

**LAKE MANITOBA AND LAKE ST. MARTIN OUTLET CHANNELS PROJECT  
RESPONSE TO IAAC TECHNICAL INFORMATION REQUESTS**

Question IAAC-62

**Table of Contents**

|                                         |           |
|-----------------------------------------|-----------|
| <b>ABBREVIATIONS AND ACRONYMS .....</b> | <b>II</b> |
| <b>QUESTION IAAC-62 .....</b>           | <b>1</b>  |

**LAKE MANITOBA AND LAKE ST. MARTIN OUTLET CHANNELS PROJECT  
RESPONSE TO IAAC TECHNICAL INFORMATION REQUESTS**

**Question IAAC-62**

**Abbreviations and Acronyms**

EIS      environmental impact statement

Question IAAC-62

---

## QUESTION IAAC-62

**EIS Guideline Reference:** 7.4 Mitigation measures; 7.6.1 Effects of potential accidents or malfunctions

**EIS Reference:** 14.2.4 Incident Response and Mitigation; 14.2.2 Incident Prevention; 14.3.2 Incident Prevention; 14.6 Summary of Residual Effects

### **Context and Rationale**

Section 7.4 of the EIS guidelines require the proponent to present mitigation measures as specific commitments, with sufficient detail to support an understanding of the implementation and effectiveness of the proposed measures. Section 7.6.1 of the EIS guidelines requires the proponent to describe safeguards established to protect against accidents/malfunctions and the contingency and emergency response procedures that would be in place if such events do occur, taking seasonality into consideration.

The EIS notes, throughout all phases of the project, many mitigation measures associated with accidents and malfunctions, such as routine inspections and maintenance, as well as actions to be taken if an accident/malfunction were to occur, but does not provide enough detail to enable the Agency to understand likely effectiveness of these measures or potential residual effects.

The EIS discusses how some potential effects from accidents/malfunctions may change with seasonality. The EIS does not describe specific mitigation measures required based on seasonal variation. The EIS mentions the Emergency Response and Preparedness Plans (not yet developed), the Spill Response and Prevention Plan (referenced but not provided), and the Project environmental management program. As these plans are not provided, it is not clear if additional mitigation measures not explicitly mentioned in the EIS will be used.

### *Information Requests*

- a) For each mitigation measure proposed to address accidents and malfunctions, provide sufficient detail to enable the Agency to understand potential residual effects of an accident or malfunction.
  - i. Discuss the anticipated effectiveness of currently proposed mitigation measures in various seasonal conditions and associated adaptations or alternate mitigation that could be required. Include details on surveillance, inspections and maintenance to help support the assessment of effectiveness.
  - ii. Identify additional known mitigation measures that could be reasonably included in the referenced plans, including enough detail to understand implementation of the measure and the environmental outcome the mitigation measure is designed to address, in addition to the assessment of the effectiveness.

## LAKE MANITOBA AND LAKE ST. MARTIN OUTLET CHANNELS PROJECT RESPONSE TO IAAC TECHNICAL INFORMATION REQUESTS

### Question IAAC-62

#### Response IAAC-62

- a) One of Manitoba Infrastructure's goals for the Project is the prevention of accidents and malfunctions. Incident prevention measures are presented in each of the accident and malfunction sections in Volume 5 (14.2.2, 14.3.2, 14.4.2, 14.5.2). These preventative measures are based on Manitoba Infrastructure's several decades of experience in construction and operation of such structures across the province, which includes following industry standard good practices for accident prevention. Similarly, mitigation in the event of such accidents and malfunctions are proven best practice measures. The effectiveness of proposed mitigation is summarized below for each potential accident or malfunction.
- i. Outlet Channel Breach/Control Structure Failure:* The potential for channel breach and control structure failure is greatest during the spring flood season, following snowmelt and summertime when there is a risk of severe rainfall events. As discussed in Volume 1, Appendix 3D, Operational Guidelines, the control structure will be opened to maintain targeted water level ranges in Lake Manitoba and Lake St. Martin. Public information on flooding is available on Manitoba Infrastructure's emergency contact number and website, both available 24 hours a day. During forecasted flooding, if there was a specific concern or deficiency with the structure (e.g., concern with a condition that could lead to a failure) Manitoba Infrastructure would conduct 24-hour monitoring and take preemptive measures to control or eliminate a breach. Should a breach occur, emergency response procedures as per the Manitoba Flood Coordination Plan (Manitoba Emergency Measures Organization 2019) would be implemented to address public health and safety concerns and reduce potential damage to infrastructure and services during flooding. The Plan includes procedures for notification of flooding, evacuation requirements, and roles and responsibilities/action plans for preparation, alert, response, and recovery. This is a province-wide plan, with Manitoba Infrastructure the lead ministry.

The channels will be inspected following each flood event and repair will be provided as necessary. As a result of the design considerations listed in Volume 5, Section 14.2.3 of the environmental impact statement (EIS); the incident response and mitigation measures listed in Volume 1, Section 14.2.4 and the Manitoba Flood Coordination Plan; and considering ongoing maintenance, pre-operating inspections and infrastructure monitoring requirements which will be outlined in the Operation and Maintenance Manual (O&M Manual; Volume 1, Chapter 3), Manitoba Infrastructure anticipates that measures will be effective in preventing incidents such as outlet channel breaches or water control structure failure and the implementation of mitigation if such events do occur.

*Spills of Hazardous Materials:* The likelihood of a hazardous material spill is higher during construction when larger amounts and more containers of fuel and hazardous materials will be stored on-site. The likelihood of a hazardous spill during operation and maintenance activities is low because a minimum quantity of materials will remain on-site and the permanent installations will be designed to properly manage these materials on a long-term basis. Because construction is expected to extend year-round, the likelihood of a hazardous spill is

## LAKE MANITOBA AND LAKE ST. MARTIN OUTLET CHANNELS PROJECT RESPONSE TO IAAC TECHNICAL INFORMATION REQUESTS

### Question IAAC-62

the same for all times of year. Contractors are required to provide their own spill response plans, which will have been reviewed and approved by Manitoba Infrastructure, and will have to meet Manitoba Infrastructure's Project Environmental Requirements, as listed in Volume 1, Section 14.3.4, and Manitoba Regulation 439/87, respecting Environmental Accident Reporting. Spill response will meet *The Contaminated Sites Remediation Act* (Manitoba) requirements (Government of Manitoba 2017) as applicable. As per these requirements, all fuel storage containers and tank vehicles are to be inspected daily for any leaks or spills and any damaged or leaking fuel storage containers shall be promptly removed from site. Manitoba Infrastructure will meet these same requirements themselves for operation and maintenance of the Project. Manitoba Infrastructure anticipates that with these mitigation measures and the incident prevention measures presented in Volume 5, Section 14.3.2, the potential for spills of hazardous materials reaching the environment are low.

*Fire:* As discussed in Volume 5, Section 14.4.1, fires may occur throughout the year, with fires from lightning strikes and wildfire having higher probabilities in summer and fall. Fires resulting from component malfunction are more likely to occur during spring (flood operations) or during equipment maintenance, which could occur at any time of the year. Construction contractors are required to provide their own Evacuation and Emergency Preparedness Plan in the Event of a Wildfire to be reviewed and approved by Manitoba Infrastructure and will have to meet Manitoba Infrastructure's Project Environmental Requirements. Emergency response measures for fires will be implemented as described in the Manitoba Wildland Urban Interface Fire Coordination Plan (Manitoba Emergency Measures Organization 2018). The plan provides procedures for notification of fires, and roles and responsibilities/action plans for preparation, alert, response, and recovery. Manitoba Infrastructure anticipates that these measures will be effective in mitigating fires that may occur due to the Project.

*Collisions:* Collisions could occur during all phases of the Project and all times of year due to movement of equipment, supplies, materials, and personnel to and from the Project site and along the public highway and road network that crosses the Project. Prevention and mitigation for collisions are as described in Volume 5, Sections 14.5.2 and 14.5.4. Manitoba Infrastructure will develop an Access Management Plan for the construction phase that will include measures to provide safe passage through the Project work area zone for the general public and provide safe, coordinated access to the Project for workers. Manitoba Infrastructure anticipates that these measures will be effective in mitigating effects from collisions. The Project Environmental Requirements include the requirement for contractors to provide an access plan for the site.

- ii. Mitigation measures included in the referenced plans are those presented in the EIS in Volume 5, Table 16.3.1.

### References

Government of Manitoba. 2017. *The Contaminated Sites Remediation Act*. C.C.S.M. c. C205.  
<https://web2.gov.mb.ca/laws/statutes/ccsm/c205e.php>

## LAKE MANITOBA AND LAKE ST. MARTIN OUTLET CHANNELS PROJECT RESPONSE TO IAAC TECHNICAL INFORMATION REQUESTS

### Question IAAC-62

Manitoba Emergency Measures Organization. 2018. Manitoba Wildland Urban Interface Fire Coordination Plan. [http://www.manitoba.ca/emo/pdfs/wildland\\_urban\\_interface\\_fire\\_annex.pdf](http://www.manitoba.ca/emo/pdfs/wildland_urban_interface_fire_annex.pdf)

Manitoba Emergency Measures Organization. 2019. Manitoba Flood Coordination Plan. [https://www.gov.mb.ca/emo/pdfs/flood\\_annex.pdf](https://www.gov.mb.ca/emo/pdfs/flood_annex.pdf)