R. v. HIBERNIA MANAGEMENT AND DEVELOPMENT COMPANY LTD. AGREED STATEMENT OF FACTS

BACKGROUND AND INTRODUCTION

- 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, and the site of the Hibernia Platform.
- 3. On July 17, 2019, pursuant to the Accord Act, HMDC was operating under Operations Authorization No. 22020-020-0A09, issued by the C-NLOPB on April 30, 2019. 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.
- 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. On July 17, 2019 there was a discharge of approximately 12,000 litres of a crude oil and water mix from the Hibernia Platform into the Atlantic Ocean. The circumstances of the discharge are detailed below.
- 6. The discharge was reported to the C-NLOPB by HMDC, in accordance with its processes and associated regulatory requirements.
- C-NLOPB Officers conducted a thorough investigation of the July 17, 2019 event. HMDC fully cooperated with the investigation.

8. Based on the facts obtained in the course of the investigation, the charges before this court were laid against HMDC on July 4, 2022.

HIBERNIA PLATFORM AND COILMS

- The Hibernia Platform consists of an installation as defined by the Newfoundland Offshore Petroleum Installations Regulations SOR/95-104, and a platform likewise defined. These facilities are collectively referred to as the Hibernia Platform.
- 10. The Hibernia Platform is located in the Atlantic Ocean, 315 kilometres east of Newfoundland and Labrador's Avalon Peninsula. The Hibernia Platform is in the Newfoundland and Labrador Offshore Area, within Canada's Exclusive Economic Zone and on the Continental Shelf of Canada.
- 11. The Hibernia Platform rests on the seabed in approximately 80 metres of water. It is comprised of two components:
 - (a) Topsides, which comprises the drilling derricks, facilities infrastructure and accommodations module; 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.
- 12. The GBS includes crude storage cells, arranged into cell groups. Crude oil produced by the Hibernia Platform is stored in these cells prior to offloading to a tanker. The crude storage cells each hold water and oil. The physical properties of oil and water are such that oil sits on top of water within the crude storage cell. In each cell, the point where the oil and water meet is called the "interface layer". The level of measurement which corresponds to the bottom of the oil layer in the crude storage cell is called the "interface level".
- 13. As the ratio of oil to water in the crude storage cells changes throughout the production and offloading process, the interface level moves up and down in the crude storage cells.
- 14. As produced crude oil enters the storage cells it displaces the seawater through the ballast water system. As part of this system the Ballast Water Tank provides the necessary head of water to maintain pressure in the cells and ensures that they are always full of liquid.

- 15. By design, the crude storage cells cannot be physically entered for internal inspection. The only way to measure the interface level and the interface layer thickness is with the Crude Oil Interface Level Measurement System ("COILMS").
- 16. COILMS uses sensors to determine the interface level and interface layer thickness. These sensors report back to the platform's Distributed Control System ("DCS"), which is programmed to both alarm and trip all platform production, in order to prevent:
 - (a) crude oil from entering the ballast water diffuser, located near the bottom of the storage cell, and discharging overboard via the deballast system; and
 - (b) water from entering the crude oil diffuser, located near the top of the storage cell, and making its way to the crude offloading pumps.
- 17. As it was producing and storing crude oil on July 17, 2019, the Hibernia Platform was continuously discharging ballast water back into the Atlantic Ocean. This discharge is part of the Hibernia Platform's Authorized Operations and the discharge is continuously monitored by an oil-in-water analyzer on the overboard discharge line, to prevent pollution.

EVENTS

- 18. On July 17, 2019, crude oil was being produced into Cell Group 3. As oil entered Cell Group 3, ballast water was being displaced overboard to the discharge outlets and in part back to the Ballast Water Tank via deballast water pump minimum flow control. Notwithstanding that COILMS indicated that the interface level and the thickness of the interface layer were as expected in Cell Group 3, a portion of the crude oil and water interface layer was unexpectedly discharged into the ocean via the deballast system.
- 19. At 00:48 [All noted times are NL Standard Time] on July 17, 2019, the GBS oil-in-water analyzer went into alarm at 15 parts per million (this being the measure of crude oil concentration in the discharge water). At 00:53 the Ballast Water Tank high level alarm went into alarm [This indicated that the level of the Ballast Water Tank was trending towards, but had not reached, an upper limit]. The deballast water discharge oil-in-water analyzer alarmed intermittently until 04:42 hrs, and intermittently from 13:37 hrs through 14:06 hrs.
- 20. The Operations Technician in the Central Control Room responded to the initial alarm and within eight minutes, at 00:56, the Operations Technician had switched production out of

Cell Group 3. This stopped the displacement of fluid from Cell Group 3 into the deballast water system. Concurrently, other technicians began to investigate the cause of the oil-in-water analyzer alarm, including by inspection, testing and re-calibration of the equipment. However, by this point, some of Cell Group 3's interface layer's crude oil and water mixture had mixed with the contents of the ballast water tank.

- 21. In the early morning the Hibernia Platform's Central Control Room received reports of oil on the ocean surface, including from the stand-by vessel at 06:52 hrs. At 06:52 HMDC initiated its oil spill response and investigation of the source of the sheen. During the course of the morning, these activities included standing up its incident management team, aerial surveillance, deploying oil spill response equipment and resources, sheen monitoring and wildlife observers as well as engagement with regulatory authorities, as set forth in more detail below.
- 22. The discharge of petroleum was reported to the C-NLOPB by HMDC at 10:38 hrs.
- 23. Investigation activities occurred continuously throughout the day on July 17, 2019 by HMDC's on-shore and off-shore teams.
- 24. The Hibernia Platform was in production until 17:13 hrs on July 17, 2019. At 17:13, upon observing crude oil in the Platform's ballast water tank, the Hibernia Platform commenced a controlled shutdown to cease production activities to enable further troubleshooting activities.

SPILL RESPONSE AND CLEANUP ACTIVITIES

- 25. HMDC initiated its oil spill response immediately upon the Avalon Sea standby vessel's report of oil in the water at 06:52. The Avalon Sea proceeded with mechanical dispersion and sheen monitoring at that time. At the same time, HMDC initiated its response process, mobilizing oil spill response operations to contain and clean up the discharge. HMDC carried out a full Tier 1 and Tier 2 oil spill response operation.
- 26. The cleanup effort spanned two and a half weeks and included numerous vessels engaged in various methods of spill response and remediation. HMDC undertook extensive clean up efforts, mobilized wildlife observers and sheen monitoring, coordinated and communicated with fishers to avoid the area of the sheen clean up operations, and

successfully completed the clean up to a point where there was no detectable trace of hydrocarbons in the area.

27. During the course of the cleanup effort six oiled birds were found.

POST-EVENT INVESTIGATION AND LEARNINGS

- Following a thorough investigation, it was determined that the discharge was caused by COILMS incorrectly reporting the interface level and/or interface layer thickness to control systems.
- 29. At the time of the discharge, the maintenance of the COILMS system was up to date, and HMDC had completed all required and reasonable maintenance on the Hibernia Platform, including of the COILMS system. By all indications, COILMS appeared to HMDC staff to be functioning properly on July 17, 2019.
- 30. During the discharge, the COILMS sensors indicated that the interface layer was at a safe level, and of appropriate thickness and position in the crude storage cell. There were no indications that anything about the interface layer was changing, nor were there any indications that COILMS's ability to measure the interface layer's thickness or the location of the interface level was not fully and accurately functioning.

OFFENCES

- 31. 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."
- 32. The July 17, 2019 discharge of the crude oil and water mix was 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, was pollution.
- 33. 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.

34. 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[.]