

Administrative Monetary Penalty Sanction administrative pécuniaire

Notice of Violation Avis d'infraction

REFERENCE NUMBER /	N° DE REFÉRÉNCE:	AMP-002-2020					
Information for Pipeline Information pour la soci			un particulier:				
Name / Nom:	Westcoast Energy Inc, on business as Spectra Transmission	, ,	TOTAL PENALTY AMOUNT / MONTANT TOTAL DES	\$ 40,000			
Contact / Contactez:	Bill Yardley EVP and President, Gas Transmission & Midstream 5400 Westheimer Court		PÉNALITES:				
Title / Titre:			Date of Notice / Date de l'avis:	September 17, 2020			
Address / Adresse:							
City / Ville:	Houston Texas 77056 USA		Regulatory Instrument #	GC-32, as amended			
Province / State / Etat:			/ N° de l'instrument réglementaire:				
Telephone / Téléphone:							
Fax / Télécopieur:							
Email / Courriel:							

On / Le October 9, 2018 (date violation was detected / date infraction avait été constatée)

Westcoast Energy Inc.

Was observed to be in violation of a CER regulatory requirement. This violation is subject to an administrative monetary penalty, as outlined below.

A commis une infraction aux exigences réglementaire de la RCE, sujet à la sanction administrative pécuniaire ci-dessous.

Section One - Violation Details / Renseignements sur l'infraction

⊠ Single-day violation / Infraction d'	un iour	Date of Violation / Date d'infraction: October 9, 2018					
☐ Multi-day Violation/ Infraction mul	ti-journée:	(from	/ du):	(to / au):			
Total Number of Days 1	Has compliance		⊠ Yes / Ou	ıi 🔲 No / Non			
/ Nombre total de jours:	achieved? La situation est-elle rétablie?		If no, a subsequent NOV may be issued. Si non, un autre avis d'infraction pourrait être envoyé				
Location of Violation / Lieu de l'infraction: approximately 13km northeast of Prince George, BC							
Short Form Description of Violation / Description abrégée de l'infraction (Refer to Schedule 1 of the AMP Regulations / Voir l'annexe 1 du Règlement)							
Act or Regulation/Section:							
Subsection 4(2) of the Onshore Pipeline Regulations							



☐ Contravention of an Order or decision made under the Act (ss. 2(2) of the AMP Regulations) / Dérogation à une ordonnance ou à une décision rendue sous le régime de la Loi (paragraphe 2(2) de Règlement sur les sanctions administratives pécuniaires)
Failure to comply with a term or condition of any certificate, licence, permit, leave or exemption granted under the Act (ss. 2(3) of the AMP Regulations) / Manquement à une condition d'un certificat, d'une licence, d'un permis, d'une autorisation ou d'une exemption accordé sous le régime de la Loi (paragraphe 2(3) du Règlement sur les sanctions administratives pécuniaires)

Section Two - Relevant Facts / Faits saillants

Briefly describe reasonable grounds to believe a violation has occurred / Décrire brièvement les motifs raisonnables de croire qu'une infraction a été commise.

Westcoast Energy Inc. (Westcoast), which operates as Spectra Energy Transmission (a wholly owned subsidiary of Enbridge Inc. (Enbridge) following Enbridge's merger with Spectra in February 2017), owns and operates a 36" (914.4 mm) natural gas transmission pipeline (hereinafter referred to as NPS 36 L2) pursuant to Certificate of Public Convenience and Necessity GC-32, as amended. Westcoast also owns and operates a 30" (762 mm) natural gas transmission pipeline (hereinafter referred to as NPS 30 L1) pursuant to Board of Transport Commissioners for Canada Order 86329, which shares the vast majority of the same right of way with NPS 36 L2. Additionally, the NPS 36 L2 and NPS 30 L1 pipelines share the same right of way as a Pembina Pipeline Corporation (hereinafter referred to as Pembina) 12 inch liquids (oil) pipeline, the latter of which is regulated by the BC Oil & Gas Commission.

On 9 October 2018, there was a rupture and subsequent fire/explosion (hereinafter referred to as the Incident) on Westcoast's NPS 36 L2 pipeline located approximately 13km northeast of Prince George, BC (INC2018-142). The Incident occurred at segment 4AL2 of NPS 36 L2, which is located between compressor stations 4A (upstream of Incident) and 4B (downstream of Incident). As a result of the rupture on NPS 36 L2 pipeline, a parallel section of the NPS 30 L1 was vented during a controlled blowdown. As such, both the NPS 36 L2 pipeline and the adjacent NPS 30 L1 pipeline segment, between compressor stations 4A and 4B, were depressurized. To ensure immediate safety, an Inspection Officer Order (IOO) NB-001-2018, as amended, was issued to Westcoast on 10 October 2018 to limit the operating pressure on the NPS 36 L2 pipeline, between station 2 to the Huntingdon meter station, and on the NPS 30 L1 pipeline, segment 4AL1 (between Compressor Station 4A and Compressor Station 4B). Both Westcoast pipelines were back to normal operations by November 2019.

The NPS 36 L2 pipeline, which was put into service in the 1960s, had a maximum operating pressure of 6,453 kPa, as approved by the National Energy Board (NEB). At the time of the Incident, the operating pressures at compressor station 4A discharge and compressor station 4B suction were 6,357 kPa (922 psig) and 5,660 kPa (821 psig), respectively.

The Transportation Safety Board (TSB) conducted an investigation into the rupture; it released its report on 4 March 2020. As set out in the TSB report, the rupture originated at stress corrosion cracks on the outside surface of the NPS 36 L2 pipeline.

Following the rupture, the NEB conducted regulatory oversight activities and an enforcement investigation. During these processes, the NEB determined that Westcoast did not adequately



implement its integrity management program with respect to stress corrosion cracking and inspection practices and that, had Westcoast done so, the pipeline defect could have been detected to avoid the rupture.

Therefore, it has been determined that Westcoast violated subsection 4(2) of the Canadian Energy Regulator Onshore Pipeline Regulations, which states:

"Without limiting the generality of subsection (1), the company shall ensure that the pipeline is designed, constructed, operated or abandoned in accordance with the design, specifications, programs, manuals, procedures, measures and plans developed and implemented by the company in accordance with these Regulations"

*Note: On 28 August 2019, the National Energy Board Act was repealed and replaced by the Canadian Energy Regulator Act, and the National Energy Board was replaced by the Canada Energy Regulator (CER).

**On 1 April 2020, the Miscellaneous Program made non-substantial amendments to National Energy Board's Onshore Pipeline Regulations, including changing the name to the Canadian Energy Regulator Onshore Pipeline Regulations.

Background:

The Incident of 9 October 2018 took place in a relatively remote location, and although nobody was injured, nearby residents, including the Lheidli T'enneh First Nation, evacuated as a precaution. Environmental damage did occur as a result of the Incident; specifically, the Incident resulted in damage to vegetation (forest and grass) on provincial Crown land surrounding the Incident site. Additionally a portion of the adjacent oil pipeline owned and operated by Pembina was damaged during the Incident and required replacement.

The area affected by the fire that resulted from the pipeline rupture covered roughly 52 000 m2. Approximately 3.98 million cubic metres of natural gas from the NPS 36 L2 pipeline was combusted and an additional 0.85 million cubic metres of natural gas was vented during a controlled blowdown of a parallel section of the NPS 30 L1 pipeline. There was also a crater, approximately 10 m wide and 30 m long, that was created as a result of the explosion. The Pembina pipeline was not flowing at the time of the rupture.

In response to the Incident, the NEB activated its Emergency Operation Centre in Calgary, Alberta, and NEB staff were deployed to site. To ensure immediate safety, an Inspection Officer Order (IOO) NB-001-2018, as amended, was issued to Westcoast on 10 October 2018 to limit the operating pressure on the Westcoast NPS 36 L2 pipeline, between station 2 to the Huntingdon meter station, and on the adjacent Westcoast NPS 30 L1 pipeline, segment 4AL1. On 23 October 2018, the initial IOO was amended to extend the pressure restriction to the entire NPS 36 L2 pipeline. On 30 November 2018, the NEB issued a Notice of Measures Satisfied allowing the NPS 30 L1 pipeline segment 4AL1 to return to service. Additionally, by 28 November 2019, all specified measures of the IOO NB-001-2018, as amended, were satisfied and the NPS 36 L2 pipeline was able to return to full operating pressure.

In order to obtain more information from Westcoast regarding the cause of the Incident and corrective actions taken, the NEB/CER sent Information Requests (IRs) to Westcoast on 19 November 2018 (IR#1), 24 July 2019 (IR#2), 29 October 2019 (IR#3) and 12 June 2020 (follow up to IR #3). Westcoast provided its responses to the NEB/CER on 17 and 21 December 2018, 23 August 2019, 30 October 2019 and 19 June 2020, respectively.

Frequency of In-line Inspections:

On 21 December 2018, in its response to IR #1, Part C&D, Westcoast provided Table 19-5 which



states that a stress corrosion cracking (SCC) In Line Inspection (ILI) of the NPS 36 L2 pipeline's segments is to be performed at an interval of 5 to 9 years. On 23 August 2019, in its response to IR #2, Westcoast provided the In Line Inspection Tracker spreadsheet for the NPS 36 L2 pipeline segment 4AL2 titled "Attachment1-1 ILI Inspection Tracker 4AL2" (hereinafter referred to as the Inspection Spreadsheet). The Inspection Spreadsheet indicated that a proposed ILI interval was a maximum of 9 years for the NPS 36 L2 pipeline segment 4AL2. Specifically the Inspection Spreadsheet stated: "Proposed ILI Interval (max 9 years)" and a "Calculated Inspection Frequency" of 9 years.

Additionally, on 30 October 2019 Westcoast provided the CER with its Stress Corrosion Cracking Hazard Management Plan (dated 2017-10-30). As indicated in its IR response #2, Westcoast's SCC ILI uses EMAT technology (ElectroMagnetic Acoustic Transducer). EMAT is commonly used by gas operators for the detection of SCC. In its SCC Hazard Management Plan, the company indicated in its IR response #2 that re-inspection intervals are determined primarily based on the "as found" size of stress corrosion cracking features upon excavation. The growth rate used to determine re-inspection frequency on segment 4AL2 of the NPS 36 L2 pipeline was based on dig results from the 2003 EMAT inspection on the 4AL2 segment. At the time, a factor of safety was applied, resulting in the re-inspection interval with a maximum of 9 years.

On 19 June 2020, in its response to follow up IR #3, Westcoast confirmed that the SCC ILI reinspection frequencies of 5 to 9 years shown in Table 19-5 in response to IR#1 was presented as a summary of calculated results using the process described in the SCC Hazard Management Plan. Specifically, Westcoast stated "as the SCC Hazard Management Plan specifies that a 'maximum reinspection interval between successive EMAT inspections of ten years is required', the calculated reinspection frequency of 5-9 years could be extended by one year." Based on the above, an SCC ILI for segment 4AL2 of the NPS 36 L2 pipeline was required between 5 to 9 years, but the EMAT ILI could be extended by one year.

Extension of In-Line Inspection Intervals:

As noted above, Westcoast's response to IR #3 confirms that the calculated re-inspection intervals of 5 to 9 years could be extended by one year. Table 19-5 of Westcoast's response to IR #1 states that based on stress corrosion cracking growth rate, largest detected feature, and tool technology advancement, an extension of 1 year could be allowed with a technical assessment to justify the extension.

Information regarding the technical assessment is found in section 4 of Westcoast's Standard Operating Practice (SOP) Waivers and Technical Assessment 1.8, which was filed as part of its response to IR #2. The SOP states:

"The SOP Waiver and Technical Assessment form shall be used for a process, decision or work activity that is required under the Pipeline Integrity Management Program and which is;

1. a deviation from an existing clause of an integrity management SOP, Plan, or Program (e.g. delay of a feature inspection beyond the planned time)"

The SOP Waiver and Technical Assessment required a multi-step process. As part of this assessment, Westcoast was required, among other things, to consider safety. Based on the above, Westcoast could extend its SCC ILI interval by one year for segment 4AL2 of the NPS 36 L2 pipeline if a SOP Waiver and Technical Assessment was conducted as per its Integrity Management Program.

Westcoast's Inspections of NPS 36 L2 pipeline segment 4AL2



Table 19-1 in Westcoast's response to IR #1, notes that the last SCC ILI for the NPS 36 L2 pipeline was conducted on 30 July 2008 and before that on 22 July 2003. Westcoast also indicated it had done pipeline replacement/repair on sections of the NPS 36 L2 pipeline between compressor stations 4A and 4B at five locations between 1985 to 2014.

Westcoast notes that an EMAT ILI was scheduled for segment 4AL2 of the NPS 36 L2 pipeline for October 2018, however the SCC ILI had not been performed by the time of the Incident. Regardless, this SCC ILI would not have occurred within the maximum of 9 years from the previous SCC ILI which was performed on 30 July 2008. As an SCC ILI on segment 4AL2 of the NPS 36 L2 pipeline was not performed within the maximum 9 year period as indicated in Westcoast's Inspection Spreadsheet, the NEB requested Westcoast provide its technical assessment justifying the one year extension of the ILI frequency as per its SOP.

In its IR #2 response, Westcoast indicated that:

"Westcoast is unable to locate a technical assessment and waiver form for the extension of the inspection interval by one year for the 4AL2 pipeline segment. No evidence exists that a request to perform an inspection deferral assessment was made in 2017 for the EMAT ILI of the 4AL2 segment...Westcoast is unable to locate any documented internal communications pertaining to the decision to extend the ILI interval for the EMAT ILI tool on the 4AL2 segment by one year." As per its SOP 1.8, Westcoast was required to complete a technical assessment and waiver form for an extension beyond the maximum of 9 years. There is no evidence that Westcoast completed a technical assessment as required by its SOP 1.8 which forms part of its Integrity Management Program.

Conclusion:

Pursuant to subsection 4(2) of the Canadian Energy Regulator Onshore Pipeline Regulations, a company shall ensure that the pipeline is designed, constructed, operated or abandoned in accordance with the design, specifications, programs, manuals, procedures, measures and plans developed and implemented by the company in accordance with these Regulations.

Westcoast's Inspection Spreadsheet establishes that, based on calculated results using the process described in the SCC Hazard Management Plan, inspections for the NPS 36 L2 pipeline segment 4AL2 were to occur within a maximum of 9 years. A one year extension of the ILI interval was possible if a technical assessment had been completed pursuant to Westcoast's Standard Operating Practice Waivers and Technical Assessment 1.8, which forms part of Westcoast's Integrity Management Program.

Westcoast provided evidence in Table 19-1, which formed part of its response to IR #1, that the last SCC ILI for the NPS 36 L2 pipeline was conducted on 30 July 2008. Westcoast was unable to provide any evidence to show that a technical assessment, as required by the SOP 1.8, was undertaken prior to making a decision to extend the SCC ILI interval on segment 4AL2 of the NPS 36 L2 pipeline by one year.

Westcoast indicated that an EMAT ILI was scheduled for segment 4AL2 of the 36 NPS L4 pipeline for October 2018, however the SCC ILI had not been performed by the time of the Incident. Regardless, this SCC ILI would not have occurred by 2017, which was the 9 year maximum from the previous SCC ILI, performed on 30 July 2008. While Westcoast's SOP 1.8 allowed for a one year extension following a technical assessment, Westcoast has been unable to find evidence that said technical assessment was undertaken or completed. Had an SCC ILI been performed as per Westcoast SCC Hazard Management Plan and the corresponding Inspection Spreadsheet during the required 5 to 9 year inspection interval, the inspection tool likely may have captured the stress corrosion cracking that failed on the NPS 36 L2 pipeline segment 4AL2. Alternatively, had a technical assessment been conducted as per Westcoast's SOP 1.8, the technical assessment may have



raised concerns with the extension of the SCC ILI beyond the 9 year maximum period, and Westcoast could have taken the necessary steps, based on the findings of the technical assessment, to ultimately prevent the Incident on the NPS 36 L2 pipeline segment 4AL2.

The NEB/CER investigation has determined that the immediate cause of the failure of NPS 36 L2 pipeline segment was due to stress corrosion cracking which could have been detected, and thus the rupture would likely have been prevented, had an SCC ILI occurred within the maximum 9 year period. Alternatively, if Westcoast was proposing to extend the inspection interval by one year, it was required to complete a technical assessment as per its Standard Operating Procedures 1.8.

Westcoast has been unable to provide evidence to show that either were done as required by Westcoast's Integrity Management Program. This AMP is being issued due to the company's failure to conduct its SCC ILI within the required period and implement its Standard Operating Practice Waivers and Technical Assessment, as required by its Integrity Management Program. Specifically, Westcoast did not implement its established procedures for identifying and managing changes required to defer the stress corrosion cracking inspections.

Section Three - Penalty Calculation / Calcul des sanctions

A) Baseline Penalty (Gravity Level = 0) / Pénalité de base (côte de gravité = 0) Refer to AMP Regulations, Subsection 4(1) / Voir le Règlement, paragraphe 4(1))										
Category / Catégorie Individual / Personne physique		Any Othe	ner Person / Autre Personne							
Type A	□ \$1,365	5								
Type B	□ \$10,000	⊠ \$40,000								
B) Applicable Gravity Value / Côte de gravité globale applicables Gravity Leve						.eve	vel			
(Refer to AMP Regulations, Subsection 4(2) / Voir le Règlement, paragraphe 4(2))			Mitiga / Atte	Aggravating / Aggravantes						
			-2	-1	0	† 1	+2	+3		
Other violations in previous seven (7) years / Autres infractions au cours des sept (7) années précédantes										
AMP-001-2015, AMP-008-2015, A	MP-009-2015									
Any competitive or economic benefit from violation / Avantages concurrentiels ou économiques découlant de l'infraction										
NA										
	able efforts to mitigate/reverse violation's effect/reverse 's effect / Efforts raisonnables déployés pour atténuer ou les effets de l'infraction									
NA										
Negligence on part of person w la part de la personne ayant co	vho committed violation / Négligence de ommis l'infractio									
Westcoast did not comply with its SCC Hazard Management Plan and complete the SOP as required by their Integrity Management Program. Company did the calculations and set the ILI interval between 5-9 years, but exceeded the 9 year maximum period. Although the company did mobilize equipment and had plans to conduct the ILI in mid-October 2018, it did not conduct the necessary technical assessment										



and get the necessary approvals granting the one year extension.								
Reasonable assistance to the Board with respect to violation / Collaboration raisonnable avec l'Office en ce qui a trait à l'infraction								
Westcoast was cooperative throughout the NEB investigation and has complied with all measures to restore the pipeline to safe operation. Communications at all levels of the company were well established with CER executives and staff, and Westcoast was proactive in setting up multiple technical meetings to apprise the CER of changes being undertaken and managed with respect to the Incident.								
Promptly reported violation to the Board / Infraction signalée sans délai a l'Office								
Incident was duly reported as per the Event Reporting Guidelines and OPR.	i							
Steps taken to prevent reoccurrence of violation / Mesures prises pour prévenir les récidive								
Westcoast developed Engineering Assessments with conservative approaches for the return of the NPS 36 L2 pipeline segments to their full operating pressure while the pipe was under pressure restrictions. Additionally, Westcoast has taken a number of steps to prevent a reoccurrence of the violation in the future. In particular, in 2019-2020 Westcoast performed EMAT GEN 3 In Line Inspections and enhanced its methodology for the evaluation of tool performances. It also capped its re-inspection intervals to six years. On 22 October 2019, Westcoast presented to the CER numerous organizational changes and resources to address priority areas and implementation of integrity management practices to avoid reoccurrence of the violation. Immediate changes were also made to the SCC Hazard Management Plan to reduce the maximum re-inspection interval.								
∀iolation was primarily reporting/record-keeping failure / Infraction reliée principalement à la production de rapports ou à la tenue des dossiers								
NA								
Any aggravating factors in relation to risk of harm to people or environment / Facteurs aggravants pouvant causer du tort au public ou à l'environnement								
The incident caused a rupture and subsequent fire/explosion. Although nobody was injured and the residents were not in the emergency response zone, residents, including residents of the nearby Lheidli T'enneh First Nation, evacuated as a precaution. The area affected by the fire covered roughly 52,000 m2 and the explosion resulted in a crater approximately 10m wide by 30m long. Environmental damage did occur as a result of the explosion; specifically, damage to vegetation (forest and grass) on provincial Crown land surrounding the incident site and to pipeline infrastructure, however the incident was in a relatively remote area.								
C) Total Gravity Value / Côte de gravité globale						0		
D) Daily Penalty / Sanctions quotidiennes (baseline penalty adjusted for the final gravity level / Pénalité de base d'acôte de gravité)	après l	а			\$ 40	,000		
E) Number of Days of Violation / Durée de l'infraction (If more than one day, justification must be provided / si plus d'une journée, prière de justifier) NA								
Notes to explain decision to apply multiple daily penalties, or "Not Applicable" / Notes pour expliquer la décision d'appliquer des pénalités mulitiples quotidiennes, ou «sans objet».								



Section Four - Total Penalty Amount / Montant total de la pénalité

Note: The total penalty amount shown is based on the period described in section one above. If compliance has not been achieved, a subsequent Notice of Violation may be issued. Le montant total des pénalités est calculé d'après la periode decrite dans la premiere section. Si la situation n'a pas été rétablie, un autre avis d'infraction pourrair être envoyé.

Total Penalty Amount / Montant total de la pénalité

\$40,000

Section Five - Due Date / Date limite

Due Date / Date limite: November 4, 2020

Original signed by

Keith Landra

Designated Officer
Administrative Monetary Penalties

Fonctionnaire désigné Sanctions administratives pécuniaires



Notes

You have the right to make a request for a review of the amount of the penalty or the facts of the violation, or both, within 30 days after the Notice of Violation was received.

If you do not pay the penalty nor request a review within the prescribed period you are considered to have committed the violation and you are liable for the penalty set out in the Notice of Violation. The penalty is due on the date indicated above.

The unpaid penalty amount is a debt due to the Crown and may be recovered by collection procedures stipulated in the Financial Administration Act.

The information regarding the violation may be posted on the CER website:

- a) 30 days from the date this Notice of Violation was received; or
- upon issuing a decision following a Request for Review.

To Make Payment:

You may remit your fee payment by Electronic Funds Transfer (EFT) or by cheque payable to the order of Receiver General for Canada.

EFT payments can be arranged by contacting the Director of Financial Services, Monday to Friday, from 09:00 to 16:00 Mountain Time:

Telephone: 403-919-4743 / 800 899-1265 Fax: 403-292-5503 / 877-288-8803

Cheques should be made out to the *Receiver General for Canada" and mailed to:

Canada Energy Regulator Attention: Finance Suite 210, 517 - 10th Avenue SW Calgary, Alberta T2R OA8

Your completed *Payment* form should be enclosed with your payment.

Notes

Vous disposez de 30 jours après la signification de l'Avis d'infraction pour demander une révision du montant de la pénalité, ou les faits rapportés, ou les deux.

Si les sanctions ne sont pas acquittées et qu'aucune révision n'est demandée, vous étes considérés comme coupable de l'infraction et vous devez payer les sanctions précisées dans l'Avis d'infraction. Les sanctions sont payables à la date indiquée cidessus.

Un défaut de paiement constitue une créance envers l'Etat et peut être recouvré en utilisant tous les recours prévus dans la Loi sur la gestion des finances publiques.

L'information concernant l'infraction pourrait égalment être affichée sur le site Web de la RCE:

- a) 30 jours après la date de réception de l'Avis:
- dès qu'une décision a été rendue à la suite d'une Demande de révision.

Paiement:

Vous pouvez payer le montant dû par transfert électronique de fonds (TEF) ou par chèque établi à l'ordre du Receveur général du Canada.

Pour se prévaloir du service de transfert électronique, communiquer par téléphone avec le Directeur, Service des finances, du lundi au vendredi, de 9 h à 16 h, heure des Rocheuses :

> Telephone: 403-919-4743 / 800-899-1265 Telec.: 403-292-5503 / 877-288-8803

Les chèques doivent être établis à l'ordre du Receveur général du Canada et postés à l'adresse suivante:

> Sanction administrative pécuniaire - Révision Régie canadienne de l'énergie 517, Dixième Avenue S.-0., bureau 210 Calgary (Alberta) T2R OA8

Le formulaire de *paiement* dûment rempli doit accompagner le paiement.

