

Ministry of Environment and Climate Change Strategy

ADMINISTRATIVE PENALTY PENALTY ASSESSMENT FORM

FILE NO: 2017-03 PE-8059

PART ONE: THE CONTRAVENTION

Party

Canadian Pacific Railway Company (CPR)

Contravention or Failure

Failure to comply with Sections 1.1.2 and 1.2.2 of waste discharge Permit 8059 (Permit):

1.1.2 The characteristics of the discharge [of effluent from the NORTH YARD WASTEWATER TREATMENT PLANT serving the Rail Car Repair Facility and the Locomotive Reliability Centre] must be equivalent to or better than:

Total Petroleum Hydrocarbons	10 mg/L
5-Day BOD, 20 ºC	20 mg/L
Total Suspended Solids	20 mg/L
рН	6.5- 8.5
Toxicity	< 50 %

1.2.2 The characteristics of the discharge [of effluent from the SOUTH YARD WASTEWATER TREATMENT PLANT serving the lube oil transfer, and maintenance of way buildings] must be equivalent to or better than:

Total Petroleum Hydrocarbons	10 mg/L
5-Day Biochemical Oxygen Demand	20 mg/L
Total Suspended Solids	20 mg/L
рН	6.5- 8.5
Toxicity	< 50 %

Dates of Contravention or Failure

The February 2, 2017 Inspection Record 47373 identified there were <u>nine</u> non-compliances with Section 1.1.2 of the Permit between January 27, 2016 and December 22, 2016, 2017:

1.	January 27, 2016 (BOD)
2.	February 18, 2016 (BOD

3. February 25, 2016 (BOD)

February 25, 2016 (pH)
 March 11, 2016 (BOD)

6. September 22, 2016 (BOD)

7. October 8, 2016 (BOD)

8. November 22, 2016 (BOD)

9. December 22, 2016 (BOD)

The February 2, 2017, Inspection Record 47373 identified there were <u>15</u> non-compliances with Section 1.2.2 of the Permit between January 8, 2015 and November 22, 2016:

- 1. January 8, 2015 (BOD)
- 2. February 17, 2015 (BOD)
- 3. February 25, 2015 (BOD)
- 4. March 10, 2015 (BOD)
- 5. March 30, 2015 (BOD)
- 6. November 19, 2015 (BOD)
- 7. November 19, 2015 (TPH)
- 8. November 19, 2015 (TSS)

- 9. December 16, 2015 (BOD)
- 10. December 16, 2015 (TSS)
- 11. January 7, 2016 (BOD)
- 12. January 7, 2016 (pH)
- 13. September 22, 2016 (TSS)
- 14. November 22, 2016 (BOD), and
- 15. November 22, 2016 (TSS).

Since the February 2, 2017, Inspection Record was completed, there have been <u>eleven</u> additional non-compliances with Section 1.1.2 of the Permit which were self-reported by CPR between January 27, 2017 and October 17, 2017:

- 1. January 27, 2017 (Toxicity);
- 2. February 15, 2017 (BOD);
- 3. February 27, 2017 (BOD);
- 4. February 27, 2017 (Toxicity);
- 5. March 16, 2017 (BOD);
- 6. May 4, 2017 (Toxicity);

- 7. May 25, 2017 (Toxicity);
- 8. June 9, 2017 (Toxicity);
- 9. September 21, 2017 (Toxicity)
- 10. September 27, 2017 (BOD), and
- 11. October 17, 2017 (BOD).

Summary of Relevant Facts

Canadian Pacific Railway Company (Company) is a large Canadian company with many assets across Canada, including British Columbia, with estimated annual revenue of \$6.2 Billion in 2016. The company maintains a railyard at Golden BC.

[Forward Momentum: Investor Fact Book, 2017, CP Rail, p.4]¹

The provincial regulatory authorization governing the discharge of effluent from CPR's Golden Railyard is waste discharge Permit 8059 (the Permit) issued pursuant to the *Environmental Management Act*, S.B.C. 2003, c. 53. The Permit was issued and is administered by the British Columbia Ministry of Environment (the Ministry). The Permit has undergone several amendments since originally issued on October 13, 1992 and the current permit is dated May 20, 2015. The May 2015 Permit authorizes discharge of effluent from two wastewater treatment plants through a combined outfall to the Columbia Wetlands per the terms of the permit. The May 2015 Permit includes new requirements for non-compliance reporting that entails notifying the Director of non-compliance within 24 hours of original notification (including analytical results). Within 30-days of the non-compliance CPR must submit a written report to the Director including analytical results with a detailed summary; specific permit non-compliance and corrections to the operational system; root causes of non-compliance and remedial action planned.

[2015 05 20 8059 signed amended Permit]

The Columbia Wetlands are a designated Wildlife Management Area and provides nesting, feeding and resting sites, which are used extensively by waterfowl, ungulates, mammals (cougar, wolf, bear, beaver, etc), amphibians & reptiles and variety of fish species.

[http://www.env.gov.bc.ca/fw/habitat/conservation-lands/wma/columbia wetlands/]

¹ http://s21.q4cdn.com/736796105/files/doc_downloads/fact-book/2017/CPR-FactBook-2017-Web.pdf

On March 16, 2015, Officer Archibald conducted an office review inspection of CPR's wastewater treatment facility (Facility) in Golden, BC to determine compliance with the Permit. A Warning was issued to CPR for failure to comply with Section 1.1.2 of the Permit. The non-compliances were specifically for 5-Day Biochemical Oxygen Demand (BOD) exceedances in January, February, March, April and December of 2014 and Total Suspended Solids (TSS) exceedances in May and December of 2014 at the South Yard Wastewater Treatment Plant. At that time, the North Yard Wastewater Treatment Plant, authorized in Section 1.1.2 of the Permit, was not completed.

[2015-03-16 IR 19906 data review-Warning and 2004-09-01 Permit 8059]

Construction of the North Yard Wastewater Treatment Plant was completed in March of 2015 and the Permit was amended on May 20, 2015 to authorize that discharge.

[2015 05 20 8059 signed amended Permit]

On January 25, 2017, Officer Bailey conducted an on-site inspection of the Facility as well as an office review of the 2015 Annual Report, 2015 Q4 report, 2016 Q1, Q2 and Q3 reports, and the 2016 Non-compliance reports to determine compliance with the Permit. Officer Bailey noted 22 exceedances with limits in Sections 1.1.2 and 1.2.2 of the Permit for the period of time from March 17, 2015 to January 25, 2017 (Inspection Record 47373).

[2017-02-02 IR 47373 and 2017-01-25 Photo Record - CPR 8059]

Since January 25, 2017, eleven additional non-compliances with Section 1.1.2 of the Permit have been self-reported and are included in this Administrative Penalty.

Section 1.1.2

There were <u>20</u> non-compliances with Section 1.1.2 reported for the North Yard Wastewater Treatment Plant (NYWTP) from January 27, 2016 to October 17, 2017 as follows:

1. On January 27, 2016, BOD was measured to be >230 mg/L, exceeding the Permit limit of 20 mg/L.

[Non-compliance Report titled "2016-02-11 s1.1.2 BOD exceedance and 2016-04-29 2016 Q1 Rpt]

2. On February 18, 2016, BOD was measured to be 320 mg/L, exceeding the Permit limit of 20 mg/L.

[2016-04-29 2016 Q1 Rpt]

3. On February 25, 2016, BOD was measured to be 230 mg/L, exceeding the Permit limit of 20 mg/L.

[Non-compliance Report titled "2016-03-09 s1.1.2 BOD & pH exceedance and 2016-04-29 2016 Q1 Rpt]

4. On February 25, 2016, field pH was measured to be 8.7, exceeding the Permit limit of 8.5 pH units.

[Non-compliance Report titled "2016-03-09 s1.1.2 BOD & pH exceedance" and 2016-04-29 2016 Q1 Rpt]

5. On March 11, 2016, BOD was measured to be 29 mg/L, exceeding the Permit limit of 20 mg/L.

[Non-compliance Report titled "2016-03-23 s 1.1.2 BOD exceedance"]

6. On September 22, 2016, BOD was measured to be 150 mg/L, exceeding the Permit limit of 20 mg/L.

[Non-compliance Report titled "2016-10-07 s 1.1.2 BOD exceedance" and 2016-10-28 2016 Q3 WQ Rpt]

7. On October 8, 2016, BOD was measured to be 100 mg/L, exceeding the Permit limit of 20 mg/L.

[Non-compliance Report titled "2016-10-19 s 1.1.2 BOD exceedance" and 2016-10-28 2016 Q3 WQ Rpt]

8. On November 22, 2016, BOD was measured to be 29 mg/L, exceeding the Permit limit of 20 mg/L.

[Non-compliance Report titled "2016-12-08 s1.1.2 s 1.2.2 BOD & TSS exceedance" and 2017-01-26 2016 Q4 WQ Rpt]

9. On December 22, 2016, BOD was measured to be 44 mg/L, exceeding the Permit limit of 20 mg/L.

[Non-compliance Report titled "2017-01-12 s1.1.2 BOD exceedance" and 2017-01-26 2016 Q4 WQ Rpt]

10. On January 27, 2017, Rainbow Trout 96 hours test failure and the Daphnia Magna 48 hours test failure at the North Yard showed 100% mortality for both test (permit limit is 50% mortality), and failure of the Daphnia Magna test at the Outfall with 50% mortality.

[Non-compliance Report titled "2017-02-16 s1.1.2 Tox TSS & Zinc exceedances"]

11. On February 15, 2017, BOD was measured to be 139 mg/L at the North Yard and 119 mg/L at the Outfall, exceeding the Permit limit of 20 mg/L.

[Non-compliance Report titled "2017-03-09 s1.1.2 BOD exceedance."]

12. On February 27, 2017, BOD was measured at North Yard measured 201 mg/L (exceeding permit limit of 20 mg/L).

[Non-compliance Report titled "2017-03-17 s1.1.2 BOD & Tox Exceedances"]

13. On February 27, 2017, Rainbow Trout 96h toxicity test failure for North Yard sample resulted in 100% mortality (exceeding the <50% permit limit)

[Non-compliance Report titled "2017-03-17 s1.1.2 BOD & Tox Exceedances"]

14. On March 16, 2017, BOD measured to be 114 mg/L (exceeding the permit limit of 20 mg/L) and zinc measured 0.16 mg/L (above BC Water Quality Guidelines).

[Non-compliance Report titled "2017-04-11 s1.1.2 BOD & Total Zinc exceedances"]

15. On May 4, 2017, the Rainbow Trout 96h toxicity test failure at North Yard resulted in 100% mortality (exceeding the <50% permit limit).

[Non-compliance Report titled "2017-05-19 s1.1.2 Tox exceedance"]

16. On May 25, 2017, the Rainbow Trout 96h toxicity test failure at North Yard resulted in 100% mortality (exceeding the <50% permit limit).

[Non-compliance Report titled "2017-06-29 s1.1.2 Tox exceedance"]

17. On June 9, 2017, the Rainbow Trout 96h toxicity test failure at North Yard resulted in 100% mortality (exceeding the <50% permit limit) and the Daphnia Magna (48hr) resulted in 100% mortality (exceeding the <50% permit limit).

[Non-compliance Report titled "2017-07-26 s1.1.2 Tox exceedance"]

18. On September 21, 2017, the Rainbow Trout 96h toxicity test failure for North Yard sample resulted in 70% mortality (exceeding the <50% permit limit).

[Non-compliance Report titled "2017-10-17 s1.1.2 Tox exceedance."]

19. On September 27, 2017 BOD was measured to be 270 mg/L at the North Yard and 175 mg/L at the Outfall (exceeding the permit limit of 20 mg/L). Zinc measured 0.25 mg/L at North Yard 0.34 mg/L at the outfall (above BC Water Quality Guidelines).

[Non-compliance Report titled "2017-10-20 s1.1.2 Tox BOD & Zinc exceedances"]

20. On October 17, 2017, BOD measured to be 247 mg/L (exceeding the permit limit of 20 mg/L).

[Non-compliance Report titled "2017-12-14 s1.1.2 BOD exceedance"]

Section 1.2.2

There were 15 non-compliances with Section 1.2.2 reported for the South Yard Wastewater Treatment Plant (SYWTP) from January 8, 2015 to November 22, 2016 as follows:

1. On January 8, 2015 BOD was measured to be 21 mg/L, exceeding the Permit limit of 20 mg/L.

[2016-03-31 2015 Annual Rpt]

2. On February 17, 2015 BOD was measured to be 183 mg/L, exceeding the Permit limit of 20 mg/L.

[2016-03-31 2015 Annual Rpt]

3. On February 25, 2015 BOD was measured to be 111 mg/L, exceeding the Permit limit of 20 mg/L.

[2016-03-31 2015 Annual Rpt]

4. On March 10, 2015 BOD was measured to be 51 mg/L, exceeding the Permit limit of 20 mg/L.

[2016-03-31 2015 Annual Rpt]

5. On March 30, 2015 BOD was measured to be 38 mg/L, exceeding the Permit limit of 20 mg/L.

[2016-03-31 2015 Annual Rpt]

6. On November 19, 2015, BOD was measured to be 22 mg/L, exceeding the Permit limit of 20 mg/L.

[2016-03-31 2015 Annual Rpt]

7. On November 19, 2015, Total Petroleum Hydrocarbons (TPH) were measured to be 15 mg/L, exceeding the Permit limit of 10 mg/L.

[2016-03-31 2015 Annual Rpt]

8. On November 19, 2015, TSS were measured to be 26 mg/L, exceeding the Permit limit of 20 mg/L. The Permit discharge limit exceedances on November 19, 2015 were attributed to site works at the old fuelling platform.

[2016-03-31 2015 Annual Rpt]

9. On December 16, 2015, BOD was measured to be 400 mg/L, exceeding the Permit limit of 20 mg/L,

[Non-compliance Report titled "2016-01-05 s1.2.2 BOD exceedance and 2016-03-31 2015 Annual Rpt"]

10. On December 16, 2015, TSS were measured to be 44 mg/L, exceeding the Permit limit of 20 mg/L. The Permit limit discharge exceedances on December 16, 2015 were attributed to a toilet chemical spill that occurred at the site.

[2016-03-31 2015 Annual Rpt]

- 11. On January 7, 2016, BOD was measured to be 58 mg/L, exceeding the Permit limit of 20 mg/L. [Non-compliance Report titled "2016-01-18 s1.2.2 BOD exceedance" and 2016-04-29 2016 Q1 Rpt]
- 12. On January 7, 2016, pH was measured to be 8.7, exceeding the Permit limit of 6.5- 8.5. [2016-04-29 2016 Q1 Rpt]
- 13. On September 22, 2016, TSS was measured to be 21 mg/L, exceeding the Permit limit of 20 mg/L.

[2016-10-28 2016 Q3 WQ Rpt]

14. On November 22, 2016, BOD was measured to be 210 mg/L, exceeding the Permit limit of 20 mg/L.

[Non-compliance Report titled "2016-12-08 s1.1.2 s 1.2.2 BOD & TSS exceedance" and 2017-01-26 2016 Q4 WQ Rpt]

15. On November 22, 2016, TSS was measured to be 28 mg/L, exceeding the Permit limit of 20 mg/L.

[Non-compliance Report titled "2016-12-08 s1.1.2 s 1.2.2 BOD & TSS exceedance" and 2017-01-26 2016 Q4 WQ Rpt]

On February 28, 2017, CPR provided a "Summary of Situation", prepared by Keystone Environmental in response to Inspection Record 47373. This report summarizes the suspected causes for the above noted Permit level exceedances at both the North and South Yards, and steps taken to correct the reoccurring non-compliances over the two year period since the March 16, 2015 Warning.

[2017-02-28 Ltr from CP Railway Permit 8059]

Table 1: Summary of Permit Limit Exceedances and Reporting Non-Compliances

The following is a summary of permit limit exceedances and reporting non-compliances since authorization of the effluent discharge under the Permit, from January 2014 to and including October 17, 2017.

Date of Non-Compliance	Sample				Exceedance from Permit	% Exceedance	
(Sample Date)	BOD mg/L	TSS mg/L	Toxicity	TPH mg/L	рН	limit	
Permit Limit	20	20	< 50 %	10	6.5- 8.5		
1. January 2014	93.8					73.8	369
2. February 2014	220					200	1000
3. March 2014	89.2					79.2	396
4. April 2014	62.1					42.1	211
5. May 2014		26				6	30
6. December 2014	84.9					64.9	325
7. December 2014		39				19	95
	Warn		n Report #19 Issued March				
Permit Section 1.1.2							
1. January 27, 2016	230					210	1050
2. February 18, 2016	320					300	1500
3. February 25, 2016	230					210	1050
4. February 25, 2016					8.7	0.2	
5. March 11, 2016	29					9	45
6. September 22, 2016	150					130	650
7. October 8, 2016	100					80	400
8. November 22, 2016	29					9	45
9. December 22, 2016	44					24	120

Date of Non-Compliance						Exceedance	% Exceedance
(Sample Date)	BOD	TSS	Toxicity	TPH	рН	from Permit limit	
	mg/L	mg/L		mg/L			
Permit Limit	20	20	< 50 %	10	6.5- 8.5		
Permit Section 1.2.2							
1. January 8, 2015*	21					1	5
2. February 17, 2015*	183					163	815
3. February 25, 2015*	111					91	455
4. March 10, 2015*	51					31	155
5. March 30, 2015	38					18	90
6. November 19, 2015	22					2	10
7. November 19, 2015		26				6	30
8. November 19, 2015				15		5	50
9. December 16, 2015	400					380	1900
10. December 16, 2015		44				24	120
11. January 7, 2016	58					38	190
12. January 7, 2016					8.7	0.2	
13. September 22, 2016		21				1	5
14. November 22, 2016	210					190	950
15. November 22, 2016		28				8	40
* As noted in the 2016 Q	ı uarter 1 Monit	ı oring Repo	rt and Permi	t Status U	pdate, p	3. [2016-04-29 20	1 16 Q1 Rpt]
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Permit Section 1.1.2 – additional contraventions January 25, 2017 to October 17, 2017 reported by Canadian Pacific Railway Company							
1. January 27, 2017			100%				
2. February 15, 2017	139					119	595
3. February 27, 2017	201					181	905
4. February 27, 2017			100%				
					<u> </u>		

Date of Non-Compliance (Sample Date)	Sample				Exceedance from Permit	% Exceedance	
(Sample Date)	BOD	TSS	Toxicity	TPH	рН	limit	
	mg/L	mg/L		mg/L			
Permit Limit	20	20	< 50 %	10	6.5- 8.5		
5. March 16, 2017	114					94	470
6. May 4, 2017			100%				
7. May 25, 2017			100%				
8. June 9, 2017			100%				
9. September 21, 2017			70%				
10. September 27, 2017	270					250	1250
11. October 17, 2017	247					227	1135

Bold font indicates a contravention subject to an administrative monetary penalty.

*Permit limit is

Total Petroleum Hydrocarbons	10 mg/L
5-Day BOD, 20 ºC	20 mg/L
Total Suspended Solids	20 mg/L
рН	6.5-8.5
Toxicity	< 50 %

Continued on next page

PART TWO: PENALTY CALCULATION

Based on the information provided above, an administrative penalty is being considered for failure to comply with Sections 1.1.2 and 1.2.2 of the Permit from January 8, 2015 to October 17, 2017.

Factors to be considered in penalty calculation:

A. Base penalty calculation:

The base penalty reflects the seriousness of the contravention or failure, based on the following two factors:

a) Nature of Contravention or Failure

Major

The majority of the Permit limit exceedances from January 8, 2015 to October 17, 2017 are exceeding the permit limit by over 100%.

b) Actual or Potential for Adverse Effect

Low

The potential for adverse effects were assessed as low due to the high dilution ratio in the receiving environment (Columbia Wetlands). The potential adverse effect is temporary in nature, and the effect is localized.

The permit exceedance of Section 1.1.2 and Section 1.2.2 has been reported continuously (month to month) and repeatedly from January 2015 to October 17, 2017. Permit exceedances are a chronic problem with CPR at the Golden Railyard facility and needs to be addressed.

BASE PENALTY:



\$ 7,000

B. Application of Penalty Adjustment Factors

The following factors reflect the unique circumstances of this file, including what happened before, during and after the contravention or failure.

c) Previous contraventions or failures, AP's imposed or orders issued:

+ \$1000

- A Warning was issued on March 16, 2015, for failure to comply with Section 1.1.2 of the Permit.
- An Advisory was issued on May 15, 2013, for failure to comply with Section 1.1.2 of the Permit.
- An Advisory was issued on April 23, 2013, for failure to comply with Section 1.1.2 of the Permit.
- A Notice of Non-compliance was issued on September 6, 2012, for failure to comply with Section 1.1.2 of the Permit.

d) Whether contravention or failure was repeated or continuous

+ \$26,000

The failure to comply with the Permit discharge requirements was continuous and repeated as the party has not demonstrated continued compliance with Section 1.1.2 and Section 1.2.2 of the permit. The failure to comply with Section 1.1.2 of the Permit occurred on 18 separate days from January 27, 2016 to October 17, 2017. The failure to comply with Section 1.2.2 of the Permit was reported to have occurred on nine separate days from March 30, 2015 to November 22, 2016.

March 16, 2015, Inspection Report #19906 noted six of seven exceedances were more than 50% over the permit limit, and five of seven were more than 200% over the permit limit.

February 2, 2017 Inspection Report #47373 noted six of eight exceedances for Permit Section 1.1.2 were more than 50% over the permit limit, and five of eight were more than 200% over the permit limit. For Permit Section 1.2.2 there were five of eleven exceedances more than 50% over the permit limit, and four of eleven were more than 200% over the permit limit

Non-Compliance reports submitted by CPR since the February 2, 2017 inspection report noted ten of eleven exceedances were more than 50% over the permit limit, and five of eleven were more than 200% over the permit limit.

This penalty is being applied to <u>26</u> of the <u>31</u> permit limit exceedances (those over 25%) since March 16, 2015 Inspection Report #19906 and warning letter was issued to CPR, and as identified in Table 1.

e) Whether contravention or failure was deliberate

+ \$2000

Canadian Pacific Railway Corporation was aware that they were exceeding their permit limits (March 16, 2015 Warning, sampling results for North Yard, South Yard and Outfall, and non-compliance report submissions), but continued to discharge effluent to the combined outfall.

Since the February 2, 2017, Inspection and referral for an administrative monetary penalty, there have been eleven additional non-compliances with the permit limits up to October 17, 2017 where BOD measured 247 mg/L (1135% exceedance). The corrective measures undertaken by CPR have not resulted in effluent discharge meeting permit limits. Attention remains needed to address effluent quality issues.

f) Economic benefit derived by the party from the contravention or failure

+ \$1000

The economic benefit of delaying the costs of implementing better source controls and treatment at the wastewater treatment systems as well as delaying completion of the Remedial Action Plan are an indirect benefit from the failure to comply with the Permit.

g) Exercise of due diligence to prevent the contravention or failure

+ \$0

There is no evidence that CPR exercised due diligence to prevent the contraventions.

h) Efforts to correct the contravention or failure

- \$4000

CPR has taken steps to correct the permit non-compliances. It has retained Keystone Environmental as a qualified professional to aid them in correcting the chronic non-compliances at the North and South Yard Wastewater Treatment Plants.

The construction of the North Yard Wastewater treatment Plant was completed in March of 2015 and operators have since adopted manual control of the oxidation process to address issues with faulty oxidation-reduction sensors, ensure appropriate hydrogen peroxide dosing and improve reaction time.

The frequency of oxidation-reduction potential (ORP) measurements has been increased during the oxidation process, and recirculation of effluent through the plant is being undertaken to increase BOD efficiency. Granular activated carbon was removed and replaced with virgin carbon to promote rapid decomposition of residual hydrogen peroxide.

Utilizing hydrogen peroxide field strips prior to effluent discharge to provide an indication of residual concentration of hydrogen peroxide in the effluent to prevent discharging effluent that may have elevated hydrogen peroxide concentrations.

Discharge of the South Yard Wastewater treatment Plant has been suspended during significant toilet chemical events, with effluent hauled to the North Yard Wastewater Treatment Plant for treatment.

Rerouting effluent from the South Yard WWTP to North Yard WWTP in order to better align the effluent volumes at the North Yard WWTP with the original design criteria.

Hiring additional personnel to assist with the operation of the North Yard WWTP.

i) Efforts to prevent reoccurrence of the contravention or failure

- \$1000

CPR has taken steps to prevent similar Permit non-compliances. At the North Yard Wastewater treatment Plant, operators have adopted manual control of the oxidation process to address issues with faulty oxidation-reduction sensors, ensure appropriate hydrogen peroxide dosing and improve reaction time. The frequency of oxidation reduction potential (ORP) measurements has been increased during the oxidation process, and recirculation of effluent through the plant is being undertaken to increase BOD efficiency.

Discharge of the South Yard Wastewater treatment Plant has been suspended during significant toilet chemical events, with effluent hauled to the North Yard Wastewater Treatment Plant for treatment where there is a greater degree of control over the treatment process.

CPR has indicated it plans on decommissioning the South Yard Wastewater Treatment Plant, installing a toilet chemical storage and dispensing containment system, and has retained Keystone Environmental to develop a remedial action plan. This information was provided on February 28, 2017 in the Keystone Environmental report titled "2017-02-28 Ltr from CP Railway Permit 8059".

j) Any additional factors that are relevant

- \$500

The above noted non-compliances were self-reported as required by the Permit.

TOTAL PENALTY
ADJUSTMENTS:

BOX B

= \$24,500.00

Add Box A and Box B

PENALTY AFTER
CONSIDERING ALL FACTORS:

\$ 31,500.00

IS A DAILY MULTIPLIER BEING APPLIED TO THIS PENALTY

No

The continuous and repeated permit exceedances were addressed in Section d).

TOTAL PRELIMINARY PENALTY ASSESSMENT

\$31,500.00