

Agreed Statement of Facts

Background

1. The Canada-Newfoundland and Labrador Offshore Petroleum Board (“C-NLOPB”) is a federal and provincial authority established by the joint operation of section 9 of the *Canada-Newfoundland Atlantic Accord Implementation Act*, R.S. 1987, c. 3, as amended, and section 9 of the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act*, RSNL 1990, c. C-2, as amended. The information in relation to the offence before the court was laid pursuant to the federal Act (the *Accord Act*) and the associated regulations, including the *Newfoundland Offshore Petroleum Drilling and Production Regulations* (SOR/2009-316).
2. Hibernia Management and Development Company Ltd. (“HMDC”) is the “operator” of the Hibernia offshore oil project in the Hibernia Commercial Discovery Area, which is a place in or above the continental shelf of Canada in the Newfoundland and Labrador offshore area.
3. Pursuant to the *Accord Act*, HMDC was issued an operating licence and an Operations Authorization No. 22020-020-0A02 by the C-NLOPB with an effective date of November 1, 2012, and an expiry date of October 28, 2015. The Operations Authorization granted HMDC the permission to conduct certain work or activity in the Newfoundland and Labrador Offshore Area, as defined in the *Accord Act*, including activity related to the Hibernia offshore oil project.
4. As operator, HMDC is responsible for ensuring all work or activity done pursuant to the Operations Authorization is conducted in a safe and environmentally responsible manner in accordance with the *Accord Act* and the terms and conditions of the Operations Authorization.
5. Between December 27, 2013 and January 1, 2014, there was a spill of petroleum, namely crude oil, from the Hibernia Platform’s Offshore Loading System (“OLS”) with an estimated volume of 6000 litres.
6. Believing that an offence may have occurred, C-NLOPB Officers investigated the circumstances surrounding the event. Search warrants were executed offshore at the Hibernia Platform, and onshore at the St. John’s offices of HMDC. A number of witnesses were also interviewed. Based on the facts obtained in the course of the investigation, the charge before this court was laid against HMDC on May 22, 2015.

Hibernia Platform and the Offshore Loading System

7. The Hibernia Platform consists of an installation as defined by the *Newfoundland Offshore Petroleum Installations Regulations* SOR/95-1 04, and a platform likewise defined, collectively referred to as the Hibernia Platform.
8. The Hibernia Platform is located 315 km offshore Newfoundland and Labrador.
9. The Hibernia Platform rests on the seabed in 82 metres of water. It is comprised of two components:
 - (a) Topsides, which comprises the drilling derricks and facilities infrastructure; and
 - (b) The gravity based structure (the “GBS”), which is a concrete pedestal which sits on the ocean floor and has storage capacity for 1.3 million barrels of crude oil.
10. The Hibernia Platform loads petroleum to tankers via the OLS, consisting of control valves, two main subsea pipelines and an interconnecting pipeline, and two single anchor loading systems, referred to respectively as the North SAL and South SAL.
11. Each SAL system has a base which is attached to the sea bed (respectively, the “North SAL base”, and the “South SAL base”). Each SAL base contains a valve known as the foot valve, which is designed to isolate the flexible loading hose from the rest of the OLS. The foot valves are “functioned” (that is, opened or closed) by supply vessels, which are always proximate to the Hibernia Platform, through an acoustic signal. When the foot valve is functioned, the system sends a confirmation signal back to the supply vessel confirming that the valve has either been opened or closed.
12. Loading of tankers is accomplished by pumping oil from the Hibernia Platform through the subsea pipelines using either the North SAL or South SAL, each of which includes an anchor base and flexible loading hose with a Hose End Valve (HEV) that connects to the Bow Loading System (BLS) on the tanker.
13. The HEV of each SAL is designed to allow crude oil to flow to a tanker when connected to the tanker BLS and to retain crude oil inside the SAL when inactive. A liquid-tight seal at the North SAL HEV is maintained by means of an o-ring that facilitates a seal between the metal components of the HEV.
14. The OLS is designed such that the SALs are redundant systems which permit loading operations on either SAL. The system is designed to be able to isolate one SAL from the other SAL. In the event one SAL is out of order, the system is designed with isolations to enable loading from the other SAL.

Events

15. HMDC experienced a weep from the face of the North SAL HEV on December 11, 2013. HMDC observed leakage of crude oil from the North SAL HEV on December 18, 2013 while attempting unsuccessfully to connect to the tanker. Subsequent inspection of the North SAL HEV, recovered between March 30, 2014 and April 1, 2014, determined that the North SAL HEV was likely compromised by a damaged seal from December 11, 2013 until it was recovered.
16. On December 11, 2013, HMDC had requested that the foot valve isolating the North SAL be closed and the supply vessel had reported it closed.
17. The North SAL had been made inactive and the South SAL made active on December 21, 2013, after HMDC had identified a problem with the North SAL.
18. HMDC loaded to a tanker on December 21, 2013 from the South SAL, and no sheen was observed during loading.
19. Loading of crude oil from the Hibernia Platform to a tanker commenced at approximately 8:12 p.m. on December 26, 2013, using the South SAL.
20. On December 27, 2013, at approximately 7:00 a.m., HMDC personnel at the Hibernia Platform were informed by the tanker that a sheen was observed on the surface of the sea in the vicinity of the submerged North SAL HEV.
21. On December 27, 2013, at approximately 12:12 p.m. HMDC stopped loading crude oil from the Hibernia Platform to the tanker using the South SAL, so that the reported sheen could be observed while the loading system was inactive.
22. Observation of the sea surface was conducted from approximately 12:00 p.m. to 1:30 p.m. (90 minutes) without a noticeable change in the petroleum sheen.
23. On December 27, 2013, at approximately 1:30 p.m., HMDC restarted loading of the tanker using the South SAL and continued loading the tanker until approximately 2:43 p.m. when the loading activity was stopped because of weather.
24. Between 2:43 p.m. on December 27, 2013, and 11:12 a.m. on December 28, 2013, a sheen was observed by HMDC on the surface of the sea in the vicinity of the North SAL.
25. HMDC completed a full tanker load from December 26 to December 28, 2013.

26. On December 28, 2013, at approximately 11:12 a.m. HMDC re-started loading of crude oil from the Hibernia Platform to the tanker via the South SAL, and continued loading until approximately 8:06 p.m. when loading was complete.
27. Between 7:00 a.m. on December 27, 2013, and January 1, 2014, a persistent sheen was observed by HMDC on the surface of the sea in the vicinity of the North SAL.
28. A Remotely Operated Vehicle (“ROV”) was deployed to inspect the North SAL on December 30, 2013. The ROV inspection confirmed that the North HEV was leaking. As well, on December 30, 2013, HMDC decided, as a mitigation effort, to flush the remainder of the crude oil from the accessible portions of the OLS back to the GBS. Flushing resulted in an increase leak rate from the HEV which was observed by the ROV. As a result, HMDC immediately suspended flushing operations and determined that the North foot valve must not be fully closed. Several attempts were then made with the supply vessel to obtain a successful isolation with the North foot valve.
29. On January 1, 2014, a support vessel successfully closed the foot valve in the North SAL base and isolated the North SAL from the remainder of the loading system - no further sheen was observed in the vicinity of the North SAL after this action.
30. On January 18, 2014 the North SAL HEV was made secure by installation of a blind flange across the valve until it could be recovered and replaced between March 30, 2014 and April 1, 2014.

Causes

31. Subsequent investigations by the C-NLOPB and HMDC have identified a number of causal factors that contributed to the restart of loading operations at the Hibernia Platform contrary to SOR/2009-316 subsection 24(2) when it could not be verified that so doing would not cause further pollution.

Contributory Causes were:

- (a) **Equipment in the Offshore Loading System failed to perform as expected and provided incorrect information to HMDC personnel.**

There were simultaneous failures of the North SAL HEV, the North SAL Base foot valve, and valves in the Hibernia Platform topsides that should have isolated the North SAL from the rest of the loading system. In particular, the North SAL Base foot valve failed to close although the hydraulic pressure was within manufacturers recommendations for operation; and the North SAL Base foot valve signaled to the supply vessel that it was closed when it was not fully closed. Undetected valve failures, particularly the failure of

the North SAL Base foot valve and the false closure signal emitted by that valve, in addition to the load without incident on December 21, 2013, contributed to HMDC failing to understand the cause of the spill on December 27, 2013, and failing to manage the loading system in compliance with the regulations.

- (b) **HMDC was unable to deploy a Remotely Operated Vehicle (“ROV”) to verify the condition of subsea components of the OLS in a timely manner due to severe weather constraints.**

Based on its observation of the North SAL HEV on December 18, 2013, HMDC had identified deployment of an ROV as an important step in verifying the condition of the North SAL HEV and the closure of isolating valves in the subsea components of the OLS but, because of weather and sea-state at the Hibernia project site, were unable to obtain and deploy an ROV in a timely manner. As a result, HMDC was unable to identify that the North SAL Base foot valve was not fully closed.

Offences

32. Pollution is defined in subsection 1(1) of the *Newfoundland Offshore Petroleum Drilling and Production Regulations* (SOR/2009-316) as “the introduction into the natural environment of any substance or form of energy outside the limits applicable to the activity that is subject to an authorization, including spills.”
33. The release of crude oil from the North SAL HEV is not an operational discharge described in accordance with the requirements of SOR/2009-316 paragraph 9(i) as part of the environmental protection plan required to be submitted to the C-NLOPB as part of an application for authorization in accordance with SOR/2009-316 paragraph 6(d) and, as such, is pollution.
34. Section 24 of SOR/2009-316 deals with cessation of a work or activity where there is a threat to safety or of pollution and stipulates that
24. (1) The operator shall ensure that any work or activity ceases without delay if that work or activity
- (a) endangers or is likely to endanger the safety of persons;
 - (b) endangers or is likely to endanger the safety or integrity of the well or the installation; or
 - (c) causes or is likely to cause pollution.
24. (2) If the work or activity ceases, the operator shall ensure that it does not resume until it can do so safely and without pollution.
35. The Accord Act stipulates the related offence under Section 194:

194 (1) Every person is guilty of an offence who
(a) contravenes this Part or the regulations;

194(2) Every person who is guilty of an offence under subsection (1) is liable
(a) on summary conviction, to a fine not exceeding one hundred thousand dollars or to imprisonment for a term not exceeding one year, or to both;