

IN THE MATTER of a CONTRAVENTION
of the *OIL AND GAS ACTIVITIES ACT*
[SBC 2008] Chapter 36
before
The BC OIL & GAS COMMISSION
Case File 2017-061

BETWEEN

The BC Oil & Gas Commission

AND

Pavilion Energy Corporation

ADMINISTRATIVE FINDING

Before

Vice President, Operations, Lance Ollenberger

Representing the BC Oil & Gas
Commission

Enforcement Officer, Ken McLean

Representing Pavilion Energy
Corporation

President, Cas H. Morel

Decision Date

May 29, 2018

Introduction:

1. On April 13, 2017, General Order 2017-014 (the Order) was issued to Pavilion Energy Corporation (Pavilion) following a site inspection where BC Oil & Gas Commission (Commission) personnel discovered surface water with a hydrocarbon sheen on the site and flowing off lease into a ditch onto private land. The Order, in part, required the implementation of measures to prevent the flow of surface runoff from Pavilion's Red Creek Facility #0262 (the Facility) located at 03-10-85-21W6M.
2. A Contravention Report (the Report) was sent to me on January 22, 2018 alleging that Pavilion contravened sections 82, 37(1)(a) and/or 37(2)(a) & (b) of the *Oil and Gas Activities Act* (OGAA).
3. The Commission sent Pavilion a letter and the Report on January 24, 2018 informing Pavilion that I was considering making a finding that it contravened sections 82, 37(1)(a) and/or 37(2)(a) & (b) of the OGAA. The letter informed Pavilion of its opportunity to be heard in written form and advised that a finding of contravention could result in the Commission imposing an administrative penalty in accordance with section 63 of the OGAA.
4. Pavilion provided a response in a letter dated February 26, 2018 (the Response).
5. The Commissioner of the Oil & Gas Commission has delegated me authority under sections 62 and 63 of the OGAA. I will be making a determination with regards to: whether Pavilion contravened sections 82, 37(1)(a) and/or 37(2)(a) & (b) of the OGAA; whether to impose an administrative penalty under section 63 of the OGAA; and the amount of the penalty, if any. I have reviewed the Report and Pavilion's Response. In making a determination, I rely on these documents, and the applicable legislation.

Applicable Legislation

6. Section 82 of the OGAA states that a person to whom an order under this Act applies must comply with the order.
7. Maximum penalties for specific violations are set by regulation. Section 2(1) of the *Administrative Penalties Regulation* (APR) provides that a person who contravenes section 82 of the OGAA in relation to an order issued under section 49 is liable to an administrative penalty not exceeding \$500,000.
8. Section 37(1)(a) of the OGAA states that a permit holder and person carrying out an oil and gas activity must prevent spillage.
9. Section 2(1) of the APR provides that a person who contravenes section 37(1)(a) of the OGAA is liable to an administrative penalty not exceeding \$500,000.
10. Section 37(2) of the OGAA states, in part, that if spillage occurs, a permit holder or person carrying out an oil and gas activity must promptly do all of the following:
 - (a) remedy the cause or source of the spillage; and
 - (b) contain and eliminate the spillage.
11. Section 2(1) of the APR provides that a person who contravenes section 37(2) of OGAA is liable to an administrative penalty not exceeding \$500,000.

12. Section 62(1) of the OGAA states that, after providing an opportunity to be heard to a person who is alleged to have contravened a provision of the Act, the regulations, a permit, an authorization or an order, the Commission may find that the person has contravened the provision.
13. Section 62(5) of the OGAA states, in part, that the Commission may not find that a person has contravened a provision of the OGAA or the regulations if the person demonstrates to the satisfaction of the Commission that they exercised due diligence to prevent the contravention.
14. Section 63(1) states that, if the Commission finds that a person contravened a provision of the OGAA or its regulations, the Commission may impose an administrative penalty. Section 63(2) of the OGAA sets out the factors that must be considered when determining whether to impose an administrative penalty under section 63(1) and the amount of the penalty. These include:
 - (a) previous contraventions by, administrative penalties imposed on, or orders issued to the person;
 - (b) the gravity and magnitude of the contravention;
 - (c) the extent of harm to others resulting from the contravention;
 - (d) whether the contravention was repeated or continuous;
 - (e) whether the contravention was deliberate;
 - (f) any economic benefit derived by the person from the contravention;
 - (g) the person's efforts to prevent and correct the contravention; and
 - (h) other prescribed matters.

Background

15. Pavilion is the permit holder and operator of the Facility.
16. On January 3, 2017, a spill of oil occurred as Pavilion was commencing production operation of the oil wells in the Red Creek field. Based on observations by its field staff, Pavilion reported to the Commission that approximately 1m³ of oil was spilled. Investigation into the cause of the spill determined that a two inch gate valve was left partially open on the header system which Pavilion has since chained and locked to prevent recurrence.
17. On January 3 and 4, 2017, Commission staff attended the site to follow up on the reported spill. General Order 2017-001 was issued as a result of the findings during these inspections and the Facility was shut-in. Commission personnel determined Pavilion met General Order 2017-001 requirements and that order was terminated on February 15, 2017. At that time, Pavilion committed to monitoring the area and cleaning up any remaining oil residue.
18. On April 12, 2017, Commission personnel inspected the Facility and noted that there was water with a hydrocarbon sheen on the site and surface water with oil emulsion flowing off lease and into ditches eventually reaching a dugout on private land. It was observed that the fluids both on and off site had a visible hydrocarbon sheen.
19. On April 13, 2017, pursuant to sections 49(1)(a) and (b) of the OGAA, General Order 2017-014 was issued, which required Pavilion to do the following:
 1. On or before April 15, 2017 implement measures to prevent the flow of all surface runoff from Pavilion's Red Creek facility, ID 0003230, located at 03-10-085-21 W6M (the Facility),
 2. On or before April 27, 2017:

- a. Sample the soils and the liquid (ditch water) and delineate the area impacted as a result of the flow of surface runoff from the Facility. Soil samples must be analyzed for detailed salinity, CSR metals, VPH, LEPH, HEPH and BTEX.
- b. Remediate the visible stained soil in the area in and around the flare stack area at the Facility.
- c. Provide the Oil and Gas Commission (Commission) with a report that includes all the analytical data from the samples obtained, a diagram detailing the extent of the impacts, a summary of remedial actions undertaken in response to the flow of surface runoff from the Facility, and evidence of the remediated area (the Report). The Report must be submitted electronically to C&E@bcogc.ca.

20. Pavilion engaged Roy Northern Environmental Ltd. (Roy Northern) to assist in sampling and remediation actions. On April 26, 2017, the Order was amended to allow Pavilion more time to meet the requirements of Item 2 due to the site conditions being extremely wet. Subsequent to the Order amendment, several follow-up inspections were performed to monitor compliance. On June 21, 2017, Commission staff determined that Pavilion had met the requirements of the Order and it was terminated.

Issues

21. The issues which I will decide are:

Section 82 of the OGAA:

- Did Pavilion fail to comply with the Order?
- Did Pavilion exercise due diligence in its efforts to comply with the Order?
- Did Pavilion contravene section 82 of the OGAA?

Section 37(1)(a) of the OGAA:

- Did Pavilion fail to prevent spillage?
- Did Pavilion exercise due diligence in its efforts to prevent spillage?
- Did Pavilion contravene section 37(1)(a) of the OGAA?

Section 37(2)(a) of the OGAA:

- Did Pavilion fail to promptly remedy the cause or source of the spillage?
- Did Pavilion exercise due diligence in its efforts to promptly remedy the cause or source of the spillage?
- Did Pavilion contravene section 37(2)(a) of the OGAA?

Section 37(2)(b) of the OGAA:

- Did Pavilion fail to contain and eliminate the spillage?
- Did Pavilion exercise due diligence in its efforts to contain and eliminate the spillage?
- Did Pavilion contravene section 37(2)(b) of the OGAA?

If Pavilion is found to have contravened sections 82, 37(1)(a) and/or 37(2)(a) & (b) of the OGAA what if any, administrative penalty to impose?

Section 82 of the OGAA:

Did Pavilion fail to comply with the Order?

22. The Report alleges that Pavilion did not comply with Item 1 of the Order, which required Pavilion to implement measures to prevent the flow of all surface runoff from the Facility on or before April 15, 2017. The issuance of the Order on April 13, 2017 arose from follow up inspections relating to the spill that occurred in January that identified surface water running across the area around the flare stack that was covered in fluid with an observable sheen and free-phase hydrocarbons. The inspection officers noted that the fluid flowed across the lease, through a 6" metal pipe and off lease eventually into a dugout located on private land. Pavilion did not contact the Commission regarding the Order requirements for Item 1 by the deadline of April 15, 2017. An inspection performed on April 16 confirmed that surface runoff continued to move across the lease, through the pipe into the ditch and into the dugout. Follow up inspections by Commission personnel on April 20, 21 and 25, identified that surface runoff was continuing to leave the Facility. Pavilion acknowledges that surface runoff continued to be an issue as of May 12, 2017 in paragraph 22 of its Response.
23. Pavilion submitted that unusual flooding conditions during the spring break-up period contributed to the delay in remediation of the oil spill. It states that there were multiple heavy rainfall events which led to abnormally high volumes of surface runoff through the spring weather conditions that were not reasonably foreseeable. I am not convinced based on the evidence submitted by Pavilion, that the rainfall events were "extreme" or not reasonably foreseeable. Although the rainfall events were above the averages provided by Pavilion for the Fort St. John area, I am not satisfied that "above average" equates to not reasonably foreseeable. In any event, Item 1 of the Order required Pavilion to implement measures to prevent the flow of all surface runoff at the Facility by April 15, 2017. It is reasonable to expect that Pavilion would contact the Commission prior to the Order deadline to explain its position and request an extension to the Order requirements as soon as Pavilion felt it would not be able to meet this deadline.
24. On April 19, 2017, Pavilion contacted the Commission to advise of the works that had been completed at the Facility to stop the flow of water off lease. Pavilion indicated that a bell hole and ditching above the lease had been dug and a cap had been welded on the end of the pipe to stop flow but that it was waiting for it to dry out before doing more work. At this time, an extension to Item 2 of the Order was requested; however, Pavilion did not indicate it required any further time to meet the requirements of Item 1. A follow-up inspection was completed on April 20 which revealed surface water was still coming onto the lease, past the temporary berm and flowing off lease. The water continued flowing into a dugout and onto private land, down a drainage ditch, over an embankment and into the tributary of Red Creek.
25. For those reasons, I find that Pavilion failed to comply with the Order within the required timelines.

Did Pavilion exercise due diligence in its efforts to comply with the Order?

26. Pursuant to section 62(5) of the OGAA, I may not find that Pavilion contravened section 82 of the OGAA if Pavilion demonstrates to my satisfaction that it exercised due diligence to prevent the contravention. The test to be applied is whether Pavilion has demonstrated that it took all reasonable steps to prevent the contravention. Pavilion is not required to show that it took all possible or imaginable steps to avoid the contravention. The standard is not one of perfection, but rather of a reasonable person in similar circumstances.

27. Item 1 of the Order required Pavilion to implement measures to prevent flow of surface runoff by April 15, 2017. Pavilion provides no evidence to show what, if any, mitigation measures were put in place immediately following the issuance of the Order prior to the April 15 deadline. Photographs taken by Commission personnel at the site on April 16 show that absorbent pads had been placed at various locations on the lease and a small amount of ground material had been moved in an effort to prevent the flow of surface runoff but little else had been employed. A contractor on site at the time of the site visit, indicated there were no plans to perform any additional works that day.
28. Pavilion retained environmental company Roy Northern to sample soil and water impacted by the oil spill and verbally requested they assist with containment efforts; however, this occurred after the Order deadline for Item 1. The Limited Spill Response Report (Spill Report) submitted by Roy Northern confirms they did not arrive onsite until April 19, 2017. Pavilion states that on April 20, it realized that its approach to managing the actions around the surface runoff and flooding needed to be revised. Pavilion, in collaboration with Roy Northern personnel, implemented the following measures: utilization of pumping equipment to divert and remove fluids from the site as an emergency measure, construction of berms around the site to limit water movement, placement of a sediment fence in the northwest corner of the Facility, and placement of hydrocarbon selective sorbent booms to capture free product.
29. It is a reasonable expectation that Pavilion would have taken these above noted steps to mitigate the surface runoff prior to the Order deadline or alternatively, requested an extension to the Order. Pavilion did not display diligence in its efforts to comply with the Order deadlines for Item 1.
30. Pavilion has failed to satisfy me that it took all reasonable steps to prevent the contravention.
- Did Pavilion contravene section 82 of the OGAA?
31. I find that Pavilion has failed to comply with section 82 of the OGAA. I am not satisfied that Pavilion exercised due diligence to prevent the contravention. As such, I find that Pavilion contravened section 82 of the OGAA.
- Section 37(1)(a) of the OGAA:**
- Did Pavilion fail to prevent spillage?
32. On January 3, 2017, oil carried over the flare stack and resulted in oil spillage on the ground at the Facility. It was eventually determined that a gate valve at the inlet was left partially open, allowing product to flow to the flare knockout tank, then up and over the flare stack. Pavilion had vac trucks onsite to clean-up the product on the snow and ground in the area around the flare stack. The cause of the spillage was confirmed by Pavilion in paragraphs 8 and 9 of the Response. On January 16, Commission staff inspected the site and informed Pavilion that the spill was not adequately cleaned up and that the site required action immediately to remove the visible oil on the ground. On January 17, Pavilion indicated that it would have the oil staining on the snow and ground removed and would continue to monitor the area and remediate any oil residue.
33. On April 12, 2017, on a routine follow-up inspection, Commission staff noted water with a hydrocarbon sheen flowing across the lease and leaving the Facility location. The water was flowing across the same area around the flare stack that had been the site of the previous oil spill in January. The water had a noticeable sheen and free-phase hydrocarbons. Surface water with the hydrocarbon sheen flowed across the site, through a metal pipe and off lease into a ditch, eventually ending up in a private dugout.

34. The spillage is confirmed in the Spill Report submitted by Roy Northern on behalf of Pavilion. The Spill Report indicates its personnel noted the presence of free product and rainbow sheen floating on water on the site, as well as oil-water emulsion within the ditch system off lease when they attended the site on April 19, 2017.

35. As such, I find Pavilion failed to prevent spillage.

Did Pavilion exercise due diligence in its efforts to prevent spillage?

36. In its Response, Pavilion stated that prior to recommencing operations it prepared a Plan of Operations that included, in part, an intention "...to carry out inspections, repairs and maintenance of the wells, pipelines and facilities...". Further, field operators for Pavilion indicated that the valve was visually checked multiple times but that the actual position of the valve (open versus closed) could not be ascertained from the visual inspection.

37. Prior to recommencement of production operations, it is reasonable to expect that Pavilion would have performed more preventative maintenance in order to prevent the oil spill that occurred in January. Pavilion was unsure how the gate valve at the Facility was opened since it was not scheduled for maintenance and there was no operational reason for it to have been opened; however, it is reasonable to expect that all valves be tagged open or closed or at the very least double checked prior to startup of the Facility.

38. Pavilion states that it now requires its field operators to manually check all valves and not rely of visual inspections alone. This would have been a reasonable expectation prior to this incident occurring and especially prior to recommencing operations of a Facility that had not been operated since March of 2016.

39. I find Pavilion did not exercise due diligence in its efforts to prevent spillage.

Did Pavilion contravene section 37(1)(a) of the OGAA?

40. I find that Pavilion has failed to comply with section 37(1)(a) of the OGAA. I am not satisfied that Pavilion exercised due diligence to prevent the contravention. As such, I find that Pavilion contravened section 37(1)(a) of the OGAA.

Section 37(2)(a) of the OGAA:

Did Pavilion fail to promptly remedy the cause or source of the spillage?

41. It is alleged that Pavilion failed to promptly remedy the cause or source of the spillage. I have found that the spillage that occurred in April was a direct result of the failure to adequately clean-up the oil spill that happened in January. As discussed above, I determined that the cause of the spillage was the gate valve that was left partially open. It should be noted that Pavilion did not have any checks or balances in place with regards to the positioning of manual valves nor any checklists or onsite sign-off procedures in place prior to recommencement of operations at the Facility. Nevertheless, I accept the evidence presented by Pavilion outlining the steps taken to address the gate valve and to implement preventative measures by locking and chaining the valve and initiating a procedure to have field operators manually check valves to ensure they are in a closed position and not rely on visual inspections alone.

42. Therefore, I find that Pavilion did promptly remedy the cause or source of the spillage.

Did Pavilion exercise due diligence in its efforts to promptly remedy the cause or source of the spillage?

43. Given that I did not find that Pavilion failed to promptly remedy the cause or source of the spillage, there is no need to determine whether Pavilion demonstrated due diligence.

Section 37(2)(b) of the OGAA:

Did Pavilion fail to contain and eliminate the spillage?

44. As outlined above, a gate valve was left partially open during start-up of the facility which caused an oil spillage on January 3, 2017. On January 16, Commission staff inspected the site and informed Pavilion that the spill was not adequately cleaned up and that the site required action immediately to remove the visible oil on the ground. On January 17, Pavilion indicated that it would have the oil staining on the snow and ground removed and would continue to monitor the area and remediate any remaining oil residue.
45. On April 12, 2017, on a routine follow-up inspection, Commission staff noted water with a hydrocarbon sheen flowing across the lease and leaving the Facility location. The water was flowing across the same area around the flare stack that had been the site of the previous oil spill in January. The water had a noticeable sheen and free-phase hydrocarbons. Surface water with hydrocarbon sheen flowed across the site, through a metal pipe and off lease into a ditch, eventually ending up in a private dugout.
46. Pavilion failed to clean up and eliminate the spillage that occurred in January. This resulted in that spillage eventually flowing off site during spring runoff.
47. Some efforts were made by Pavilion following the issuance of the Order on April 13, but subsequent follow-up inspections on April 14, 16, 20, 21 and 25 showed that the surface runoff continued to flow offsite down the road and into the ditch system and dugout. The temporary measures including the berm, boom and silt fencing that were installed by Pavilion were insufficient as the actions still allowed fluids to leave the lease.
48. It was not until the Order was eventually terminated in June that the spillage had been adequately contained and eliminated. This delay resulted in much more significant impacts (i.e. the runoff onto private land and into a tributary of Red Creek) than if the spillage had been quickly addressed and contained.
49. For those reasons, I find Pavilion failed to contain and eliminate the spillage.

Did Pavilion exercise due diligence in its efforts to contain and eliminate spillage?

50. Once the spill did occur, the expectation is that Pavilion would have expended the required efforts to clean-up the original oil spill around the flare stack completely, leaving no residual contaminants and thus eliminating the spread of hydrocarbons offsite in April during the wet spring conditions when surface runoff was at its peak. This could have been done by performing the immediate remedial actions necessary to clean-up the spill entirely and by hiring a qualified environmental company or professional to assist in the containment and remedial works. It took Pavilion over 2 months to meet the requirement of the Order and over 5 months to clean-up and remediate the spill area.
51. Pavilion states that its intention was to monitor the area around the flare stack and perform additional clean-up of oil residue when surface conditions allowed for the excavation and removal

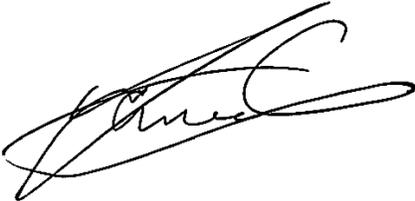
of the contaminated materials when the area was free of snow and ice. Pavilion indicates the area was excavated and soils taken to a landfill site to be disposed of in late May; however, photographs taken during the April 12 inspection showed that the site was mainly clear of snow and ice at that time. Pavilion could have performed the remedial actions during the period between January and April as the conditions were drying and thawing out and the surface was covered with very little snow and ice.

52. The Report alleges that Pavilion implemented minimal measures to prevent the spillage and eliminate surface runoff. I accept the evidence of the enforcement officer in this regard. The actions that were implemented were of a temporary nature and not long term water and site management solutions.
53. Additionally, Pavilion could have added water management features to include construction of a permanent berm to prevent the flow of water from leaving the lease and digging of ditches to avert water from flowing onto the site prior to the yearly wet spring break up weather. This would have prevented the overland flows of surface water from entering the lease before the spring weather conditions.
54. Pavilion states that it did exercise due diligence at all relevant times considering that the weather conditions were extreme and not reasonably foreseeable. I have reviewed the statistical evidence provided by Pavilion in regards to precipitation amounts during April and May. I am not convinced that the weather events that occurred were significantly unusual for the time of year in question. The very wet environment would have contributed to unfavourable conditions at the site and perhaps impacted remediation efforts. In spite of this, it is expected that Pavilion would expend the necessary means to address the containment and remediation of the original oil spill in a timely manner which contributed to the off-lease contamination.
55. Pavilion has failed to satisfy me that it took all reasonable steps to prevent the contravention.
Did Pavilion contravene section 37(2)(b) of the OGAA?
56. I find that Pavilion has failed to contain and eliminate spillage. I am not satisfied that Pavilion exercised due diligence to prevent the contravention. As such, I find that Pavilion contravened section 37(2)(b) of the OGAA.
If Pavilion is found to have contravened sections 82, 37(1)(a) and/or 37(2)(a) & (b) of the OGAA what if any, administrative penalty is to be imposed?
57. Section 63 of the OGAA sets out factors that the Commission must take into consideration when determining whether or not to impose an administrative penalty. In the following paragraphs, I consider the applicability of those factors to this contravention.
58. Pavilion has not had any previous contraventions or penalties imposed, but has two previous orders issued.
59. The gravity and magnitude is moderate due to the environmental impacts of allowing contaminated water to enter the aquatic ecosystem.
60. The contravention did not result in any harm to others.
61. The contravention was not repeated but continuous from January when the spill was not adequately eliminated until compliance was confirmed on June 19, 2017.

62. There is no evidence to show the contravention was deliberate.
63. Pavilion derived economic benefit by not expending the appropriate funds to fully clean up the contaminated area around the flare stack and not minimizing the spillage of flowing surface water containing hydrocarbons both on and off lease.
64. Pavilion expended minimal efforts to prevent and correct the contravention taking an extended period of time to comply with the Order and over 5 months to clean-up the spillage.

Conclusion

65. In consideration of the foregoing, I have found that Pavilion did not fail to promptly remedy the cause or source of the spillage; therefore, did not contravene section 37(2)(a) of the OGAA. However, I have found that Pavilion did contravene sections 82, 37(1)(a) and 37(2)(b) of the OGAA. In consideration of the factors identified in section 63 of the OGAA, I am imposing an administrative penalty of \$20,000.



Lance Ollenberger
Vice President, Operations
BC Oil and Gas Commission

Date: May 29, 2018