



File OF-Surv-Inc-2012 14301
19 July 2013

Ms. Jen Watson
Operations Superintendent
Norman Wells Operations
Imperial Oil Resources
Bag 5000
1001 Canol Drive
Norman Wells, NT X0E 0V0
Facsimile 867-587-3106

Dear Ms Watson:

**Imperial Oil Resources Ltd. (IORL) Pipeline Leaks at the Norman Wells
Production Facility**

The National Energy Board (the Board) directs IORL to submit a formal Corrective Action Plan (CAP) to mitigate the risk of a spill for all the 77 pipelines (66 oil emulsion, 9 produced water and 2 produced gas pipelines) mentioned in Table 1 of IORL's 1 February 2013 Norman Wells Pipelines Risk Management Review. The CAP shall include a completion timeline and justification for the prioritization of the work to be completed. Attached is Order CO-001-2013.

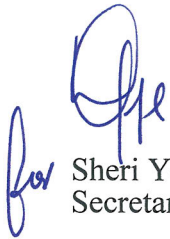
In 2011-2012, four oil emulsion pipelines, listed as M-43X, E-33-1X, O-18X, and Q-06X, forming part of IORL's gathering system leaked due to external corrosion. Following the most recent failure of pipeline Q-06X in October 2012, Board staff met with IORL to gather further information on the causes of the recent failures and to discuss IORL's plans to prevent reoccurrence. IORL indicated the leaks have occurred on pipelines constructed in the 1980s which share in common a coating system that was applied outside of clamshell insulation over bare steel pipe. IORL also indicated that water ingress can occur at the shrink sleeves installed over the clamshell insulation at girth welds and can cause external corrosion of the pipe.

IORL filed with the Board a copy of the Norman Wells Pipelines Risk Management Review dated 1 February 2013. Table 1 of this document indicates that there are 77 pipelines constructed in the 1980s that have the same coating and insulation design as the ones that leaked as mentioned above. On 28 March 2013, IORL provided a preliminary mitigation plan including abandonment, replacement and in-line inspection for 61 of the 77 pipelines in question, noting that the recommendations were subject to adjustment as plans progressed.

The proposed mitigations identified by IORL for the 61 pipelines contained in the preliminary mitigation plan appear to be adequate. However, IORL has not provided a plan for the other 16 lines also constructed in the 1980s and with the same coating and insulation design. In addition, the plan is informal at this point and does not provide a completion timeline.

The safety of Canadians and protection of the environment are the Board's top priorities. The Board requires companies to anticipate, prevent, manage and mitigate potentially dangerous conditions associated with their facilities.

Yours truly,

A handwritten signature in blue ink, appearing to read 'Sheri Young', is written over a printed name and title.

Sheri Young
Secretary of the Board

Attachment



ORDER CO-001-2013

IN THE MATTER OF the *Canada Oil and Gas Operations Act* (the Act) and the regulations made thereunder, and

IN THE MATTER OF Imperial Oil Resources Ltd. (IORL) pipeline leaks at the Norman Wells Production Facilities filed under File OF-Surv-Inc-2012 14301.

BEFORE the Board on 18 July 2013.

WHEREAS the Board regulates the operation of the IORL production facilities in Norman Wells, Northwest Territories under the *Canada Oil and Gas Operations Act*;

AND WHEREAS in 2011 and 2012, there was an oil emulsion leak in each of the pipelines identified as M-43X, E-33-1X, O-18X, and Q-06X;

AND WHEREAS in Table 1 of IORL's 1 February 2013 Normal Wells Pipelines Risk Management Review, IORL identified 77 pipelines (66 oil emulsion, 9 produced water and 2 produced gas pipelines) constructed in the 1980s with the same coating and insulation design as the four emulsion pipelines that leaked in 2011 and 2012;

AND WHEREAS IORL has provided a preliminary mitigation plan on 28 March 2013 including abandonment, replacement and in-line inspection for 61 of the 77 pipelines;

AND WHEREAS subsection 25(a) of the *Canada Oil and Gas Drilling and Productions Regulations*, SOR/2009-315 requires that operators ensure that all wells, installations, equipment and facilities are designed, constructed, tested, maintained and operated to prevent incidents and waste under the maximum load conditions that may be reasonably anticipated during any operation;


.../2

NOW THEREFORE, pursuant to subsection 5.32 (a) of the Act, the Board hereby orders IORL to do the following:

1. By 19 August 2013, IORL shall submit to the Board a corrective action plan with respect to the 77 pipelines (66 oil emulsion, 9 produced water and 2 produced gas pipelines) mentioned in Table 1 of the 1 February 2013 Normal Wells Pipelines Risk Management Review. The corrective action plan shall indicate IORL's plan to inspect, replace or abandon each of the 77 pipelines. The corrective action plan shall provide a completion timeline and justification for the prioritization of the work.
2. By 19 August 2013, IORL shall submit to the Board the details of the interim mitigation measures that IORL has taken or will take to reduce the risk of a spill until the corrective action plan is fully implemented.
3. IORL shall submit to the Board on a quarterly basis a report concerning IORL's progress implementing the corrective action plan.
4. By 19 August 2013, IORL shall submit to the Board an assessment of the effects on the ultimate oil recovery if flowlines are abandoned.
5. By 19 August 2013, IORL shall submit to the Board a well abandonment/well suspension plan, including a timeline, for those oil wells which would have its flowline abandoned.
6. By 19 August 2013, IORL shall submit to the Board a grouping and proration plan for those oil wells that may be affected by the corrective action plan.
7. IORL shall submit to the Board, in the next two Norman Wells Field annual production reports, a discussion concerning the effects on oil production rates due to flowline abandonments.

Issued the 19th day of July 2013.

NATIONAL ENERGY BOARD


for Sheri Young
Secretary of the Board