

Administrative Penalty Director’s Decision

Named Party: Encana Corporation **BA Code:** 0026

File No. 2015 - 022

Legislative Authority

Sections 59.3 of the *Public Lands Act*

Section 70(a) of the *Responsible Energy Development Act*

Preliminary Assessment

Number of Counts Identified	Base Assessment Amount	Factor Variance(s)	
Count 1	\$2 500	+\$2 500	
Count 2	\$3 500		
Total Counts: 2	Total Base Assessment: \$6 000	Total Variance:	\$8 500

Total Preliminary Assessment: \$8 500

Director's Decision Summary

On Thursday, August 31, 2017, I, Ron Wagener, Director, Pipelines, Environment and Operational Performance for the Alberta Energy Regulator (AER), spoke with Brent Harrison, Director, EH&S, for Encana Services Company Ltd., to discuss the Preliminary Administrative Penalty Assessment (the "preliminary assessment") prepared against Encana Corporation (Encana)¹, and to provide the opportunity for Encana to review this information.

During this discussion, a meeting time was established for Encana to meet in person with the AER to discuss the circumstances associated with the investigation and the prepared preliminary assessment. A copy of the preliminary assessment (dated September 1, 2017) was then forwarded to Mr. Harrison for Encana's review prior to the established meeting.

On Thursday, September 7, 2017, I, Ron Wagener, as the statutory decision maker (SDM) for this file, along with AER staff, met with Encana representatives at the Calgary AER office that included; Brent Harrison and Travis Ferguson, both Directors, EH&S, Dwayne Kelm, Senior Manager, Drilling & Completions, and Ms. Jung Lee, Director, Legal Services.

The purpose of this meeting was to provide Encana the opportunity to hear the facts and rationale used for the development of the preliminary assessment and its calculation – and to further allow Encana the opportunity to raise related questions, and to share with the AER any relevant information not previously submitted to be considered prior to making a final decision.

During the meeting, the AER's investigator for the file, presented to the attendees a summary of the circumstances and findings related to the investigation and associated contraventions; with the AER's compliance advisor then discussing the determination of the preliminary assessment calculation including the base penalty table ratings and factors.

Dialogue included Encana conveying to the AER, their analysis and findings as to the cause of the incident, as well as describing their relationship with contracted services as it relates to occupational health and safety legislation. During the meeting, Encana further requested the opportunity to provide additional information in response to the preliminary assessment through a subsequent written submission to the SDM for consideration in rendering a final decision. The SDM agreed to this request.

The SDM received Encana's submission dated September 11, 2017 (the "submission"), which communicated Encana's general areas of concern and their desire to provide clarity on; manufacturer's requirements for snubbing units, the difference between the role of a prime contractor and employer as it relates to count 2, and additional considerations of Encana's due diligence and its steps taken to mitigate.

¹ Encana Corporation is the AER's licensee of record for the subject well (AER well licence W0466075), and the Kaybob well pad (AER facility licence F48055) where the well control incident occurred.

Discussion

While the preliminary assessment considered all the information obtained during the investigation, the verbal and written submissions provided by Encana are new. All the information obtained during the investigation and this new information has been given consideration to support the SDM in rendering this decision.

The following discussion will respond to Encana's submission dated September 11, 2017.

- **Manufacturer's requirements for snubbing units:**

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(Encana); '...engineering documentation was provided by Kova Engineering which provided approval for this snubbing unit's stack stability system, which was based on four guy lines that are anchored so that the guy line is at a 45-degree angle and affixed to a minimum 1179 kg anchors.'

The snubbing stack had a manufacturer's identification plate outlining its load capacity but there was no engineering drawing or documentation for the height of installation on the Encana wellhead. As evidenced in job scope that Encana provided to Deep Well, Deep Well recognized the requirements of design and the necessity of engineering support for installation and pre-job calculations. An anchoring requirement was given to EnCana and was executed accordingly and well #1 performed without any issues. The gravitational failure was not caused by the inadequacy of the anchoring, but by the loosening of the guy line.

The AER notes that the need to install guy lines for self-contained snubbing units to meet manufacturer's specifications, is based on the requirement under section 763(1)(a) of the *Occupational Health and Safety Code 2009 (OHSC)*. This requirement is incorporated by reference in section 8.090(8) of the *Oil and Gas Conservation Rules (OGCR)*, such that Encana, as licensee, is responsible for ensuring all installations at or near a well, process vessel, oil storage tank or other source of ignitable vapor are made in compliance with section 763(1)(a) of the *OHSC*.

The engineered drawing prepared by Kova Engineering Saskatchewan Ltd. and provided to the AER by Snubco Pressure Control Ltd., the manufacturer of this snubbing unit, identifies specifications for the snubbing unit that includes anchorage requirements, a guy wire configuration and unit height under a specific wind load design. Evidence obtained during the AER's investigation identified the installed height of the snubbing unit exceeded specifications as described in the engineered drawing provided by the manufacturer.

In its submission, Encana stated that Deep Well Services Corp., an Encana contractor, recognized the requirements of design and necessity of engineering support for installation and pre-job calculations.

Encana further stated in its submission that an anchoring requirement was given to Encana and executed accordingly.

Section 13 of the *OHSC* recognizes that procedures or specifications certified by a professional engineer to ensure safety may be complied with in lieu of manufacturer's specifications. The AER has considered the statements provided by Encana in its submission and notes that Encana has not provided the AER any supplemental engineering reviews or analysis to verify that site variances were taken into account and certified by a professional engineer, including site variances from the engineered drawing provided by the manufacturer. The AER is not satisfied Encana ensured that the snubbing unit was installed in accordance with the manufacturers specification or modified specifications certified by a professional engineer. Furthermore, the decision made by Encana's contractors to loosen the guy line created the circumstance that the snubbing unit was also not in compliance with the manufacturer's specifications or modified specifications or procedures certified by a professional engineer.

Accordingly, the AER finds that Encana, as licensee, failed to ensure all installations at or near a well, process vessel, oil storage tank or other source of ignitable vapor is made in compliance with section 763(1)(a) of *OHSC*.

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(Encana); 'Snubbing stacks are component based and, as such, they do not fall under this definition of structures covered by this RP...'

Section 763(1)(b) of the *OHSC* requires that self-contained snubbing unit guy lines are installed in accordance with the *API Recommended Practice RP 4G, Recommended Practice for Maintenance and Use of Drilling and Well Servicing Structures (2004) (API)* or manufacturers specifications. The AER interprets the *API* and applicable guying requirements as applying to self-contained snubbing units. Beyond the general statement outlined above, Encana has provided no specific evidence within the *API* to suggest otherwise.

▪ **The role of a prime contractor and employer:**

Encana requested that the AER ensure its records recognize a distinction between the obligations of a prime contractor and employer under *Occupational Health and Safety (OHS)* legislation, and reflect accurately the different roles played by the persons involved in this incident on the Encana site.

The AER recognizes that a distinction exists between the obligations of prime contractor and employers as defined under *OHS* legislation. However, the AER finds Encana responsible for the contravention of section 8.090(8) of the *OGCR* as the licensee of record – for not ensuring that all installations at or near a well, process vessel, oil storage tank or other source of ignitable vapour were made in compliance with regulations under the *Occupational Health and Safety Act (OHS Act)*. Where appropriate, the AER will identify the distinction of persons involved in this decision.

Regarding the ‘Seriousness of the Contravention: Major’, as described in the preliminary assessment, and associated with the contravention of section 8.090(8) of the *OGCR*:

(Encana); ‘...we believe that a rating of “moderate” would be more appropriate in the circumstances. This is recognizing that the AER looks to Encana as the licensee. However, the reasoning provided and provision relied upon to conclude as such is based ultimately on contravention of the OHSC and the OHSC properly interpreted and applied to Encana in this circumstance is that Encana failed its duty as a prime contractor and not as an employer...’

The AER has considered the submission of Encana and, as outlined above, recognizes that a distinction exists between the obligations of prime contractor and employers under *OHS* legislation. However, this distinction is not considered in determining the seriousness of this contravention.

Section 8.090(8) of the *OGCR* was contravened by Encana, as the licensee of record. This requirement supports the overarching purpose of the *Oil and Gas Conservation Act* which includes; ‘...to secure the observance of safe and efficient practices, [...], in operations for the production of oil and gas...’ and, ‘...to control pollution, [...], in operations for the production of oil and gas’. The foundational nature of this legislation and its subordinate requirements, are intended to ensure public safety and environmental protection. It not only places a responsibility on the licensee to comply with regulatory requirements, but an inherent obligation on licensees to ensure that compliance with regulatory requirements is extended and enforced to those conducting work on their behalf, to ensure that public safety and environmental protection is upheld.

As such, the AER finds that given the nature and regulatory importance of the requirement and the circumstance in which this requirement was contravened, the “Seriousness of the Contravention” will remain “Major”.

▪ **Additional considerations of Encana’s due diligence and steps taken to mitigate**

Encana made reference with some “Factors applicable to this case”; which are adjustment factors that can be applied to the base penalty of each assessment count, and then influence the total amount of the administrative penalty.

The primary concerns presented by Encana relate to ensuring that Encana’s relationship with its service providers and contractors are accurately reflected, and clarification on the AER’s analysis with respect to factor (b).

Encana further provided additional information to be considered for the factor determination, by informing the AER of its subsequent positive and proactive efforts to mitigate a recurrence.

The AER has considered Encana’s written submission in relation to the base penalty and factors applicable to this assessment. These considerations have been applied to the adjustment factors associated with the base penalty.

The following are the identified counts, with the base assessment amounts and revised factor variances for the contraventions under the *Public Lands Act (PLA)* and the *OGCR*:

Counts

PUBLIC LANDS ACT

COUNT 1

On or about September 21, 2015 until September 27, 2105, at or near 04-04-063-21 W5M, in the Province of Alberta, Encana released approximately 955 000 cubic metres (m³) of gas, 803 m³ of hydrocarbon condensate and frack fluids, and 741 m³ of produced water, that resulted in loss or damage to approximately 4.9 hectares of public land, in contravention of section 54(1)(a.1) of the *PLA*.

BASE PENALTY TABLE				
Seriousness of Contravention				
Extent of actual or potential loss or damage		Major	Moderate	Minor
		Major	5000	3500
Moderate		3500	2500	1500
Minor		2500	1500	1000
None		1000	650	250

Seriousness of Contravention: Moderate

As pressures are exerted on the Province to expand and diversify our economy, these pressures alone are impacting public lands through increased human activity, loss of wilderness, and risks to water quantity and quality. Every effort must be made by users and occupiers of public land to not contribute to loss or damage of this valuable resource for the benefit of existing and future Albertans. Accordingly, any loss or damage that occurs is considered a significant breach of legislation.

Over a six-day period, Encana released products (gas, hydrocarbon condensate and frack fluids, produced water) associated with the uncontrolled well incident that impacted approximately 4.9 hectares of Crown (public) land; causing damage to soil, vegetation, and impacting an ephemeral (seasonal) watercourse.

Actual or Potential Loss or Damage: Moderate

The damage to public lands occurred for six days until the well was controlled, and was primarily due to the released products that extended beyond the lease, as well as the containment and remediation activities that were undertaken. Approximately 4.9 hectares of public land were affected, with about 36 136 m³ of contaminated fluids removed from the site, and 33 977 tonnes of contaminated soils, organic materials (leaf litter and fibric/humic cover) and vegetation.

The actual and potential loss caused by this incident is considered moderate due to the scope of the damage that has occurred, and remediation activities undertaken to date.

Base Assessment: \$2 500

OIL AND GAS CONSERVATION RULES

COUNT 2

On or about September 21, 2015, at or near Fox Creek in the Province of Alberta, the AER became aware that Encana contravened section 8.090(8) of the *OGCR* by failing to ensure that all installations at or near any well, process vessel, oil storage tank or other source of ignitable vapour were made in compliance with regulations made under the *OHSA*.

BASE PENALTY TABLE				
Seriousness of Contravention				
Extent of actual or potential loss or damage		Major	Moderate	Minor
		Major	5000	3500
Moderate	3500	2500	1500	
Minor	2500	1500	1000	
None	1000	650	250	

Seriousness of Contravention: Major

The purpose of the *OGCA* includes: ‘...to secure the observance of safe and efficient practices, [...], in operations for the production of oil and gas...’ and, ‘to control pollution, [...], in operations for the production of oil and gas’. The regulatory requirements mandated by the *OGCA* and its subordinate legislation ensure that all activities undertaken pursuant to the *OGCA* are conducted in a manner that mitigates risk to human life and the environment. It not only places a responsibility to the licensee to comply with regulatory requirements, but an inherent obligation on licensees to ensure that compliance with regulatory requirements is extended and enforced to those conducting work on the licensees behalf, to ensure that public safety and environmental protection is upheld.

Encana failed to ensure that the installation of the snubbing unit was installed in accordance with the requirements of *OHSR*, as required by section 8.090(8) of the *OGCR* to ensure that all installations at or near any well are made in compliance with regulatory requirements – regulations with a primary intent to mitigate risk to worker and public safety as well as the environment.

The AER therefore considers the seriousness of this contravention to be major.

Extent of Actual or Potential Loss or Damage: Moderate

The circumstances that led up to resulting collapse and subsequent uncontrolled well release for six days, caused significant safety concerns to persons and effects to the environment that required substantial intervention in order to mitigate and manage. This included the immediate personnel evacuation of the site, managing ignition sources, executing an Emergency Response Plan including stakeholder notifications, establishing road blocks and security measures, and employing specialized services to address the uncontrolled well.

Overall, no deaths or injuries to persons occurred, and the resulting damage to public land was considered moderate. However, the circumstances could have resulted in significantly more severe consequences, including the injury or death to workers on site at the time.

While the potential loss or damage could have included serious injury, death, fire/explosion, and resulted in significant impacts to public lands requiring extensive remediation activities, the extent of actual loss or damage was significantly less and reasonably mitigated and controlled. The AER is therefore considering the extent of actual or potential loss or damage to be moderate.

Base Assessment: \$3 500

Factors to be considered to vary the Assessment (*PLA* and *OGCR*)

- (a) the importance to the regulatory scheme of compliance with the provision that was contravened;
- (b) the degree of wilfulness or negligence, if any, on the part of any person responsible for the contravention;
- (c) any steps taken by a person responsible for the contravention to avoid or limit the extent of any actual loss or damage that resulted or any potential loss or damage that may reasonably be expected to result from the contravention;
- (d) any steps taken by a person responsible for the contravention to prevent its recurrence;
- (e) any previous contravention of a provision prescribed by subsection (2) by a person responsible for the contravention;
- (f) whether a person responsible for the contravention derived or is likely to derive any economic benefit from the contravention;
- (g) any other factor that, in the opinion of the director, is relevant.

Factors applicable to this case

Factor from above	Amount Varied	Description/Comments
(a)	+ \$1 000	The AER has an expectation that disposition holders and licensees conducting energy related activities on public lands understand and comply with the <i>PLA</i> and <i>OGCR</i> . The requirements contravened by Encana as the licensee of record in this matter, are foundational in supporting worker and public safety, and environmental protection.
(b)	Neutral	Not being considered.
(c)	Neutral	Not being considered.

		Encana responded immediately and effectively to the incident, investigation, and the subsequent cleanup efforts. However, the AER considers these efforts to be an expectation of licensees under the regulatory framework.
(d)	- \$1 000	<p>Encana responded to this event with immediate investigative learnings across the company and to its contractors, including issuing an advisory to communicate the incident and further initiate immediate corrective action/prevention guidance to prevent recurrence.</p> <p>Encana further checked and reinforced with its service providers and employees that a similar snubbing rig in operation was complying with all requirements to ensure stack stability.</p>
(e)	Neutral	Not being considered.
(f)	Neutral	Not being considered.
(g)	+ \$1 500	<p>Following regulatory requirements is critical in mitigating risk to safety, and it was incumbent on Encana to ensure equipment and installations undertaken at its site by its contractors was conducted in accordance with the <i>OGCR</i>. This incident was precipitated by Encana not ensuring that the risk of loosening a guy line under the circumstances presented at the time was recognized by it or the other persons involved in this incident on the Encana site.</p> <p>This <i>OHSC</i> requirement is intended to identify, capture and mitigate those hazards, and to ensure that both prime contractors and employers carry out their duties. The AER finds this contravention with the requirement to undertake a hazard assessment when this deviation in operation or work process occurred to be significant given the site circumstances.</p> <p>Additionally, the AER finds that Encana failed to ensure that its contractors met manufacturer's specifications, professional engineering certified specifications, or recommended practices with respect to the installation of the snubbing unit. This specialized piece of equipment requires careful placement and securing to ensure its operational integrity, for the protection of a significant number of personnel, and the surrounding environment at this site.</p>

Final Decision

I, Ron Wagener, Director, Pipelines, Environment and Operational Performance for the AER, have fully considered all of the information collected in the investigation, the discussion with Encana at the September 7, 2017 meeting, as well as Encana's written submission sent to me on September 11, 2017.

I am of the opinion that the contraventions described did occur and is supported by evidence to demonstrate the contraventions.

After a review of all the information available, I find that there is lack of evidence to support due diligence by Encana as the licensee at the time of the contraventions for the following reasons;

Encana failed to ensure that a hazard assessment was conducted by its contractors in accordance the requirements under the *OHSC*, as required when a work process or operation changed. As a result, decisions were made on site in the absence of the process that is intended to identify, capture, and mitigate hazards – thereby losing an opportunity to consider the ramifications of loosening the guy line which ultimately precipitated the incident, and led to the damage to public lands.

Encana failed to ensure that recommended practices, manufacturer's specifications or professional engineering certified specifications for the snubbing unit were followed.

These are contraventions of an *OGCR* requirement that supports the overarching *OGCA* legislation '*...to secure the observance of safe and efficient practices, [...], in operations for the production of oil and gas...*' and, '*to control pollution, [...], in operations for the production of oil and gas*', for the safety of the public and environment.

I do recognize Encana's effective and efficient response and efforts undertaken in this matter.

Encana responded to the incident swiftly, effectively, cooperatively, with acknowledgement of their regulatory obligations during and after the incident. Encana was well represented by senior leadership at the September 7, 2017 meeting, showing commitment to learn from this experience.

Further steps have also been taken by Encana to prevent recurrence through their internal investigation learnings and educational activities directed to their staff and contracted services.

Based on all the information provided, adjustments of the factors from the preliminary assessment will be applied to the base assessment.

Total Number of Counts

Number of Counts Identified	Base Assessment Amount	Factor Variance(s)	
Count 1	\$2 500	+ \$1 000	- \$1 000
Count 2	\$3 500	+ 1 500	
Total Counts: 4	Total Base Assessment: \$6 000	Total Variance:	\$1 500

Accordingly, the application of the factors to the base penalty assessment, now results in a total administrative penalty of \$7 500.

Final Assessment: \$7 500

Date: September 19, 2017

<original signed by>

Director's Signature:

Ron Wagener, Director, Pipelines, Environment and Operational Performance, AER