LAKE MANITOBA LAKE ST. MARTIN

OUTLET CHANNELS PROJECT

MANITOBA INFRASTRUCTURE

Decommissioning Plan

November 16, 2020



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DISCLAIMER

This document was developed to support the Lake Manitoba and Lake St. Martin Outlet Channel Environmental Management and Monitoring Program. This document has been prepared by Manitoba Infrastructure as a way to share information and have discussion with Indigenous Communities and Groups and the public. This document has been prepared using existing environmental and preliminary engineering information, professional judgement as well as information from previous and ongoing public and Indigenous engagement and consultation. The contents of this document are based on conditions and information existing at the time the document was prepared and do not take into account any subsequent changes. The information, data, recommendations, and conclusions in this report are subject to change as the information has been presented as draft and will not be considered complete until further engagement and consultation is complete. The plans may be further revised based on information and direction received from provincial and federal environmental regulators. This draft report be read as a whole, and sections or parts should not be read out of context.

PREFACE

The Lake Manitoba and Lake St. Martin Permanent Outlet Channels Project (the "Project") is proposed as a permanent flood control mitigation for Lake Manitoba and Lake St. Martin to alleviate flooding in the Lake St. Martin region of Manitoba. It will involve the construction and operation of two new diversion channels: the Lake Manitoba Outlet Channel (LMOC) will connect Lake Manitoba to Lake St. Martin and the Lake St. Martin Outlet Channel (LSMOC) will connect Lake St. Martin to Lake Winnipeg. Associated with these outlet channels are the development of bridges, control structures with power connections, a new realignment of PR 239, and other ancillary infrastructure.

Manitoba Infrastructure (MI) is the proponent for the proposed Project. After receipt of the required regulatory approvals, MI will develop, manage and operate the Project. This Decommissioning Plan is one component of the overall Environmental Management Program (EMP) framework which describes the environmental management processes that will be followed during the construction and operation phases of the Project. The goal of the EMP is to ensure that the environmental protection measures committed to in the Environmental Impact Statement (EIS) and the requirements of the Environment Act Licence and Federal Decision Statement Conditions are undertaken in a timely and effective manner. This includes the verification that environmental commitments are executed, monitored, evaluated for effectiveness, and that information is reported back in a timely manner to the Project management team for adjustment if required.

Manitoba Infrastructure remains committed to ongoing engagement and consultation with Indigenous groups and other stakeholders that are potentially impacted by the Project. Detailed EMP review discussions have been incorporated into community-specific consultation work plans and additional engagement opportunities will be provided prior to EMP finalization. Engagement opportunities include virtual open house events and EMP-specific questionnaires. EMP-specific questionnaires will be provided to Indigenous groups and stakeholders to obtain feedback and views on the draft plans, in addition to exploring opportunities for Indigenous participation in follow-up monitoring. Feedback and recommendations will be used to inform the completion of the plans.

The EMP provides the overarching framework for the Construction Environmental Management Program (CEMP) and an Operation Environmental Management Program (OEMP), which will be finalized as separate documents prior to Project construction and ideally operation, respectively. Their finalization will consider applicable conditions of the Environment Act Licence and associated approvals, any other pertinent findings through the design and regulatory review processes and key relevant outcomes of the ongoing Indigenous and public engagement and Consultation processes.

The purpose of the CEMP and OEMP is to guide how environmental issues will be addressed during construction and operation, respectively and how adverse effects of activities will be mitigated. The CEMP is supported by several specific or targeted management plans (e.g. surface water, groundwater, sediment, etc.), as shown in the Figure below, that will guide MI's development of the Project's contract documents and subsequently, the Contractor(s) activities, in constructing the Project in an environmentally responsible manner. The OEMP will likely include the same targeted plans developed to manage issues during construction, but prior to construction completion they would be revised and adapted to suit the specific needs during the operation phase.

Environmental Management Program Process and Associated Environmental Management Plans

Environmental Management Program (EMP) Process



GLOSSARY OF TERMS AND ACRONYMS

Acronyms

| CEMP | Construction Environmental Management Program |
|---------|--|
| EIS | Environmental Impact Statement |
| EMP | Environmental Management Program |
| LMOC | Lake Manitoba Outlet Channel |
| LSMOC | Lake St. Martin Outlet Channel |
| MI | Manitoba Infrastructure |
| OEMP | Operation Environmental Management Program |
| PER | Project Environmental Requirements |
| Project | The Lake Manitoba and Lake St. Martin Permanent Outlet Channel Project |

Glossary of Terms

Casual Quarry Permit: An annual permit issued for the production of a specified quantity of Crown quarry mineral (Quarry Minerals Regulation 1992).

Quarry: An open excavation or pit from which stone, gravel or sand is obtained by digging, cutting or blasting.

Quarry lease: Refers to a 10-year lease granted by the Crown with the exclusive rights to excavate quarry minerals (e.g. sand, gravel, clay, shale, gypsum, peat, salt, rock or stone).

1.0 INTRODUCTION

The Decommissioning Plan is a component of the overall Environmental Management Program (EMP) for the Lake Manitoba and Lake St. Martin Permanent Outlet Channel Project (the Project). The Decommissioning Plan includes activities that may be required during the construction and operation phases of the Project. The purpose of the Decommissioning Plan is to outline the processes and environmental requirements for the removal and closure of temporary designated areas, temporary access roads and quarry areas required during construction of the Project. Decommissioning of the channels and ancillary structures required for on-going operation is not a requirement at this date. However, any temporary facilities and structures that are not needed for future maintenance activities will be decommissioning Plan.

The Decommissioning Plan is intended to be a living document that will be revised periodically to address changes that may be required. Changes may be required if additional temporary designated areas are included in the project scope that are not addressed in the current Decommissioning Plan.

The Decommissioning Plan is organized into three main sections, which address the following:

- Communication from Manitoba Infrastructure (MI) to contractors and residents of local Indigenous communities and non-Indigenous communities.
- Decommissioning measures to be implemented during construction.
- Processes to be implemented during operation and maintenance.

1.1 Applicable Legislation and Reference Documents

Federal and provincial legislation and applicable reference documents will be followed by Contractors during the decommissioning of infrastructure and associated temporary works during the Project. Table 1 outlines key legislation and supporting documents to be followed, as required, for temporary works that will be decommissioned. There is no intent to decommission any permanent works; however, in the event that may occur, applicable legislations and regulations would apply at that time.

| Federal Legislation | |
|---|--|
| Canadian Environmental Assessment Act, 2012 | Explosives Act (R.S.C., 1985, c. E-17) |
| Species at Risk Act (S.C. 2002, c. 29) | Canada Water Act, 1985 |
| Transportation of Dangerous Goods Act 1992 | Fisheries Act, 1985, Amendment 2019 |
| Migratory Birds Convention Act, 1994 | |

Table 1: Applicable Legislation and Reference Documents

| Provincial Legislation | |
|--|--|
| The Environment Act (C.C.S.M. c. E125) | The Dangerous Goods Handling and Transportation Act (C.C.S.M. c. D12) |
| The Workplace Safety and Health Act (C.C.S.M. c. W210) | The Fires Prevention and Emergency Response Act (C.C.S.M. c. F80) |
| The Mines and Minerals Act (C.C.S.M. c. M162) | Quarry Minerals Regulations, 1992 (Regulation 65/92) |
| The Forest Act (C.C.S.M. c. F150) | The Wildfires Act (C.C.S.M. c. W128) |
| The Crown Lands Act (C.C.S.M. c.C340) | The Endangered Species and Ecosystems Act (C.C.S.M. c. E111) |
| The Heritage Resources Act (C.C.S.M. c. H39.1) | The Water Rights Act (C.C.S.M. c. W80) |
| The Noxious Weeds Act (C.C.S.M. c. N110) | The Water Protection Act (C.C.S.M. c. W65) |
| Other | |
| MI Contracts and Associated Documents | Project Licences and Authorizations |
| Applicable Manitaba Minas and Minarals Casual | |
| Applicable Manitoba Mines and Minerals Casual | Applicable Manitoba Sustainable Development |
| Quarry Permits or Quarry Leases | Applicable Manitoba Sustainable Development Work Permits |
| Applicable Mantoba Mines and Minerals Casual Quarry Permits or Quarry Leases Environmental Protection Guidelines | Applicable Manitoba Sustainable Development Work Permits |
| Applicable Manitoba Mines and Minerals Casual Quarry Permits or Quarry Leases Environmental Protection Guidelines Relevant Project Environmental Requirements (PER) | Applicable Manitoba Sustainable Development Work Permits , Section Number |
| Applicable Manitoba Mines and Minerals Casual Quarry Permits or Quarry Leases Environmental Protection Guidelines Relevant Project Environmental Requirements (PER) 2.1 Designated Areas and Access | Applicable Manitoba Sustainable Development Work Permits , Section Number 2.3 Erosion and Sediment Control |
| Applicable Manitoba Mines and Minerals Casual Quarry Permits or Quarry Leases Environmental Protection Guidelines Relevant Project Environmental Requirements (PER) 2.1 Designated Areas and Access 2.4 Working Within or Near Water | Applicable Manitoba Sustainable Development Work Permits Section Number 2.3 Erosion and Sediment Control 2.5 Machinery, Fuel Storage, Materials Handling and Storage, Spill Response and Remediation |
| Applicable Manitoba Mines and Minerals Casual Quarry Permits or Quarry Leases Environmental Protection Guidelines Relevant Project Environmental Requirements (PER) 2.1 Designated Areas and Access 2.4 Working Within or Near Water 2.6 Dust Suppression | Applicable Manitoba Sustainable Development Work Permits Section Number 2.3 Erosion and Sediment Control 2.5 Machinery, Fuel Storage, Materials Handling and Storage, Spill Response and Remediation 2.8 Noise and Noise Limitations |
| Applicable Manitoba Mines and Minerals Casual Quarry Permits or Quarry Leases Environmental Protection Guidelines Relevant Project Environmental Requirements (PER) 2.1 Designated Areas and Access 2.4 Working Within or Near Water 2.6 Dust Suppression 2.9 Wildlife | Applicable Manitoba Sustainable Development Work Permits Section Number 2.3 Erosion and Sediment Control 2.5 Machinery, Fuel Storage, Materials Handling and Storage, Spill Response and Remediation 2.8 Noise and Noise Limitations 2.10 Wildfires |
| Applicable Manitoba Mines and Minerals Casual Quarry Permits or Quarry Leases Environmental Protection Guidelines Relevant Project Environmental Requirements (PER) 2.1 Designated Areas and Access 2.4 Working Within or Near Water 2.6 Dust Suppression 2.9 Wildlife 2.11 Heritage Resources | Applicable Manitoba Sustainable Development Work PermitsSection Number2.3 Erosion and Sediment Control2.5 Machinery, Fuel Storage, Materials Handling and Storage, Spill Response and Remediation2.8 Noise and Noise Limitations2.10 Wildfires2.12 Quarries and Borrow |

1.2 Occupational Safety, Health and Risk Management

MI Occupational Safety, Health and Risk Management applies to all MI facilities and operations, employees, contractors, and visitors. Its purpose is to manage risks to the safety, health and well-being of employees, visitors and the public arising out of the work activities performed by or on behalf of the Department. The Decommissioning Plan will help ensure that the safety of MI employees, contractors, visitors and the public is

not adversely affected by Project construction or operations and in adherence to *The Workplace Safety and Health Act* and its associated regulations.

1.3 Project Schedule

A schedule outlining the physical activities required for completion of the Project leading up to Operation is being developed as part of the Detailed Design stage. Construction is currently anticipated to occur over approximately two and half to three years followed by an additional one to two years for site clean-up, surveying and environmental offset works following the major construction works. Decommissioning of the channels and ancillary structures required for on-going operation is not a requirement at this date. However, any temporary facilities and structures that are not needed for future maintenance activities will be decommissioned and reclaimed by the Contractor following the construction phase.

2.0 COMMUNICATION

Effective public education and communication about the Project is important to enable the successful attainment of the objectives of the Decommissioning Plan. The education and communication approach for the construction and operations phases of the Project is intended to:

- Promote safety for all and to maintain an understanding among specific relevant groups and the publicat-large regarding the decommissioning measures being implemented and maintained, and the rationale for doing so.
- Promote and maintain the cooperation and support of parties in encouraging citizens to respect the intent of the Decommissioning Plan and abide by its measures.
- Provide clear information as to how the Decommissioning Plan will be implemented, as detailed in Section 3.

Ongoing communications with respect to the Decommissioning Plan may include information such as:

- Changes to timing of certain Project items such as closure of temporary construction work areas, temporary access roads, and temporary facilities.
- The Proponent is committed to working with stakeholders, the public and Indigenous groups to mitigate disruptions in use of resource areas and will provide timely communication about Project activities and about restrictions to activities that will be applied.

During the construction and decommissioning period of temporary works, MI will maintain communication with local residents including members of local Indigenous communities and non-Indigenous communities.

2.1 Contact Persons

MI, as the overall Project Manager and owner, is responsible for implementing, monitoring and amending the environmental aspects of the Project. The overall Project organization structure is outlined in Section 2.2 of the EMP Framework. The MI Project Manager will coordinate with an on-site MI Environmental Assessment Officer, or designated alternate, who will oversee daily activities. Both of these individuals will be supported by advice from a MI technical support team comprised of off-site environmental and design personnel. The MI Project Manager will coordinate information sharing between on-site activities and off-site support teams.

Throughout the construction phase, the MI Project Manager and/or designate will be the main contact for communications between the construction team and the local residents and will be responsible for regular communications with Indigenous and non-Indigenous communities. They will facilitate communication between the construction site staff and the local communities, including keeping leadership apprised of project activities.

The Contractor is responsible for informing the MI Project Manager and/or onsite Environmental Assessment Officer of the project schedule and when decommissioning of temporary construction works will begin. Prior

to decommissioning, and as required, the MI Project Manager and/or designate will provide members of the local Indigenous and non-Indigenous communities with information about any Project activities and restrictions that will be put in place for overall public safety. The MI Project Manager and/or designate will work collaboratively on measures to address community concerns.

If decommissioning of project related infrastructure is required during the operations phase, MI will provide timely communication with stakeholders, the public, and Indigenous groups about Project activities and restrictions that will be put in place for overall public safety on an as-needed basis.

2.2 Reporting

Upon completion of any decommissioning works the Contractor is responsible for ensuring the work is documented and reported to MI. If any soil sampling or remediation activities are required all third-party reporting completed by Environmental Consultants should be included in the report submission. Reporting should generally include:

- Location of site.
- Description of decommissioning activities.
- Mitigation measures required for construction activities.
- Environmental monitoring plans and activities that may be required for reclamation.
- Records of actions taken to address environmental incidents such as accidents, spills, leaks, and releases, the reporting and clean-up procedures used.
- Third-party reporting for any required environmental sampling or remediation activities.

3.0 CONSTRUCTION

As detailed in the Project's Environmental Impact Statement (EIS), the construction activities and accommodations required for the Project include, but are not limited to, temporary construction camps, waste disposal, temporary work areas, laydown areas and other ancillary infrastructure such as temporary construction access roads. The construction phase also includes transporting equipment, vehicles, machinery, construction materials and supplies to the Project site, as well as the preparation of equipment marshalling areas. Existing licensed and permitted quarry and borrow areas will be used as required and may remain after Project construction. Temporary facilities and work areas that will not be needed for future maintenance activities will be decommissioned and reclaimed at the end of the construction phase.

The Contractor will be responsible for decommissioning construction components as detailed in the following Sections.

3.1 Designated Areas

Proposed Designated Areas required to complete components of the Project will be submitted by the Contractor for review and acceptance by the Engineer prior to the development and commencement of work. The Contractor is responsible for decommissioning and restoring the Designated Areas not required for on-going maintenance. Decommissioning of Designated Areas, temporary facilities and work areas, shall be conducted in accordance with applicable legislation, regulations, permits, approvals, authorizations or licenses. Temporary facilities and work areas that will not be needed for future maintenance activities will be decommissioned and reclaimed following the construction phase by the Contractor.

Designated Areas include, but are not limited to the following:

- Laydown and Staging Area(s)
- Waste Storage Area(s)
- Fuel Storage and Refueling Area(s)
- Equipment Servicing Area(s)
- Work Camp(s)
- Parking Area(s)
- Cement Batch Plant(s)
- Cement Washout Area(s)
- Other Designated Areas (as required by the MI Project Manager)

During decommissioning of the Designated Areas, the Contractor is required to complete the following:

- Buildings, outbuildings, above-ground storage tanks and associated infrastructure will be removed.
- Dismantling of buildings will include disconnecting services such as potable water and septic holding tanks and removal of associated infrastructure.

- Dismantling electrical and telephone services including removal of overhead lines, poles and transformers.
- Remove and clear non-hazardous debris, construction waste and solid waste to existing permitted waste disposal sites in accordance with the Waste Management Plan and Hazardous Waste Management Plan.
- Removal of hazardous materials will be handled by licensed contractors and in accordance with specific legislation and the Hazardous Waste Management Plan and Hazardous Waste Management Plan.
- Areas with fuel storage or refueling, hazardous substance handling or vehicle or heavy equipment parking will require soil testing. Should soil concentrations result in exceedances above applicable criteria the area will be fully remediated (i.e. below CCME guidelines).
- Areas that were used for cement/concrete washout will require soil testing. Should soil concentrations result in exceedances above applicable criteria the area will be fully remediated (i.e. below CCME guidelines).
- Areas will be levelled to natural or pre-existing grade and slope and will be restored to original condition, where possible.
- Signage and flag persons at the site may be required as part of the decommissioning and reclamation activities if the activities pose a risk to the safety of local residents.
- Closure of temporary construction work areas will typically consist of redistributing topsoil and other organic materials to encourage natural vegetation and regeneration.
- Re-seeding will occur, as required, following the Revegetation Plans developed for the Project. Should re-seeding be required, and when conditions permit, re-seeding should be completed following grading, capping and trimming operations. If conditions do not permit re-seeding immediately, the Contractor is responsible to re-seed the next growing season. Seeding operations should not be carried out during high wind events, snow cover, ice conditions or in standing water.

Decommissioning of Designated Areas will also follow the details outlined in the following topic specific Environmental Management Plans (as applicable): Access Management Plan, Dust Control Plan, Waste Management Plan and Hazardous Materials Management Plan.

3.2 Access Roads

Temporary construction roads within the right-of-way for the Project that are not required for the operation and maintenance phases will require removal (Figure 1). The Contractor is responsible for leveling the roads to the natural or pre-existing grade and slope and restoring the site to original conditions, where possible. Any granular material will require stripping and removal from the site. Temporary construction roads will be contoured, de-compacted and trimmed to encourage natural vegetation. If the public will be affected during the decommissioning of any temporary construction roads the Contractor will require signage or flag persons to ensure the health and safety of workers and residents in the area.

Any existing or constructed roads that are required as part of the Project that will be used during the operation and maintenance phases of the project are not required to be decommissioned.



Figure 1: Access Roads within the LSMOC Right of Way

3.3 Quarry Areas

Reclamation of quarry and borrow areas will occur following the completion of construction if the sites are no longer needed for operation and maintenance. The remediation and reclamation of quarry and borrow areas will follow those measures in place at the time of remediation/decommissioning and in full compliance with legislation and regulatory standards as detailed in the Quarry Management Plan.



4.0 OPERATION

As stated in the Project's EIS, the operation phase of the Project is expected to be indefinite because the Project will be maintained and not be decommissioned. Major maintenance or upgrade projects that require designated areas, construction of temporary construction roads or use of a quarry or borrow area will be required to follow decommissioning details outlined in Sections 3.1, 3.2 and 3.3.

If decommissioning of the proposed Project is required at a future date, a decommissioning plan consistent with the environmental conditions and regulatory requirements at that time would be developed for Federal and Provincial review prior to implementation.