

March 16, 2021

Enforcement Action: 2020-1129-01

Canadian Natural Resources Limited
2100, 855 – 2nd Street, SW
Calgary, Alberta
T2P 4J8
Canada

Attention: Stacy Johnson, Senior Production Engineer, NEBC

RE: Warning: Failure to Comply With an Order

Dear Stacy Johnson,

On March 20, 2017 Canadian Natural Resources Limited (CNRL) was issued an Acid Gas Disposal Approval for Well Authorization 10347 (WA10347) by the BC Oil & Gas Commission (Commission).

Under the authority provided by section 75(1)(d) of the *Oil and Gas Activities Act* (OGAA), the Commission designated these disposal activities as a special project with the issuance of Order 17-16-002. Under section 75(2) of OGAA, the Commission imposed several conditions on CNRL as the permit holder for WA10347, including:

Operating Limits

- b) Limit the maximum H₂S concentration to 70.0%.

On November 20, 2020 CNRL self-disclosed its non-compliance with Order 17-16-002 with regard to pipeline segments 022664-001 and 023893-001 to the Commission.

Acid gas disposal commenced at WA10347 in August 2017, approximately 40 months prior to CNRL's self-disclosure submission. As disclosed by CNRL, H₂S concentrations periodically exceeded the imposed maximum of 70% approximately half of this time. CNRL also stated that it was their understanding that the "rolling average H₂S was being used as the marker for non-compliance." Following the discovery of its non-compliance, CNRL had ensured operations abided by the conditions of Order 17-16-002.

Maximum H₂S concentrations are a key variable in calculating the Emergency Planning Zone (EPZ) of an activity such as acid gas disposal. Average H₂S concentrations are not used in calculating EPZs as doing so would fail to take in to account the potential hazards associated with any peak-value H₂S concentration events. Accurate EPZs are essential to ensuring public safety for both the permit holder and the Commission.

CNRL's self-disclosure included notification of its intention to apply for Order 17-16-002 to be amended to include an approved maximum H₂S concentration of 95%. This requested amendment has since been approved and CNRL has updated its emergency response documentation accordingly.

Given the circumstances, CNRL is hereby issued a warning only for the following:

1. CNRL, on or between August 1, 2017 and November 1, 2020 at or near Fort St. John in the Province of BC, did fail to comply with an Order issued under section 75 of the *Oil and Gas Activities Act* contrary to section 82 of the *Oil and Gas Activities Act*.

If CNRL has any questions about this matter, please feel free to contact the undersigned.

Sincerely,

<original signed by>

Compliance & Enforcement Officer
BC Oil and Gas Commission