IN THE MATTER of a CONTRAVENTION

of the OIL AND GAS ACTIVITIES ACT

[SBC 2008] Chapter 36

before

The BC OIL and GAS COMMISSION

Case File 2021-0107

BETWEEN

The BC Oil and Gas Commission

AND

AQT Water Management Inc.

ADMINISTRATIVE FINDING

Before

Vice President, Operations, Andy Johnson

Representing the BC Oil and Gas Commission

Ken McLean, Compliance and Enforcement Officer

Representing AQT Water Management Inc.

Decision Date

Tom Johnson, President

July 15, 2022

Introduction/Background:

- 1. On August 7, 2020, the BC Oil and Gas Commission (Commission) issued Order 20-02-007 to AQT Water Management Inc. (AQTWM) under section 75 of the *Oil and Gas Activities Act* (the OGAA) to begin injectivity testing at 7-24-78-27, Well Authority #35043 (the Well). On September 11, 2020, the Commission issued Order 20-02-007 Amendment #1 (the Amendment) designating an area in the Bluesky formation for operation and use of a storage reservoir for the injection of produced water. The amendment detailed multiple conditions, including maximum injection pressure.
- 2. On March 21, 2021, the Commission received a report from a well permit holder of a drilling kick while drilling in the Bluesky formation at a location nearby, specifically G4-24-78-17(WA# 29777).
- 3. On March 26, 2021, the Commission suspended Order 20-02-007 under section 75(2)(b)(iv) until further notice. One of the reasons for suspending Order 20-02-007 indicated that the pressure may have exceeded the Pmax reservoir storage pressure.
- 4. The Commission issued General Order 2021-0107-01 (Order) under section 49(1)(e)(ii) of the OGAA on June 25, 2021, to AQTWM requiring them to reduce the measured reservoir pressure to 15,400 kPaa or less and provide a reservoir pressure test to the Commission that demonstrates the reservoir pressure is at or below 15,500 kPaa measured at 1,4515.5 mKB TVD by September 30, 2021.
- 5. The Commission contacted AQTWM via email regarding the Order. In a reply dated October 21, 2021, AQTWM confirmed it had been flowing back the Well since July 2021 and stated "AQTWM agrees that the data gathered to date by AQTWM and submitted to the Commission indicates the reservoir pressure likely exceeds 15,400kPa at the measurement depth".
- 6. On November 12, 2021, the measured reservoir pressure was 20,600 kPaa.
- 7. In the Response, AQTWM submitted a pressure transient analysis completed March 29, 2022. This analysis indicated a reservoir pressure of 15,931 kPa, or 531 kPa above the required pressure.
- 8. A Contravention Report (the Report) was sent to me on April 20, 2022, alleging that AQTWM contravened section 82 of the OGAA by failing to meet the requirements of the Order.
- 9. The Commission sent AQTWM a letter and the Report on April 26, 2022, informing AQTWM that I was considering making a finding that it contravened section 82 of the OGAA. The letter informed AQTWM 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.
- 10. AQTWM provided a response in a letter dated May 26, 2022 (the Response).
- 11. The Commissioner of the Oil and Gas Commission has delegated me authority under sections 62 and 63 of the OGAA. I will be making a determination with regards to: whether

AQTWM contravened section 82 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 AQTWM's Response. In making a determination, I rely on these documents, and the applicable legislation.

Applicable Legislation

- 12. Section 82 of the OGAA states that a person to whom an order under this Act applies must comply with the order.
- 13. 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 is liable to an administrative penalty not exceeding \$500,000.
- 14. 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.
- 15. 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.
- 16. 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.

Issues

- 17. The issues which I will decide are:
 - Did AQTWM fail to comply with the Order?
 - Did AQTWM exercise due diligence to comply with the Order?
 - Was any noncompliance due to an officially induced error?
 - Did AQTWM contravene section 82 of the OGAA?
 - If AQTWM is found to have contravened section 82 of the OGAA what if any, administrative penalty to impose?

Did AQTWM fail to comply with the Order?

- 18. In the Response AQTWM acknowledges that the pressure was not achieved by September 2021. I find that the reservoir pressure was not reduced to at or below 15,500 kPaa measured at 1,4515.5 mKB TVD by September 30, 2021.
- 19. AQTWM references a letter from the Commission dated October 18, 2021, requesting that AQTWM outline steps to achieve the required downhole pressure by April 1, 2022. AQTWM submits that "based on the projections from early March and the general trends observed through the flowback period AQTWM does believe the pressure was achieved by or near the deadline of April 1, 2022, in the amended Order."
- 20. I note that the Commission has authority under section 49(7) of the OGAA to amend an order issued under section 49(1) of the OGAA. There is no evidence that the Commission issued such an amendment to the Order. In any event, if it was necessary for me to make any finding on the matter, I would conclude there is insufficient evidence to establish that the reservoir pressure was reduced to at or below to at or below 15,500 kPaa by April 1, 2022. Even if there was an extended deadline of April 1, 2022, I note that the Response submits that the requisite pressure was achieved "by *or near*" that date and AQTWM did not at any time provide a reservoir pressure test to the Commission that demonstrates the reservoir pressure is at or below 15,500 kPaa measured at 1,4515.5 mKB TVD.

Did AQT exercise due diligence in its efforts to comply with the order?

- 21. Pursuant to section 62(5) of the OGAA, I may not find that AQTWM contravened section 82 of the OGAA if AQTWM demonstrates to my satisfaction that it exercised due diligence to prevent the contravention. The test to be applied is whether AQTWM has demonstrated that it took all reasonable steps to prevent the contravention. AQTWM 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.
- 22. In the Response AQTWM maintains it has taken measures to ensure progress had been made specifically flowing back since July 2021 and taking intermittent pressure tests. A step AQTWM could have taken to was to create a detailed plan to ensure the reservoir pressure was at or below the maximum allowable pressure by the prescribed time outlined in the Oder. This plan should have included sufficient pressure testing such that AQTWM would be able to track the progress in real time to ensure compliance with the Order.
- 23. AQTWM has failed to satisfy me that it took all reasonable steps to prevent the contravention.

Was any noncompliance due to an officially induced error?

24. I have no evidence before me of an officially induced error.

Did AQTWM contravene section 82 of the OGAA?

25. I find that AQTWM failed to comply with the Order and thereby contravened section 82 of the OGAA.

If AQTWM is found to have contravened section 82 of the OGAA what if any, administrative penalty is to be imposed?

- 26. 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.
- 27. There have been five General Orders issued to AQTWM since 2016. AQTWM was found in contravention of section 82 of the OGAA in 2017 for failing to comply with an order issued under section 75 of the OGAA.
- 28. The gravity of the contravention I conclude is moderate, but the magnitude of the contravention was moderate to high. Any loss of formation pressure presents a significant potential hazard to workers and the environment.
- 29. There is no evidence of harm to others as a result of the contravention.
- 30. The contravention was continuous.
- 31. There is no evidence demonstrating that the contravention was deliberate.
- 32. There is insufficient evidence to establish economic benefit derived as a result of contravention.
- 33. AQTWM has been flowing back the well since July 2021.

Conclusion

34. I have found AQTWM contravened section 82 of the OGAA. Based on the above discussion of the various factors set out in section 63(2), I am imposing an administrative penalty of \$20,000.

Anchy Johnson

Andy Johnson Vice President, Operations BC Oil and Gas Commission

Date: July 15, 2022