance (>0.05)	0	0	0
Fe, Maximum	0.45	0.06	0.45	Fe, Maximum	0.17	0.35	0.35
Fe, Exceedance (>10)	0	0	0	Fe, Exceedance (>10)	0	0	0
Hg, Maximum	<0.0001	<0.0001	<0.0001	Hg, Maximum	<0.0001	<0.0001	<0.0001
Hg, Exceedance (0.005)	0	0	0	Hg, Exceedance (>0.005)	0	0	0
Nitrate, Maximum	0.16	0.3	0.3	Nitrate, Maximum	<0.10	<0.10	<0.10
Nitrate, Exceedance (>10)	0	0	0	Nitrate, Exceedance (>10)	0	0	0

**Table 19: Carino Processing Ltd 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	2	4	4	4	5	5	2	4	4	4	2	4	44
pH, Maximum (units)	7.26	8.75	8.83	8.83	8.75	7.73	6.07	8.98	7.17	7.41	8.21	9.37	9.37
pH, Minimum (units)	7.01	7.71	6.62	7.25	6.82	6.54	5.42	6.16	6.90	6.90	6.91	7.16	5.42
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	1	0	0	0	0	3	4
As, Maximum Exceedance (>0.5)	<0.001	<0.001		<0.001	0.0019	<0.01	<0.01	<0.001		<0.001		<0.001	0.0019
	0	0		0	0	0	0	0		0		0	0
Ba, Maximum Exceedance (>0.5)	0.0052	0.0063		0.0084	0.0069	0.015	0.033	0.019		0.018		0.0077	0.033
	0	0		0	0	0	0	0		0		0	0
B, Maximum Exceedance (>5.0)	<0.05	<0.05	<0.05	<0.05	0.052	<0.5	<0.5	0.32	<0.5	<0.5	<0.05	<0.05	<0.5
	0	0	0	0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)	0.044	0.048	0.46	0.2	0.049	0.69	1.7	0.4	0.62	0.19	0.088	0.085	1.7
Exceedance(>0.05)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cr, Maximum Exceedance (>1.0)	0.006	0.067	0.0043	0.01	0.0095	0.22	0.025	0.39	0.48	0.31	0.34	0.012	0.48
	0	0	0	0	0	0	0	0	0	0	0	0	0
Cr (III), Maximum Exceedance (>1.0)	0.004	0.063	0.003	0.007	0.007	0.18	0.02	0.14	0.46	0.31	0.33	0.012	0.46
	0	0	0	0	0	0	0	0	0	0	0	0	0
Cr (VI), Maximum Exceedance (>0.05)	0.0017	0.0034	0.0012	0.0032	0.0023	0.0063	<0.0005	0.017	0.012	0.0033	0.0031	<0.0005	0.017
	0	0	0	0	0	0	0	0	0	0	0	0	0
Cu, Maximum Exceedance (>0.3)	0.036	0.079	0.066	0.014	0.021	0.110	0.048	0.084	0.11	0.11	0.097	0.12	0.12
	0	0	0	0	0	0	0	0	0	0	0	0	0
Fe, Maximum Exceedance (>10 )	1.8	0.67	3.4	1.7	6.5	21	31	9.3	5	3.5	1.7	1.3	31
	0	0	0	0	0	2	2	0	0	0	0	0	4
Pb, Maximum Exceedance( >0.2)	<0.0005	<0.0005	0.0031	0.00091	0.00059	0.017	<0.005	0.0029	<0.005	<0.005	0.0017	0.0014	0.017
	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	0.018	<0.013		<0.013		<0.013	0.018
Exceedance (>0.005)	0	0		0	0	0	0	0		0		0	0

**Table 19 Continued: Carino Processing Ltd 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Ni, Maximum Exceedance (>0.5)	0.024 0	0.027 0	0.065 0	0.07 0	0.12 0	0.06 0	0.16 0	0.058 0	0.054 0	0.037 0	0.033 0	0.026 0	0.16 0
Zn, Maximum Exceedance (>0.5)	0.0072 0	0.024 0	0.12 0	0.027 0	0.019 0	0.25 0	0.5 0	0.23 0	0.16 0	0.17 0	0.093 0	0.054 0	0.5 0
Se, Maximum Exceedance (>0.5)	0.0027 0	0.002 0		<0.001 0	0.0038 0	<0.01 0	<0.01 0	0.002 0		0.0017 0		<0.001 0	0.0038 0
Ag, Maximum Exceedance (>0.05)	<0.0001 0	<0.0001 0		<0.0001 0	<0.0001 0	<0.001 0	<0.001 0	<0.0001 0		<0.0001 0		<0.0001 0	<0.001 0
TDS, Maximum Exceedance (>1000)	3700 1	5200 1		3500 1	3200 1	7800 1	18000 1	7700 1		9200 1		5400 2	18000 10
TSS, Maximum Exceedance (>30)	7 0	12 0	<10 0	9.6 0	21 0	48 1	57 1	24 0	15 0	28 0	12 0	11 0	57 2
BOD, Maximum Exceedance (>20)	150 1	200 3	160 4	510 4	1100 4	770 4	730 1	430 3	480 4	810 3	420 2	330 2	1100 35
Ammonia, Maximum Exceedance (>2.0)	0.92 0	1.2 0		2.3 1	31 1	4 1	5 1	3.7 1	6.5 4	2.6 1	3.7 1	3.1 3	31 14
Sulfide, Maximum Exceedance (>0.5)	<0.020 0	0.03 0		<0.02 0	<0.02 0	<0.020 0	<0.020 0	<0.020 0		<0.020 0		<0.020 0	0.03 0
Total Oil & Grease, Maximum Exceedance (>15)	81 1	61 3	11 0	10 0	12 0	45 1	66 1	40 2	26 3	17 1	23 1	17 1	81 14
Phenol Exceedance (>0.1)	5.4 1	7.6 1		7.1 1	0.05 0	21 1	17 1	7.7 1	4.9 4	6 3	1.2 2	0.21 3	21 18
Cyanide Exceedance (>0.025)		<0.005 0		0.0063 0	0.0067 0	<0.010 0	0.0047 0	0.0048 0		0.0023 0		0.0021 0	0.0067 0

**Table 20: DJ Composites 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

	Feb	Mar	Apr	May	Aug	Sep	Oct	Total
Samples	1	2	1	1	2	1	1	9
pH Maximum (Units)	7.86	8.69	7.93	8.62	8.48	8.28	8.23	8.69
pH Minimum (Units)		8.28			6.94			6.94
pH Violations (<5.5, >9.0)	0	0	0	0	0	0	0	0
BOD Maximum	6.5	<25	<20	41	10	29	87	87
BOD Violations (>300)	0	0	0	0	0	0	0	0
TSS, Maximum	93	76	36	98	5	22	17	98
TSS Violations (>350)	0	0	0	0	0	0	0	0
B, Maximum	0.075	1.4	1.6	3.1	0.62	0.42	0.9	3.1
Exceedance (>5.0)	0	0	0	0	0	0	0	0
Cd, Maximum	6.5E-05	0.0026	0.00044	0.0027	<0.001	0.0011	0.00035	0.0027
Exceedance (>0.05)	0	0	0	0	0	0	0	0
Cr, Maximum	1	0.48	0.057	0.062	0.22	0.21	0.23	1.00
Exceedance (>1.0)	0	0	0	0	0	0	0	0
Cr (+3), Maximum	0.99	0.48	0.06	0.06	0.21	0.21	0.21	0.99
Exceedance (>1.0)	0	0	0	0	0	0	0	0
Chromium (VI), Maximum	0.012	<0.005	<0.0005	<0.005	0.0072	<0.0005	0.013	0.013
Exceedance (>0.05)	0	0	0	0	0	0	0	0
Cu, Maximum	0.034	0.2	0.054	0.25	0.024	0.26	0.087	0.26
Exceedance (>0.3)	0	0	0	0	0	0	0	0
Fe, Maximum	0.13	<0.5	<0.5	<0.5	<0.5	0.58	0.95	0.95
Exceedance (>15)	0	0	0	0	0	0	0	0
Pb, Maximum	0.00052	0.014	0.0078	<0.05	0.022	0.067	0.41	0.41
Exceedance(>0.2)	0	0	0	0	0	1	1	1
Hg, Maximum	<0.0013	<0.0013	<0.0013	<0.0013	0.00003	<0.0013	<0.0013	<0.0013
Exceedance (>0.005)	0	0	0	0	0	0	0	0
Ni, Maximum	<0.002	0.035	<0.02	0.044	<0.02	0.018	<0.02	0.044
Exceedance (>0.5)	0	0	0	0	0	0	0	0
Zn, Maximum	0.056	0.67	0.1	0.047	0.26	0.0083	0.23	0.67
Exceedance (>0.5)	0	1	0	0	0	0	0	1

**Table 20 Continued: DJ Composites 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

	Feb	Mar	Apr	May	Aug	Sep	Oct	Total
Orthophosphate, Maximum Exceedance (>4.36)	2 0	1.4 0	0.67 0	2.3 0	1 0	2.1 0	<1.0 0	2.3 0
Total Oil & Grease, Maximum Exceedance (>100)	10 0	27 0	15 0	19 0	21 0	33 0	22 0	33 0
Phenol	<0.010 0	<10 0	<1.0 0	<1.0 0	<1.0 0	0.18 0	<0.10 0	<10 0
Cyanide	0.0075 0	0.085 0	0.51 0	0.41 0	0.15 0	0.16 0	0.24 0	0.51 0
As, Maximum	<0.001	<0.01	<0.01	<0.01	<0.01	0.0042	<0.01	<0.01
Ba, Maximum	0.0017	<0.01	<0.01	<0.01	0.21	0.041	0.012	0.21
Se, Maximum	<0.001	<0.01	<0.01	<0.01	<0.01	0.0019	<0.01	<0.01
Ag, Maximum	0.00022	<0.001	0.0019	0.0057	0.036	0.053	0.044	0.053

**Table 21: Gullbridge Mine Site 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Below Berm	May	Total
Samples	1	1
pH, Maximum (units)	5.7	5.7
pH, Minimum (units)		
pH, Exceedance (<5.5, >9.0)	0	0
As, Maximum	<0.001	<0.001
Exceedance (0.5)	0	0
Ba, Maximum	0.028	0.028
Exceedance (0.5)	0	0
B, Maximum	<0.05	<0.05
Exceedance (5.0)	0	0
Cd, Maximum (ug/L)	0.26	0.26
Exceedance( 0.05)	0	0
Cr, Maximum	<0.001	<0.001
Exceedance (1.0)	0	0
Cu, Maximum	0.36	0.36
Exceedance (0.3)	1	1
Fe, Maximum	1	1
Exceedance (10 )	0	0

Below Berm	May	Total
Samples	1	1
Pb, Maximum	<0.0005	<0.0005
Exceedance( 0.2)	0	0
Ni, Maximum	0.055	0.055
Exceedance (0.5)	0	0
Zn, Maximum	0.05	0.05
Exceedance (0.5)	0	0
Se, Maximum	<0.001	<0.001
Exceedance (0.5)	0	0
Ag, Maximum	<0.0001	<0.0001
Exceedance (0.05)	0	0
TSS, Maximum	7.4	7.4
Exceedance (30 )	0	0
Sulfide, Maximum	<0.020	<0.020
Exceedance (0.5)	0	0
Orthophosphate, Maximum	<0.010	<0.010
Exceedance (1.0)	0	0

**Table 22: Hebron Bull Arm Site 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Trench Location	Jan	Feb	Mar	Apr	May	Total
Samples	4	3	5	4	2	18
TSS, Maximum	10	14	2	6	144.8	144.8
TSS, Exceedance (>30)	0	0	0	0	1	1
Samples	3					3
TPH, Maximum	<0.10					<0.10
TPH, Exceedance (>15)	0					0

Filters Location	Jan	Feb	Mar	Apr	Total
Samples	4	4	5	4	17
TSS, Maximum	10.4	14	2.8	6.8	14
TSS, Exceedance (>30)	0	0	0	0	0
Samples	3				3
TPH, Maximum	<0.10				<0.10
TPH, Exceedance (>15)	0				0

**Table 23: Hope Brook Mine Site 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Banana Pond	Jun	Total	BH6	Jun	Total	Pine Pond Outflow	Jun	Total
Samples	1	1	Samples	1	1	Samples	1	1
pH, Maximum (units)	7.08	7.08	pH, Maximum (units)	6.31	6.31	pH, Maximum (units)	7.06	7.06
pH, Minimum (units)			pH, Minimum (units)			pH, Minimum (units)		
pH, Exceedance (<5.5, >9.0)	0	0	pH, Exceedance (<5.5, >9.0)	0	0	pH, Exceedance (<5.5, >9.0)	0	0
Ba, Maximum	0.02	0.02	Ba, Maximum	0.03	0.03	Ba, Maximum	0.02	0.02
Exceedance (0.5)	0	0	Exceedance (0.5)	0	0	Exceedance (0.5)	0	0
B, Maximum	0.01	0.01	B, Maximum	0.01	0.01	B, Maximum	<0.01	<0.01
Exceedance (5.0)	0	0	Exceedance (5.0)	0	0	Exceedance (5.0)	0	0
Cd, Maximum (ug/L)	<0.1	<0.1	Cd, Maximum (ug/L)	0.6	0.6	Cd, Maximum (ug/L)	<0.1	<0.1
Exceedance( 0.05)	0	0	Exceedance( 0.05)	0	0	Exceedance( 0.05)	0	0
Cr, Maximum	<0.001	<0.001	Cr, Maximum	<0.001	<0.001	Cr, Maximum	<0.001	<0.001
Exceedance (1.0)	0	0	Exceedance (1.0)	0	0	Exceedance (1.0)	0	0
Cu, Maximum	0.015	0.015	Cu, Maximum	0.190	0.190	Cu, Maximum	0.008	0.008
Exceedance (0.3)	0	0	Exceedance (0.3)	0	0	Exceedance (0.3)	0	0
Fe, Maximum	0.53	0.53	Fe, Maximum	0.08	0.08	Fe, Maximum	0.16	0.16
Exceedance (10.0)	0	0	Exceedance (10.0)	0	0	Exceedance (10.0)	0	0
Pb, Maximum	<0.001	<0.001	Pb, Maximum	0.001	0.001	Pb, Maximum	<0.001	<0.001
Exceedance( 0.2)	0	0	Exceedance( 0.2)	0	0	Exceedance( 0.2)	0	0
Ni, Maximum	<0.005	<0.005	Ni, Maximum	<0.005	<0.005	Ni, Maximum	<0.005	<0.005
Exceedance (0.5)	0	0	Exceedance (0.5)	0	0	Exceedance (0.5)	0	0
Zn, Maximum	<0.01	<0.01	Zn, Maximum	0.08	0.08	Zn, Maximum	<0.01	<0.01
Exceedance (0.5)	0	0	Exceedance (0.5)	0	0	Exceedance (0.5)	0	0
Ag, Maximum	<0.0001	<0.0001	Ag, Maximum	<0.0001	<0.0001	Ag, Maximum	<0.0001	<0.0001
Exceedance (0.05)	0	0	Exceedance (0.05)	0	0	Exceedance (0.05)	0	0
TDS, Maximum	105	105	TDS, Maximum	150	150	TDS, Maximum	39	39
Exceedance (1000)	0	0	Exceedance (1000)	0	0	Exceedance (1000)	0	0
Sulphate, Maximum	54	54	Sulphate, Maximum	87	87	Sulphate, Maximum	11	11
						ALT, Pass (RT)	1	1
						ALT, Fail (RT)	0	0

**Table 23 Continued: Hope Brook Mine Site 2014 Effluent Discharge Criteria Summary (mg/L, unless noted)**

Inlet to Boat Hole Brook	Jun	Total	Open Pit Spillway	Jun	Total	Polishing Pond	Jun	Total
Samples	1	1	Samples	1	1	Samples	1	1
pH, Maximum (units)	6.70	6.70	pH, Maximum (units)	7.76	7.76	pH, Maximum (units)	7.03	7.03
pH, Minimum (units)			pH, Minimum (units)			pH, Minimum (units)		
pH, Exceedance (<5.5, >9.0)	0	0	pH, Exceedance (<5.5, >9.0)	0	0	pH, Exceedance (<5.5, >9.0)	0	0
Ba, Maximum	<0.01	<0.01	Ba, Maximum	0.01	0.01	Ba, Maximum	0.02	0.02
Exceedance (0.5)	0	0	Exceedance (0.5)	0	0	Exceedance (0.5)	0	0
B, Maximum	<0.01	<0.01	B, Maximum	<0.01	<0.01	B, Maximum	<0.01	<0.01
Exceedance (5.0)	0	0	Exceedance (5.0)	0	0	Exceedance (5.0)	0	0
Cd, Maximum (ug/L)	0.1	0.1	Cd, Maximum (ug/L)	<0.1	<0.1	Cd, Maximum (ug/L)	<0.1	<0.1
Exceedance( 0.05)	0	0	Exceedance( 0.05)	0	0	Exceedance( 0.05)	0	0
Cr, Maximum	<0.001	<0.001	Cr, Maximum	<0.001	<0.001	Cr, Maximum	<0.001	<0.001
Exceedance (1.0)	0	0	Exceedance (1.0)	0	0	Exceedance (1.0)	0	0
Cu, Maximum	0.028	0.028	Cu, Maximum	0.001	0.001	Cu, Maximum	0.016	0.016
Exceedance (0.3)	0	0	Exceedance (0.3)	0	0	Exceedance (0.3)	0	0
Fe, Maximum	0.12	0.12	Fe, Maximum	0.78	0.78	Fe, Maximum	0.36	0.36
Exceedance (10.0)	0	0	Exceedance (10.0)	0	0	Exceedance (10.0)	0	0
Pb, Maximum	<0.001	<0.001	Pb, Maximum	<0.001	<0.001	Pb, Maximum	<0.001	<0.001
Exceedance( 0.2)	0	0	Exceedance( 0.2)	0	0	Exceedance( 0.2)	0	0
Ni, Maximum	<0.005	<0.005	Ni, Maximum	0.006	0.006	Ni, Maximum	<0.005	<0.005
Exceedance (0.5)	0	0	Exceedance (0.5)	0	0	Exceedance (0.5)	0	0
Zn, Maximum	0.01	0.01	Zn, Maximum	<0.01	<0.01	Zn, Maximum	<0.01	<0.01
Exceedance (0.5)	0	0	Exceedance (0.5)	0	0	Exceedance (0.5)	0	0
Ag, Maximum	<0.0001	<0.0001	Ag, Maximum	<0.0001	<0.0001	Ag, Maximum	<0.0001	<0.0001
Exceedance (0.05)	0	0	Exceedance (0.05)	0	0	Exceedance (0.05)	0	0
TDS, Maximum	68	68	TDS, Maximum	892	892	TDS, Maximum	51	51
Exceedance (1000)	0	0	Exceedance (1000)	0	0	Exceedance (1000)	0	0
Sulphate, Maximum	31	31	Sulphate, Maximum	591	591	Sulphate, Maximum	18	18
ALT, Pass (RT)	1	1	ALT, Pass (RT)	1	1	ALT, Pass (RT)	1	1
ALT, Fail (RT)	0	0	ALT, Fail (RT)	0	0	ALT, Fail (RT)	0	0

**Table 23 Continued: Hope Brook Mine Site 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Catch Basin	Jun	Total
Samples	1	1
pH, Maximum (units)	7.58	7.58
pH, Minimum (units)		
pH, Exceedance (<5.5, >9.0)	0	0
Ba, Maximum	0.02	0.02
Exceedance (0.5)	0	0
B, Maximum	<0.01	<0.01
Exceedance (5.0)	0	0
Cd, Maximum (ug/L)	<0.0001	<0.0001
Exceedance( 0.05)	0	0
Cr, Maximum	<0.001	<0.001
Exceedance (1.0)	0	0
Cu, Maximum	0.007	0.007
Exceedance (0.3)	0	0
Fe, Maximum	0.22	0.22
Exceedance (10.0)	0	0
Pb, Maximum	<0.001	<0.001
Exceedance( 0.2)	0	0
Ni, Maximum	<0.005	<0.005
Exceedance (0.5)	0	0
Zn, Maximum	<0.01	<0.01
Exceedance (0.5)	0	0
Ag, Maximum	<0.0001	<0.0001
Exceedance (0.05)	0	0
TDS, Maximum	398	398
Exceedance (1000)	0	0
Sulphate, Maximum	261	261
ALT, Pass (RT)	1	1
ALT, Fail (RT)	0	0

**Table 24: Husky Oil Operations Ltd-Atlantic Region 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Settling Pond 1 Weir	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples	2	14	15	5	4	5	4	6	5	60
pH, Maximum (Units)	7.98	8.15	8.07	8.14	8.11	8.18	8.09	7.86	7.69	8.18
pH, Minimum (Units)	7.91	7.85	7.70	8.01	7.98	7.9	7.78	7.46	7.48	7.46
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0
As, Maximum	0.003	0.0069	0.0074	0.001	<0.001	<0.001	0.0016	0.002	0.0018	0.0074
As, Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0
Ba, Maximum	0.088	0.17	0.16	0.076	0.14	0.2	0.19	0.2	0.11	0.2
Ba, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0
B, Maximum	<0.05	0.094	0.12	0.12	0.13	0.19	1.6	1.1	2	2
B, Exceedance (>5.0)	0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)	0.14	0.29	0.55	0.015	0.03	0.073	1.3	0.95	1.4	1.4
Cd, Exceedance (>0.05)	0	0	0	0	0	0	0	0	0	0
Cr, Maximum	0.01	0.024	0.018	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.024
Cr Exceedance (>1.0)	0	0	0	0	0	0	0	0	0	0
Cu, Maximum	0.032	0.072	0.067	<0.002	<0.002	<0.002	0.0033	0.003	0.0059	0.072
Cu, Exceedance (>0.6)	0	0	0	0	0	0	0	0	0	0
Fe, Maximum	9.2	22	19	<0.05	<0.05	<0.05	0.47	1.5	0.57	22
Exceedance (>10)	0	2	1	0	0	0	0	0	0	3
Pb, Maximum	0.024	0.05	0.046	<0.00050	<0.0005	<0.0005	0.001	<0.0005	0.0007	0.05
Pb, exceedance (>0.4)	0	0	0	0	0	0	0	0	0	0
Hg, Maximum (ug/L)	<0.013	0.013	<0.013	<0.013	0.02	0.06	0.065	0.082	0.047	0.082
Hg, Exceedance (>0.005)	0	0	0	0	0	0	0	0	0	0
Ni, Maximum	0.0087	0.021	0.016	<0.0020	<0.002	<0.002	<0.002	<0.002	<0.002	0.021
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0

**Table 24 Continued: Husky Oil Operations Ltd-Atlantic Region 2014 Effluent Discharge Criteria Summary (mg/L, unless noted)**

Settling Pond 1 Weir	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Zn, Maximum	0.055	0.12	0.11	<0.0050	<0.005	<0.005	0.013	0.013	0.0092	0.12
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0
Se, Maximum	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Se, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0
Ag, Maximum	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	0.0001	0.0003	0.0003	0.0003	0.0003
Ag, Exceedance (>0.05)	0	0	0	0	0	0	0	0	0	0
TDS, Maximum	350	520	570	470	1000	2000	13000	18000	19000	19000
TDS, Maximum attributed to operations*							1000	1900	13800	13800
TDS Exceedance (>1000)	0	0	0	0	0	1	0	1	1	3
TSS, Maximum	130	540	560	2	8.6	2	6	20	10	560
TSS, Exceedance (>30)	2	12	4	0	0	0	0	0	0	18
Ammonia, Maximum	0.084	0.24	0.29	0.31	0.29	0.52	6.7	9.4	7.7	9.4
Ammonia, Exceedance (>2.0)	0	0	0	0	0	0	1	3	1	5
Sulfide, Maximum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Sulfide, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0
TPH, Maximum	0.11	0.16	<0.10	<0.10						0.16
TPH, Exceedance (>15)	0	0	0	0						0
Phenol	<0.001	<0.01	<0.001	0.0014	0.0021	0.0037	0.0069	0.011	0.014	0.014
Phenol, Exceedance (>0.1)	0	0	0	0	0	0	0	0	0	0
Ra-226, Maximum	0.012	0.012	<0.010	<0.010						0.012
Ra-226, Exceedance (>1.11 Bq/l)	0	0	0	0						0
Nitrate, Maximum	0.82	0.93	0.55	0.37	0.32	0.2	0.16	0.11	0.083	0.93
Nitrate, Exceedance (>10)	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 24 Continued: Husky Oil Operations Ltd-Atlantic Region 2014 Effluent Discharge Criteria Summary (mg/L, unless noted)**

Settling Pond 2 Weir	Oct.	Nov.	Dec.	Total
Samples	4	4	5	13
pH, Maximum (Units)	7.99	7.89	7.89	7.99
pH, Minimum (Units)	7.83	7.75	7.65	7.65
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
Ba, Maximum	0.24	0.14	0.12	0.24
Ba, Exceedance (>0.5)	0	0	0	0
B, Maximum	0.38	0.45	0.43	0.45
B, Exceedance (>5.0)	0	0	0	0
Cd, Maximum (ug/L)	0.34	0.66	0.31	0.66
Cd, Exceedance(>0.05)	0	0	0	0
Cr, Maximum	<0.001	0.0012	<0.001	0.0012
Cr Exceedance (>1.0)	0	0	0	0
Cu, Maximum	<0.002	<0.002	0.002	0.002
Cu, Exceedance (>0.6)	0	0	0	0
Fe, Maximum	0.32	0.21	0.52	0.52
Exceedance (>10)	0	0	0	0
Pb, Maximum	0.00089	0.00067	0.00086	0.00089
Pb, exceedance (>0.4)	0	0	0	0
Hg, Maximum (ug/L)	0.063	0.043	0.023	0.063
Hg, Exceedance (>0.005)	0	0	0	0
Ni, Maximum	<0.002	<0.002	<0.002	<0.002
Ni, Exceedance (>0.5)	0	0	0	0

Settling Pond 2 Weir	Oct.	Nov.	Dec.	Total
Samples	4	4	5	13
Zn, Maximum	<0.005	<0.005	<0.005	<0.005
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	0.0002	0.0003	0.0002	0.0003
Ag, Exceedance (>0.05)	0	0	0	0
TDS, Maximum	5100	5100	4600	5100
TDS, Maximum attributed to operations*	200	1000	0	1000
TDS Exceedance (>1000)	0	0	0	0
TSS, Maximum	9.8	16	50	50
TSS, Exceedance (>30)	0	0	1	1
Ammonia, Maximum	1.5	1.4	1.3	1.5
Ammonia, Exceedance (>2.0)	0	0	0	0
Sulfide, Maximum	<0.020	<0.020	<0.020	<0.020
Sulfide, Exceedance (>0.5)	0	0	0	0
TPH, Maximum	0.0031	0.0032	<0.010	0.0032
TPH, Exceedance (>15)	0	0	0	0
Phenol	0.13	0.16	0.055	0.16
Phenol, Exceedance (>0.1)	0	0	0	0
Ra-226, Maximum	<0.005	<0.005	<0.005	<0.005
Ra-226, Exceedance (>1.11 Bq/l)	0	0	0	0
Nitrate, Maximum	<0.001	<0.001	<0.001	<0.001
Nitrate, Exceedance (>10)	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 25: Labatt Breweries Newfoundland 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Samples	4	4	3	4	4	3	4	4	5	4	3	4	46
pH Maximum (Units)	10.80	12.00	11.40	6.25	6.16	5.65	6.62	9.84	6.68	6.84	6.33	6.70	12.0
pH Minimum (Units)	5.75	5.68	6.33	5.62	4.84	5.27	5.86	5.75	4.92	5.76	4.39	5.86	4.39
pH Violations (<5.5, >9.0)	2	1	2	0	2	1	0	1	1	0	2	0	12
BOD Maximum	2400	1500	2200	2200	1500	1300	1200	720	1300	1700	640	780	2400
BOD Violations (>300)	2	3	2	4	4	3	4	4	4	3	3	2	38
TSS, Maximum	1900	940	11000	1200	490	600	520	320	1100	620	640	520	11000
TSS Violations (>350)	1	2	1	2	1	1	2	0	2	1	2	2	17
B, Maximum				<0.05					<0.05				<0.05
B, Exceedance (>5.0)				0					0				0
Cd, Maximum (ug/L)				<0.10					0.13				0.13
Cd, Exceedance( >0.05)				0					0				0
Cr, Maximum				0.0051					0.0096				0.0096
Cr, Exceedance (>1.0)				0					0				0
Cu, Maximum				0.049					0.084				0.084
Cu, Exceedance (>0.3)				0					0				0
Fe, Maximum				0.43					0.72				0.72
Fe, Exceedance (>15 )				0					0				0
Pb, Maximum				0.0018					0.0023				0.0023
Pb, Exceedance( >0.2)				0					0				0
Hg, Maximum (ug/L)				<0.013					0.022				0.022
Hg, Exceedance (>0.005)				0					0				0
Ni, Maximum				0.004					0.0052				0.0052
Ni, Exceedance (>0.5)				0					0				0

**Table 25 Continued: Labatt Breweries Newfoundland 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Zn, Maximum				0					0				0
Zn, Exceedance (>0.5)				0.1					0.12				0.12
Phenol				0					0				0
Phenol, Exceedance (>0.5)				<0.001					<0.001				<0.001
Se, Maximum				<0.001					<0.001				<0.001
As, Maximum				0.0098					0.017				0.017
Ba, Maximum				<0.0001					<0.0001				<0.0001
Ag, Maximum				540					510				540
TDS, Maximum				4.9					6.6				6.6
Ammonia, Maximum				0.069					0.065				0.069
Sulfide, Maximum				0					0				0

**Table 26: Molson Coors Canada, St. John's 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Samples	4	4	4	5	3	4	5	4	5	4	4	4	50
pH Maximum (Units)	10.80	7.48	11.20	12.50	11.10	7.78	11.90	6.69	9.81	9.33	10.20	11.50	12.50
pH Minimum (Units)	5.61	6.19	6.34	6.10	9.83	4.43	4.91	5.31	4.69	6.39	6.01	6.07	4.43
pH Violations (<5.5, >9.0)	1	0	1	2	3	3	3	1	5	1	1	2	23
BOD Maximum	4400	810	1600	1500	2400	2700	1600	970	2200	1300	1600	1100	4400
BOD Violations (>300)	4	2	4	5	3	4	5	2	5	3	4	4	45
TSS, Maximum	3300	170	2700	300	340	1600	1200	240	890	560	430	1300	3300
TSS Violations (>350)	2	0	2	0	0	3	3	0	1	1	2	2	16
B, Maximum	<0.05	<0.05			<0.05			<0.05			<0.05		<0.05
B, Exceedance (>5.0)	0	0			0			0			0		0
Cd, Maximum (ug/L)	0.00014	<0.00020			0.000077			0.000056			0.000085		0.00014
Cd, Exceedance (>0.05)	0	0			0			0			0		0
Cr, Maximum	0.014	0.0096			0.0055			0.011			0.016		0.016
Cr, Exceedance (>1.0)	0	0			0			0			0		0
Cu, Maximum	0.08	0.047			0.15			0.047			0.071		0.15
Cu, Exceedance (>0.3)	0	0			0			0			0		0
Fe, Maximum	1.3	1.3			0.83			0.88			0.89		1.3
Fe, Exceedance (>15)	0	0			0			0			0		0
Pb, Maximum	0.014	0.0075			0.0091			0.0056			0.0062		0.014
Pb, Exceedance (>0.2)	0	0			0			0			0		0
Hg, Maximum (ug/L)	0.000033	0.000033			0.00005			0.000043			0.000018		0.00005
Hg, Exceedance (>0.005)	0	0			0			0			0		0
Ni, Maximum	0.0059	0.003			0.0033			0.0039			0.0045		0.0059
Ni, Exceedance (>0.5)	0	0			0			0			0		0

**Table 26 Continued: Molson Coors Canada, St. John's 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Zn, Maximum	0.16	0.092			0.48			0.18			0.31		0.48
Zn, Exceedance (>0.5)	0	0			0			0			0		0
Phenol	0.2	0.072			0.086			<1.0			0.15		<1.0
Phenol, Exceedance (>0.5)	0	0			0			0			0		0
Se, Maximum	<0.001	<0.001			<0.001			<0.001			<0.001		<0.001
As, Maximum	0.016	0.019			0.0074			0.014			0.021		0.021
Ba, Maximum	<0.001	<0.001			<0.001			<0.001			<0.001		<0.001
Ag, Maximum	0.0011	<0.0001			<0.0001			<0.0001			<0.0001		0.0011
TDS, Maximum	870	730			1000			400			500		1000
Ammonia, Maximum	1.9	0.088			1.1			2.5			1		2.5
Sulfide, Maximum	0.1	0.16			0.042			0.039			0.10		0.16

**Table 27: Newfoundland Transshipment Terminal 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Tank No. 1- Sump No. 1	Jan	Apr	Jul	Oct	Year To Date
Number of 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)	7.3	7.9	7.9	7.5	7.90
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TPH, Maximum	5.8	5.6	8.3	8.1	8.30
TPH, Exceedance (>15)	0	0	0	0	0

Tank No. 2- Sump No. 2	Jan	Apr	Jul	Oct	Year To Date
Number of Samples	1	1	1	1	4
TSS, Maximum	3.3	2.4	<1.6	<1.6	3.3
TSS, Exceedance (>30)	0	0	0	0	0
pH, Maximum (units)	7	7.7	7.8	7.6	7.80
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TPH, Maximum	9.8	9.9	5.6	3.9	9.90
TPH, Exceedance (>15)	0	0	0	0	0

Tank No. 3- Sump No. 3	Jan	Apr	Jul	Oct	Year To Date
Number of 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)	6.4	7.7	7.9	7.6	7.90
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TPH, Maximum	8.5	12.2	8.2	9.3	12.20
TPH, Exceedance (>15)	0	0	0	0	0

Tank No. 4- Sump No. 4	Jan	Apr	Jul	Oct	Year To Date
Number of 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)	5.8	7.9	7.3	7.7	7.90
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TPH, Maximum	8.7	2	9.5	5.6	9.50
TPH, Exceedance (>15)	0	0	0	0	0

Tank No. 5- Sump No. 5	Jan	Apr	Jul	Oct	Year To Date
Number of Samples	1	1	1	1	4
TSS, Maximum	4.1	<1.6	<1.6	<1.6	4.10
TSS, Exceedance (>30)	0	0	0	0	0
pH, Maximum (units)	6.4	7.5	7.8	7.7	7.8
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TPH, Maximum	7.7	11.8	7.5	8.2	11.8
TPH, Exceedance (>15)	0	0	0	0	0

Tank No. 6- Sump No. 6	Jan	Apr	Jul	Oct	Year To Date
Number of Samples	1	1	1	1	4
TSS, Maximum	6.3	<1.6	<1.6	<1.6	6.3
TSS, Exceedance (>30)	0	0	0	0	0
pH, Maximum (units)	6.8	7.4	7.4	7.6	7.60
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
TPH, Maximum	6	10.5	10.2	3.7	10.5
TPH, Exceedance (>15)	0	0	0	0	0

**Table 27 Continued: Newfoundland Transshipment Terminal 2014 Effluent Discharge Criteria Summary (mg/L, unless noted)**

Tank No. 7- Sump No. 7	Jan	Apr	May	Jul	Oct	Year To Date
<b>Number of Samples</b>	1	1		1	1	4
TSS, Maximum	3.1	2.2		<1.6	<1.6	3.10
TSS, Exceedance (>30)	0	0		0	0	0
pH, Maximum (units)	7.8	7.7		8.5	7.6	8.50
pH, Exceedance (<5.5, >9.0)	0	0		0	0	0
TPH, Maximum	8.2	3.6		6.6	6.4	8.2
TPH, Exceedance (>15)	0	0		0	0	0

Containment Pond	Jan	Apr	May	Jul	Oct	Year To Date
<b>Number of Samples</b>		1	1		1	3
TSS, Maximum		<1.6			<1.6	<1.6
TSS, Exceedance (>30)		0			0	0
pH, Maximum (units)		6.4			6.4	6.40
pH, Exceedance (<5.5, >9.0)		0			0	0
TPH, Maximum		8.6			3.8	8.6
TPH, Exceedance (>15)		0			0	0
ALT, Pass (RT)			1		1	2
ALT, Fail (RT)			0		0	0

Oily Water Separator	Apr	Nov	Year To Date
<b>Number of Samples</b>	1	1	2
TSS, Maximum	<1.6	<1.6	<1.6
TSS, Exceedance (>30)	0	0	0
pH, Maximum (units)	7.1	6.9	7.10
pH, Exceedance (<5.5, >9.0)	0	0	0
TPH, Maximum	3	5.1	5.1
TPH, Exceedance (>15)	0	0	0
TDS, Maximum	2484	1042	2484
TDS, Exceedance (>36000)	0	0	0

**Table 28: Pardy's Waste Management Facility – Incinerator Road 2014 Effluent Discharge Criteria Summary (mg/L, unless noted)**

<b>Weekly Samples - Effluent</b>	<b>Jan.</b>	<b>Feb.</b>	<b>Mar.</b>	<b>Apr.</b>	<b>May</b>	<b>Jun.</b>	<b>Jul.</b>	<b>Aug.</b>	<b>Sept.</b>	<b>Oct.</b>	<b>Nov.</b>	<b>Dec.</b>	<b>Total</b>
Samples	2	3	4	4	5	4	3	1	4	6	4	3	43
pH, Maximum (Units)	6.08	7.41	7.23	7.33	7.56	7.95	7.97	8.11	7.91	7.7	7.31	8.01	8.11
pH, Minimum (Units)	6.07	6.06	6.01	6.96	7.52	7.80			7.37	6.04	6.12	5.9	5.9
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum		0.009	0.006	0.004	0.007	0.002	0.003		0.002	0.005	0.003		0.009
As, Exceedance (>0.5)		0	0	0	0	0	0		0	0	0		0
Ba, Maximum		0.057	0.035	0.031	0.05	0.018	0.035		0.031	0.027	0.043		0.057
Ba, Exceedance (>5.0)		0	0	0	0	0	0		0	0	0		0
B, Maximum		0.696	0.471	0.323	0.434	2.29	1.38		0.149	0.316	0.125		2.29
B, Exceedance (>5.0)		0	0	0	0	0	0		0	0	0		0
Cd, Maximum (ug/L)		<0.017	0.139	0.08	0.125	0.035	0.054		<0.017	0.035	0.038		0.139
Cd, Exceedance (>0.005)		0	0	0	0	0	0		0	0	0		0
Cr, Maximum		0.002	<0.001	0.002	0.001	0.001	<0.001		<0.001	0.002	0.001		0.002
Cr, Exceedance (>1.0)		0	0	0	0	0	0		0	0	0		0
Cu, Maximum	0.028	0.051	0.044	0.081	0.03	0.011	0.019	0.011	0.005	0.013	0.025	0.046	0.081
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0	0	0	0
Fe, Maximum	0.583	0.368	0.211	0.240	0.373	0.616	1.04	0.446	0.719	0.828	0.359	7.01	7.01
Fe, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0
Pb, Maximum		0.001	<0.0005	<0.0005	0.001	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		0.001
Pb, Exceedance (>0.2)		0	0	0	0	0	0		0	0	0		0
Ni, Maximum		0.019	0.013	0.02	0.027	0.022	0.014		0.014	0.031	0.016		0.031
Ni, Exceedance (>0.5)		0	0	0	0	0	0		0	0	0		0
Se, Maximum		0.007	0.008	0.005	0.014	0.019	0.002		<0.001	0.005	0.002		0.019
Se, Exceedance (>0.01)		0	0	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	<0.0001		<0.0001
Ag, Exceedance (>0.05)		0	0	0	0	0	0		0	0	0		0
Zn, Maximum	0.137	0.253	0.146	0.145	0.068	0.062	0.043	0.018	0.014	0.058	0.092	0.223	0.253
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0

**Table 28: Pardy's Waste Management Facility – Incinerator Road 2014 Effluent Discharge Criteria Summary (mg/L, unless noted)**

Weekly Samples - Effluent	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
TSS, Maximum	18	12	18	62	35	12	24	12	15	20	29	183	183
TSS, Exceedance (>30)	0	0	0	1	1	0	0	0	0	0	0	1	3
BOD, Maximum	80	23	22	133	13	8	19	5	14	19	13	186	186
BOD, Exceedance (>20)	1	1	2	4	0	0	0	0	0	0	0	1	9
Total Coliform, Maximum	1.1	0.49	13	49000	230	230	2200	170	328	330	230	33	49000
Total Coliform, Exceedance (>50)	0	0	0	3	2	1	1	1	2	1	1	0	12
Fecal Coliform, Maximum	0.33	0.078	1.4	3300	13	33	70	170	2	13	230	13	3300
Fecal Coliform, Maximum (>10)	0	0	0	3	1	1	2	1	0	1	1	1	11
Orthophosphate, Maximum	93.5	68.8	36.2	24.2	23.1	15.8	9.48	2.64	1.73	16.5	19.5	24	93.5
Orthophosphate, Maximum (>0.436)	1	1	1	2	5	2	3	1	1	4	4	3	28
TDS, Maximum	1540	1990	3520	3040	4070	5330	4910	1870	1030	992	1040	1350	5330
TDS, Exceedance (>1000)	1	3	4	4	5	4	3	1	1	0	1	2	29
Nitrate, Maximum	1.71	18.4	22.4	9.32	17.8	3.47	<0.05	5.35	13.8	44.1	55.4	88.4	88.4
Nitrate, Exceedance (>10)	0	2	2	0	2	0	0	0	1	4	4	1	16
TPH, Maximum	25	5.3	3.9	8.3	4	1.9	1.9	2.3	1.6	2.8	36	18.1	36
TPH, Exceedance (>15)	1	0	0	0	0	0	0	0	0	0	1	2	4
Ammonia, Maximum	50.4	78.6	19.7	4.15	23.2	5.43	22.2	0.46	0.37	11.5	0.92	118	118
Ammonia, Exceedance (>2.0)	1	1	2	1	1	3	2	0	0	1	0	2	14
ALT, Pass (RT)		1											1
ALT, Fail (RT)		0											0

**Table 29: Vale Newfoundland and Labrador Ltd (Argentia) 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

Polish Pond Discharge	Jun	Jul	Dec	Total
Samples	1	1	1	3
pH, Maximum (units)	7.35	7.62	7.63	7.63
pH, Minimum (units)				
pH, Exceedance (<5.5, >9.0)	0	0	0	0
As, Maximum	0.0002	0.0004	<0.0002	0.0004
As, Exceedance (>0.5)	0	0	0	0
Cd, Maximum	0.019	0.041	0.022	0.041
Cd, Exceedance (>0.05)	0	0	0	0
Cu, Maximum	0.00194	0.00361	0.00137	0.00361
Cu, Exceedance (>0.3)	0	0	0	0
Fe, Maximum	0.059	0.01	0.027	0.059
Fe, Exceedance (> 10)	0	0	0	0
Pb, Maximum	0.00016	0.00019	0.00005	0.00019
Pb, Exceedance (>0.2)	0	0	0	0
Hg, Maximum (ug/L)	<0.01	<0.01	<0.01	<0.01
Hg, Exceedance (>0.005)	0	0	0	0
Ni, Maximum	0.361	0.233	0.213	0.361
Ni, Exceedance (>0.5)	0	0	0	0
Zn, Maximum	0.002	0.004	0.003	0.004
Zn, Exceedance (>0.5)	0	0	0	0
Ammonia, Maximum	<0.1	0.2	<0.1	0.2
Ammonia, Exceedance (>2)	0	0	0	0

Polish Pond Discharge	Jun	Jul	Dec	Total
Nitrate, Maximum	<0.06	<0.06	<0.06	<0.06
Nitrate, Exceedance (>10)	0	0	0	0
TDS, Maximum	496	553	459	553
TDS, Exceedance (>1000)	0	0	0	0
TPH, Maximum		<0.10	<0.10	<0.10
TPH, Exceedance (>15)		0	0	0
TSS, Maximum	<2	4	3	4
TSS, Exceedance (>30)	0	0	0	0
ALT, Pass (RT)	1	1	1	3
ALT, Fail (RT)	0	0	0	0

**Table 30: Vale Newfoundland and Labrador Ltd (Long Harbour) 2014 Effluent Discharge Criteria Summary (mg/L, unless noted)**

D2 - Plant Site Diversion Ditch North Discharge	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Samples	5	1	3	2	1	1	2	1	1	2	4	2	25
pH, Maximum (units)	7.22	7.43	7.35	6.16	7.45	7.86	7.89	6.51	6.68	6.61	6.70	7.66	7.89
pH, Minimum (units)	6.88						7.30						6.88
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	0.004	<0.002	<0.002	0.003	<0.002	0.006	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.006
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	0.004	0.003	0.002	0.002	0.002	0.002	0.003	0.004	0.002	0.005
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.0066	0.002	0.0006	0.0076	0.0008	0.0024	<0.0005	0.0006	0.0166	0.0023	0.002	0.0005	0.0166
Pb, Exceedance (>0.2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni, Maximum	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	0.003
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn, Maximum	0.089	0.038	0.033	0.062	0.021	0.052	0.035	0.021	0.087	0.027	0.032	0.013	0.089
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
TSS, Maximum	32	<5	111	143	<5	5	<5	<5	<5	7	204	24	204
TSS, Exceedance (>30)	1	0	1	1	0	0	0	0	0	0	2	0	5
Ammonia, Maximum	0.06	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	<0.05	0.1
Ammonia, Exceedance (>2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)	0.324	<0.017	0.151	<0.5	0.118	0.431	0.285	0.083	0.164	0.124	0.111	0.141	0.431
Fe, Maximum	1.86	0.365	0.206	0.381	0.442	0.415	0.173	<0.05	0.08	0.669	0.754	0.191	1.86
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
Nitrate, Maximum	0.18	0.16	0.08	0.12	0.10	0.08	0.16	0.08	0.13	<0.05	<0.05	0.11	0.18
Nitrate, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0

**Table 30 Continued: Vale Newfoundland and Labrador Ltd (Long Harbour) 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

D3 - Plant Site Diversion Ditch South Discharge	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples	4	1	2	2	1	1	2	1	2	2	3	1	22
pH, Maximum (units)	7.03	7.42	7.29	5.84	7.38	7.59	7.50	7.66	6.78	6.48	6.64	7.52	7.66
pH, Minimum (units)	6.63						7.45						6.63
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	0.003
As, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cu, Maximum	0.011	0.001	0.002	0.004	0.002	0.007	0.003	0.004	0.002	0.006	0.006	0.003	0.011
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.0243	0.0036	0.0039	0.0091	0.0013	0.0013	0.0023	0.0016	0.0091	0.0079	0.0068	0.0031	0.0243
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	0.055	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	0.055
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn, Maximum	0.043	0.016	0.016	0.018	0.016	0.038	0.019	0.011	0.039	0.021	0.02	0.018	0.043
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
TSS, Maximum	30	<5	15	161	<5	5	<5	<5	18	14	77	7	161
TSS, Exceedance (>30)	0	0	0	1	0	0	0	0	0	0	2	0	3
Ammonia, Maximum	0.06	0.07	0.08	<0.05	0.09	<0.05	<0.05	0.06	<0.05	0.08	<0.05	<0.05	0.09
Ammonia, Exceedance (>2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)	0.152	<0.017	0.069	<0.5	0.034	0.031	0.051	0.045	0.079	0.111	0.095	0.178	<0.5
Fe, Maximum	1.61	1.17	1.05	0.298	1.27	1.42	0.803	1.52	0.783	3.14	1.12	1.05	3.14
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
Nitrate, Maximum	0.13	0.09	0.08	0.12	0.06	<0.05	<0.05	0.07	0.09	0.23	<0.05	0.12	0.23
Nitrate, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0

**Table 30 Continued: Vale Newfoundland and Labrador Ltd (Long Harbour) 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

D5 - Laydown Pad Storm Pond Discharge	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples	5	4	2	2	1	1	2	1	1	1	1	1	22
pH, Maximum (units)	7.36	7.58	7.40	7.26	7.42	7.44	7.35	7.26	6.36	6.42	6.97	6.63	7.58
pH, Minimum (units)	7.18	6.78	7.26	6.68			7.15						6.78
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0	0	0	0	0	0	0	0	0
As, Maximum	0.003	0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003
As, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cu, Maximum	0.012	0.009	<0.001	0.01	0.002	<0.001	0.003	0.003	0.003	0.002	0.003	0.001	0.012
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.0245	0.0121	<0.0005	0.0107	0.0007	<0.0005	0.0027	0.0018	0.003	0.0016	0.0021	0.0006	0.0245
Pb, Exceedance (>0.2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni, Maximum	0.006	0.004	<0.002	0.006	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.006
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn, Maximum	0.046	0.031	0.019	0.038	<0.005	0.008	0.024	0.011	0.016	0.01	0.012	0.006	0.046
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
TSS, Maximum	216	108	<5	17	<5	<5	16	16	<5	10	13	15	216
TSS, Exceedance (>30)	2	1	0	0	0	0	0	0	0	0	0	0	3
Ammonia, Maximum	0.05	0.71	<0.05	0.55	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.71
Ammonia, Exceedance (>2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)	0.181	0.136	<0.017	<0.5	<0.017	<0.017	0.043	0.095	0.03	0.017	<0.017	0.024	<0.5
Fe, Maximum	14.7	6.17	0.28	13.3	0.469	0.285	0.642	0.474	0.471	1.18	1.71	0.32	14.7
Hg, Maximum (ug/L)		<0.026	<0.026	0.044	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	0.044
Nitrate, Maximum	0.22	2.28	0.33	0.33	0.48	0.06	0.11	0.1	0.12	0.07	0.08	0.16	2.28
Nitrate, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0

**Table 30 Continued: Vale Newfoundland and Labrador Ltd (Long Harbour) 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

D11 - Quarry 2 Discharge	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Nov.	Dec.	Total
Samples	5	4	1	1	1	1	2	1	1	1	1	19
pH, Maximum (units)	6.88	7.17	6.60	6.18	6.38	6.88	6.94	6.72	6.08	6.73	6.66	7.17
pH, Minimum (units)	1.90	6.73					6.67					1.90
pH, Exceedance (<5.5, >9.0)	1	0	0	0	0	0	0	0	0	0	0	1
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
As, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0
Cu, Maximum	0.008	0.009	0.003	0.004	0.002	0.003	0.002	0.007	0.008	0.007	0.003	0.009
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.0095	0.004	0.0037	0.0047	0.0011	0.0021	0.0012	0.0012	0.0047	0.004	0.0034	0.0095
Pb, Exceedance (>0.2)	0	0	0	0	0	0	0	0	0	0	0	0
Ni, Maximum	0.004	0.003	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.003	<0.002	0.004
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0
Zn, Maximum	0.034	0.018	0.019	0.01	0.008	0.015	0.014	0.016	0.032	0.015	0.012	0.034
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0
TSS, Maximum	51	17	23	20	10	18	6	30	15	25	30	51
TSS, Exceedance (>30)	3	0	0	0	0	0	0	0	0	0	0	3
Ammonia, Maximum	0.07	0.76	<0.05	<0.05	0.06	<0.05	0.21	<0.05	<0.05	0.05	<0.05	0.76
Ammonia, Exceedance (>2)	0	0	0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)	0.126	0.057	0.089	<0.5	0.062	0.061	0.082	0.077	0.092	0.118	0.172	<0.5
Fe, Maximum	4.83	1.23	1.68	0.473	0.805	0.8	0.802	1.85	2.41	1.61	1.95	4.83
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
Nitrate, Maximum	3.54	0.33	0.33	0.44	0.38	0.35	0.44	0.17	0.11	0.47	0.27	3.54
Nitrate, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0

**Table 30 Continued: Vale Newfoundland and Labrador Ltd (Long Harbour) 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

D13 - USM Site 2 Discharge	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples	5	1	1	1	1	1	2	1	4	3	1	1	22
pH, Maximum (units)	6.11	6.47	6.24	6.31	6.08	7.04	6.66	6.59	6.61	6.68	6.18	6.33	7.04
pH, Minimum (units)	2.51						6.44		5.59		5.81		2.51
pH, Exceedance (<5.5, >9.0)	1	0	0	0	0	0	0	0	0	0	0	0	1
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	0.004	0.001	<0.001	<0.001	0.001	0.002	<0.001	0.001	0.005	<0.001	0.002	0.001	0.005
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.0021	0.001	0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	0.0037	<0.0005	0.001	<0.0005	0.0037
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	0.027	<0.002	<0.002	0.013	<0.002	<0.002	<0.002	0.027
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn, Maximum	0.022	0.045	0.018	0.009	<0.005	0.075	0.012	0.014	0.021	<0.005	0.015	<0.005	0.075
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
TSS, Maximum	20	9	<5	<5	<5	<5	5	24	36	28	7	8	36
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	1	0	0	0	1
Ammonia, Maximum	0.09	0.06	0.13	<0.05	0.08	0.10	0.16	0.59	0.4	0.51	0.05	0.14	0.59
Ammonia, Exceedance (>2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Cd, Maximum (ug/L)	0.073	<0.017	0.021	<0.5	0.022	0.018	<0.017	0.043	0.061	<0.017	<0.017	0.029	<0.5
Fe, Maximum	1.68	0.984	1.68	0.478	2.47	2.53	4.15	22.9	11.4	13	1.12	1.76	22.9
Hg, Maximum (ug/L)		<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	<0.026	0.091	<0.026	<0.026	<0.026	0.091
Nitrate, Maximum	0.91	0.09	0.06	<0.05	0.09	<0.05	<0.05	<0.05	0.11	0.43	<0.05	0.07	0.91
Nitrate, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0

**Table 30 Continued: Vale Newfoundland and Labrador Ltd (Long Harbour) 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

D18 - EPCM Discharge	Mar	Jun	Sept	Dec	Total
Samples	1	1	1	1	4
pH, Maximum (units)	6.62	6.84	7.06	6.88	7.06
pH, Minimum (units)					
pH, Exceedance (<5.5, >9.0)	0	0	0	0	0
As, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002
As, Exceedance (>0.5)	0	0	0	0	0
Cu, Maximum	0.004	<0.001	0.001	0.001	0.004
Cu, Exceedance (>0.3)	0	0	0	0	0
Pb, Maximum	0.0041	0.0019	0.0011	0.001	0.0041
Pb, Exceedance (>0.2)	0	0	0	0	0
Ni, Maximum	<0.002	<0.002	<0.002	<0.002	<0.002
Ni, Exceedance (>0.5)	0	0	0	0	0
Zn, Maximum	0.034	0.024	0.013	0.008	0.034
Zn, Exceedance (>0.5)	0	0	0	0	0
TSS, Maximum	19	14	11	8	19
TSS, Exceedance (>30)	0	0	0	0	0
Ammonia, Maximum	<0.05	<0.05	<0.05	<0.05	<0.05
Ammonia, Exceedance (>2)	0	0	0	0	0
Cd, Maximum (ug/L)	<0.017	0.036	0.038	0.035	0.038
Fe, Maximum	3.37	0.443	0.849	0.67	3.37
Hg, Maximum (ug/L)	<0.026	<0.026	<0.026	<0.026	<0.026
Nitrate, Maximum	0.14	0.29	0.13	<0.05	0.29
Nitrate, Exceedance (>10)	0	0	0	0	0

**Table 30 Continued: Vale Newfoundland and Labrador Ltd (Long Harbour) 2014 Effluent Discharge Criteria Summary** (mg/L, unless noted)

D25	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Samples	4	1	1	1	1	4	2	1	1	5	2	1	24
pH, Maximum (Units)	6.44	6.30	6.17	5.82	6.36	7.07	7.07	6.82	6.32	7.26	6.37	6.39	7.26
pH, Minimum (Units)	5.78				6.38	6.93				6.07	6.34		5.78
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	<0.001	0.001	<0.001	0.003	0.003	0.002	0.002	<0.001	0.003
Cu, Exceedance (>0.3)	0	0	0	0	0	0	0	0	0	0	0	0	0
Pb, Maximum	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	0.0007	0.004	0.0037	<0.0005	<0.0005	0.004
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	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003
Ni, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn, Maximum	0.016	0.012	0.017	0.007	<0.005	0.008	0.013	0.01	0.015	0.01	0.007	<0.005	0.017
Zn, Exceedance (>0.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
TSS, Maximum	<5	<5	<5	<5	5	14	9	7	16	19	<5	<5	19
TSS, Exceedance (>30)	0	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia, Maximum	0.08	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	3.94	4.19	0.26	<0.05	4.19
Ammonia, Exceedance (>2)	0	0	0	0	0	0	0	0	1	2	0	0	3
Cd, Maximum (ug/L)	<0.017	<0.017	<0.017	<0.5	<0.017	<0.017	<0.017	0.024	0.023	0.018	0.018	0.027	<0.5
Fe, Maximum	0.565	0.385	0.243	0.107	0.238	0.235	0.34	1.29	3.06	3.53	0.945	0.683	3.53
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
Nitrate, Maximum	0.28	0.18	0.11	<0.05	0.07	<0.05	<0.05	0.08	<0.05	0.14	0.14	0.16	0.28
Nitrate, Exceedance (>10)	0	0	0	0	0	0	0	0	0	0	0	0	0

## **7) Conclusion**

The NL ENVC regulates effluent discharged from the industrial sectors of the province. As can be concluded from this short summary report, 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 NL 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

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## **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

MMER – Metal Mining Effluent Regulations

NL ENVC – Newfoundland and Labrador Department of Environment and Conservation

PPD – Pollution Prevention Division

TDS – Total Dissolved Solids

TIA – Tailings Impoundment Area

TPH – Total Petroleum Hydrocarbons

TSS – Total Suspended Solids