Manitoba-Minnesota Transmission Project

Waste and Recycling Management Plan

April 2019

Prepared by:

Licensing and Environmental Assessment Department

Manitoba Hydro



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Preface

Manitoba Hydro would like to acknowledge that this Project will be located in Treaty One Territory, the traditional territories of the Anishinabe, Cree, and Dakota people and the homeland of the Metis Nation.

This document presents the Waste and Recycling Management Plan (WRMP; the Plan) for the construction of the Manitoba-Minnesota Transmission Project (the Project). It is intended to provide information and instruction to Contractors and Manitoba Hydro employees as well as information to regulators and members of the public.

The Plan provides general considerations and guidance pertinent to waste and recycling management during the development of the Project. More importantly it presents a Project-specific implementation plan and actions required to proactively address the issue of waste management as a result of construction of the Project.

Manitoba Hydro employees and contractors are encouraged to contact the onsite Manitoba Hydro Environmental Inspector/Officer if they require information, clarification or support. Regulators and the Public are to direct any inquiries about this Plan to:

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Version – Final 1.0

List of Revisions

Number	Nature of revision	Section(s)	Revised by	Date
Draft	Added "WR_06 Biosecurity waste" to the EMPs	Sec 6 page 10	Manitoba Hydro	20181121
Draft	Added Engagement activities	Section 1.1	Manitoba Hydro	20190211
Draft	Added Summary of Consultation appendix	Appendix B	Manitoba Hydro	20190211
Draft	Added acknowledgement to Preface	Page ii	Manitoba Hydro	20190211

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1.0 Introduction

Consistent with its corporate Environmental Management Policy, Manitoba Hydro has committed within the Manitoba - Minnesota Transmission Project (the Project) Environmental Impact Statement (EIS) to developing a Waste and Recycling Management Plan (WRMP) as part of a larger suite of mitigation measures to minimize potential negative environmental and socio-economic effects. This document outlines the procedures to be employed by Contractors to proactively address the issue of waste management.

This document is intended to provide measures to manage waste during the construction of the Project. Waste generated during the construction activities of a transmission project will be collected, sorted, isolated, stored and disposed of or recycled. This document identifies some of the common waste materials generated during different construction activities.

Note that the methods presented here are not exhaustive and alternative methods may be proposed by the Contractor but would require approval from a Manitoba Hydro Environmental Officer prior to implementation.

1.1 Commitment to environmental protection and indigenous engagement

Manitoba Hydro integrates environmentally responsible practices in all aspects of our business. Environmental protection can only be achieved with the involvement of Manitoba Hydro employees, consultants, contractors, Indigenous communities and organizations and the public at all stages of the Project from planning and design through construction and operational phases.

The use of a WRMP is a practical and direct implementation of Manitoba Hydro's environmental policy and its commitment to responsible environmental and social stewardship. It is a proactive approach to manage potential effects of access related to the construction of a new transmission line.

Manitoba Hydro is committed to seeking input on this draft plan from Indigenous communities and organizations through the MMTP Monitoring Committee and the project First Nations and Metis Engagement Process.

Below is a summary and evidence of Manitoba Hydro's consultation with potentially affected persons, organizations, Indigenous communities, and federal and provincial authorities regarding the Waste and Recycling Management Plan. Any feedback or concerns that were raised, steps that Manitoba Hydro has taken or will take to address those concerns can be found in Appendix B.

Draft environmental protection and management plans, including Waste and Recycling Management Plan, were uploaded to the Project website and a web page was created in October 2018, including a fillable comment form to provide feedback (Appendix B).

Indigenous communities and organizations, landowners, interested parties and the public were notified, in October 2018, that Manitoba Hydro was seeking feedback on these plans. This was done through the Project website, MMTP Monitoring Committee website, e-campaign, emails, and letters to landowners (Appendix B).

The construction environmental protection plan and associated management plans, including the Waste and Recycling Management Plan have been discussed at two MMTP Monitoring Committee meetings and posted to the MMTP Monitoring Committee website. Paper copies of all draft plans were provided to community members at both meetings. The management plan website was shared with communities via email and the plan was also posted on the MMTP Monitoring Committee website (Appendix B).

Manitoba Hydro is committed to implementing this WRMP and requiring Contractors to follow the terms of this and other applicable plans within the Environmental Protection Program.

1.2 Purpose and objectives

This Plan is intended to be used as a reference document in the field, during construction activities to addresses waste management while ensuring compliance with Manitoba Hydro's Construction Environmental Protection Plan requirements, industry best practices, and Provincial/Federal regulations and legislation. In order to effectively manage waste during construction activities, a variety of methods are available for implementation. The appendix outlines waste management techniques along with a description of the situations where each technique may be employed and directions for correct implementation.

Should a contractor wish to deviate from the techniques or implementation described in this document they must first obtain approval from a Manitoba Hydro Environmental Officer.

The objectives of this Plan are as follows:

- To establish a process prior to the start of construction that can be used to identify potential waste streams and plan for proper handling and disposal. This process will meet regulatory requirements, industry standards and best practices with regards to waste management during construction activities.
- To provide guidance on the correct handling and management of waste.

1.3 Potential effects of waste

The Project has potential to generate significant amounts of waste of various types. To manage and reduce waste from the Project, Manitoba Hydro requires all Contractors to utilize the Waste and Recycling Management Plan (WRMP) in an effort to reduce the volume of materials going to landfill and facilitate reuse and recycling. Where applicable, this WRMP will also address wastes developed in the operation of construction camps.

1.4 Roles and responsibilities

This section outlines the major roles and responsibilities of those involved in the implementation of the Plan. The Plan forms a component of the Environmental Protection Program (EPP), which provides the framework for the delivery, management and monitoring of environmental and socio-economic protection measures for the Project. The EPP describes how Manitoba Hydro is organized and functions to deliver timely, effective, and comprehensive solutions and mitigation measures to address potential environmental effects from Project activities. A visual reference for how the Plan fits into the overall EPP organization structure is provided in Figure 1.



Figure 1: Transmission Environmental Protection Program

A summary of roles and key responsibilities is found in Table 1. Communication and reporting on environmental issues, monitoring and compliance will be as outlined in Figure 2.

	Key Responsibilities		
Manitoba Hydro	 Develops and amends the WRMP. May delegate this responsibility to other construction professionals to implement, maintain and inspect /monitor for the duration of the undertaking. Signs agreements, approvals, permits and Authorizations to which compliance is legally binding. Ensures Contractors are aware of their responsibilities Appoints an Environmental Inspector/Officer to confirm that regulatory criteria are being met. The Manitoba Hydro Environmental Inspector/Officer will regularly inspect waste management measures to confirm effectiveness. 		
Construction Contractor(s)	 Ensure that all activities comply with the requirements of the WRMP. Ensure that all activities comply with applicable regulatory requirements. Responsible for acquiring any applicable regulatory permits related to waste management and submitting copies to MH. Responsible for implementation, coordination and verification of preproject employee environmental orientation. Ensure all contractor project staff are adequately trained/informed of pertinent requirements and of the Project related to their position. Ensure that only adequately trained personnel are permitted to handle hazardous materials. Ensure that hazardous material storage areas are only accessible to adequately trained personnel. Ensure all staff will be trained in Work Hazardous Materials Information Systems (WHMIS) and have access to MSDS sheets. Respond and act promptly to resolve if any activities are identified as not in compliance with the WRMP or any regulatory requirements. Ensure that adequate equipment and materials are on hand to safely store, segregate and manage waste products Ensure that all documentation is maintained and copies submitted to MH in a timely manner. 		

Table 1: Roles and responsibilities

hazardous materials plans, and other related topics.

• Ensure that food waste is carefully sorted and stored in wildlife proof containers. Seek clarification from Environmental Inspector/Officer and/or Hydro Field Safety Officers as necessary.



Figure 2: Environmental communication reporting structure

2.0 Regulatory context

Below is a list of the applicable legislation regarding waste and recycling practises:

Provincial

- The Workplace Health and Safety Act and Regulations
- The Waste Reduction and Prevention Act and Regulations
- The Ozone Depleting Substance Act
- The Dangerous Goods Handling and Transportation Act
 - o Dangerous Goods Handling and Transportation Regulation
 - Hazardous Waste Regulation
- Environment Act (C.C.S.M. E125)
 - o MR 37/2016 Waste Management Facilities Regulation
 - o MR 83/2003 Onsite Wastewater Management Systems Regulation
 - o MR 92/88R Litter Regulation

Federal

- Transportation of Dangerous Goods Act
- Fisheries and Oceans Regulations and Legislation

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3.0 Implementation

3.1 Waste identification

Waste will be categorized and segregated by the contractor, examples of waste that are expected to be produced by the Project and be covered by this plan are found in Table 2 (Note: this is not an exhaustive list).

Category	ltems
Hazardous waste	Motor oils, fuels, solvents, coolants, lead-acid batteries, hydraulic
	fluid, oil filters, pesticides, solids and liquids (water/snow, soils, clean-
	up materials) contaminated by petroleum products or other hazardous
	materials, other chemicals
Construction materials	Wood, aluminum, copper, steel, cardboard, plastic
Food services	Beverage containers (aluminum, plastic and glass), cardboard,
	boxboard, plastics, newsprint, office paper
Domestic solid waste	Organic material, non-recyclable waste
E-waste	Computers, circuitry, general purpose batteries (lithium, nickel-
	cadmium)
Construction	Rubber tires, equipment parts etc.
e quipment	
Wastewater	Sewage, grey water

Table 2: Examples of commonly produced waste during construction

3.2 Waste management

This Waste and Recycling Management Plan takes a hierarchical approach to waste management. The purpose of the hierarchy is to assess each waste item for opportunities to avoid waste, then opportunities to reuse, followed by opportunities to recycle prior to disposal. This hierarchy will be as follows:

- Compliance with federal and provincial waste management legislation (i.e., Acts and Regulations)
- Waste avoidance
- Waste re-use

- Waste recycling
- Waste disposal (as a final option)

Prior to the start of construction, the Contractor must ensure that the local waste management facilities are willing, and have the capacity to accommodate the projected waste volume. Only waste management facilities that are approved by MH may be used by the Contractor.

3.3 Training

As part as their pre-job training and site orientation, work crews must participate in formal training. Prior to starting work on the project, staff and subcontractors must have training in:

- Workplace Hazardous Materials Information Systems (WHIMIS)
- When applicable, the Transportation of Dangerous Goods (TDG)
- Environmental Awareness (Environmental Orientation)
- Waste management procedures
- Spill response procedures

3.4 General mitigation measures

General mitigation measures that are particular to waste management and construction activities are found in the Construction Environmental Protection Plan, General mitigation tables:

- EI-13 Concrete wash water and waste
- EI-4 Hazardous materials
- EI-5 Petroleum products
- EI-10 Waste management
- EI-12 Wastewater

3.5 Documentation

The list below outlines the documentation requirements that the contractor is responsible for as part of the implementation of the Plan.

• Submit a copy of a valid hazardous waste generator licence to MH.

- Maintain an accurate and detailed inventory of various hazardous waste types being generated and submit a copy to MH on a bi-weekly basis.
- Submit all copies of manifests and waste receipts related to transport and/or disposal of hazardous waste materials to MH
- Complete required reporting to regulatory agencies and either copy MH on all correspondence or provide copies of all correspondence to MH in a timely manner
- Submit copies of all valid TDG certificates to MH for all Contractor staff that require.
- Submit to MH in writing the valid Sewage Haulers Provincial Registration Number for any individuals/companies completing this service for the Contractor.
- Submit in writing to MH the name/company of any subcontractors involved in transport of Project related recycling and/or waste transport to recycling and/or disposal sites and notify MH in writing if any changes are made.
- Receive approval from MH prior to hauling of Project related waste to a recycling and/or disposal site and submit a request to MH in writing if would like to propose any changes.

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4.0 Communication

Any contractor-proposed additions, location modifications or Plan requirement revisions will be submitted in writing to Manitoba Hydro and include a map containing legal land description and GPS location. Any Manitoba Hydro-required revisions to the Plan will be communicated to the contractor's Project Manager for distribution to Project staff.

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5.0 Monitoring and follow-up

Monitoring, Inspection and adaptive management are necessary to ensure the effectiveness of waste management and the Waste and Recycling Management Plan. It is the duty of the Contractor to ensure that the storage requirements and processes described in this plan are being followed. Regular monitoring of worksites and storage facilities will take place to track and document compliance. To accomplish this, the Contractor's Environmental Representative will conduct monitoring that includes the following:

- Ensure that proper general housekeeping practices are being followed and that any unnecessary waste/mess at work and/or storage sites is being cleaned up on a daily basis.
- Ensure waste is not exceeding the capacity of containers and coordinating transport/disposal as required.
- Ensure that general waste, recycling and hazardous waste are being appropriately segregated and labelled
- Ensure that general waste, recycling and hazardous waste containers are very clearly signed accordingly.
- Ensure that all hazardous waste storage has adequate secondary containment.
- Ensure that all hazardous waste storage is adequately covered and protected from precipitation.
- Ensure that all hazardous waste storage areas are appropriately ventilated.
- WHMIS procedures are being followed and MSDS sheets are accessible.
- Check the capacity of containers, determining and reporting on levels and determine if transport to a waste management facility is needed.
- Ensure tracking documentation is being completed by site personnel.

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6.0 Environmental management practices

Below is a list of environmental management practices applicable to waste and recycling. An appendix is provided for each that provides material examples, methods, reduction techniques, applicable legislation for each.

- WR_01 Hazardous materials handling
- WR_02 Hazardous materials storage and facility requirements
- WR_03 Construction waste
- WR_04 Wastewater
- WR_05 Concrete waste
- WR_06 Biosecurity waste

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Appendix A

Environmental Management Practices

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HAZARDOUS MATERIALS - Handling



Material Examples

Motor oils, oil filters, lead-acid batteries, hydraulic fluid, fuels, solvents, coolants, pesticides, soil and water impacted by hazardous materials, other chemicals and their containers

Waste management method

Materials will be shipped to an approved Recycling facility or Hazardous waste management facility

Waste reduction technique

•Where possible order hazardous materials in a container type that can be returned to the vendor when emptied.

•Non-hazardous products will be used in place of hazardous substances to the extent possible. Such as the use of Industrial soaps can be used instead of solvents when similar results can be achieved

Applicable Legislation

•Waste Management Facilities Regulation 37/2016, Feb 23, 2016)

- •Transportation of Dangerous Goods Act and Regulations
- •The Workplace Health and Safety Act and Regulations
- •The Ozone Depleting Substance Act
- •Fisheries and Oceans Regulations and Legislation
- •Hazardous Waste Regulation (MR 195/2015)



HAZARDOUS MATERIALS - Handling

Handling

•Contractor personnel will be trained in emergency response procedures in accordance with provincial legislation.

•Contractor personnel will receive WHMIS training in accordance with provincial legislation. Controlled substances will be labeled in accordance with WHMIS requirements.

•Hazardous substances management procedures will be communicated to all project staff and a copy will be made available at the project site.

•Orientation for Contractor and Manitoba Hydro employees working in construction areas will include hazardous substance awareness.

For instruction on handling and disposal of soil and water impacted by soil see the "Guidance document for the Identification and Management of soils, surface waters or groundwater suspected to be impacted by Hazardous Materials" Found in Appendix G of the CEnvPP
All Batteries (lithium, nickel-cadmium and lead-acid) will be segregated and stored.

Treatment

•Waste materials will be categorized and segregated Non-Hazardous and Hazardous •In the even that hazardous and non-hazardous material are mixed, the entire mixture must be managed as hazardous material.

•Rags, cloths and clean up debris that have been used to apply or remove hazardous materials are also considered to be hazardous waste and should be treated as such.

Sludge from solvent parts cleaning must be shipped with the solvent being recycled
Used oil storage tanks or drums will be clearly marked as "Used Oil" with nothing else added to them including waste solvents and antifreeze

Waste Oils, fluids and filters from vehicle maintenance will be stored in drums
Used oil filters removed from equipment while still warm will be punctured and placed on a drain rack, once drained will be placed in a labeled drum and shipped for recycling
Containers will be weatherproof

Transportation and Disposal

•Waste oil will be transported by licensed carriers to licensed or approved waste oil recycling facilities.

•Empty hazardous waste containers will be removed to a licensed or approved disposal site by the contractor.

•All Batteries (lithium, nickel-cadmium and lead-acid) will be transported to licensed or approved waste recycling facilities.

•Transportation of Hazardous materials off-site is to be performed by licensed regulated waste transporter and disposal off-site should be accommodated by a regulated waste receiver, for recycling or proper disposal.

•Material Safety Data Sheets (MSDS) will be available for transportation

Record Keeping

•Record kept of amounts of waste generated

•Manifesting transportation of wastes

•Inventory and account for hazardous waste leaving collection areas.

HAZARDOUS MATERIALS -STORAGE FACILITY REQUIREMENTS

1



Facility Design

•Hazardous substances storage areas will be located a minimum of 100 m from the ordinary high water mark of a waterway and above the 100-year flood level.

•Temporary hazardous material storage containers will be located on level ground and within a structure that is covered by roofing preventing precipitation from entering the storage area or the secondary containment system

•Indoor storage of flammable and combustible substances will be in fire resistant and ventilated enclosed storage area or building in accordance with national codes and standards.

•Bulk waste oil will be stored in approved aboveground tanks provided with secondary containment in accordance with provincial legislation.

•Hazardous materials shall be stored in a secondary a containment system that is designed to contain at least 110% of the volume stored

•Access to hazardous materials storage areas will be restricted to authorized and trained Contractor and Manitoba Hydro personnel.

•Ensure Emergency response provisions are available and employees working with Hazardous Materials are trained in Emergency response

•The contractor employees will monitor the level of used oil in storage tanks or drums to ensure that the container isn't at risk of overflow.

HAZARDOUS MATERIALS -STORAGE FACILITY REQUIREMENTS

Documentation

•An inventory of WHMIS controlled substances and their Material Safety Data Sheets (MSDS) will be prepared by the Contractor and maintained at each project site and updated as required by provincial legislation.

•Hazardous materials storage sites will be secured, and signs will be posted that include hazard warnings, as well as contacts in case of a release, access restrictions and under whose authority the access is restricted.

Treatment

•Hazardous waste materials will be segregated and stored by type in approved containers within a secondary containment system.

•Pesticide storage will be in accordance with provincial legislation and Manitoba Hydro guidelines.

•Hazardous waste can be stored temporarily for no longer than 30 days before removal to a licensed or approved disposal site.

•All batteries will be segregated by type.

Monitoring

•The Contractor will monitor containers of hazardous substance containers regularly for leaks and to ensure that labels are legible and prominently displayed.

•The MH Environmental Inspector\Officer will make routine inspections of hazardous substance storage facilities to confirm that environmental protection measures are implemented and effective.

•Hazardous materials storage facilities will undergo regular inspections to inspect storage containers and records of inspections be maintained by the contractor

Applicable Legislation

•Waste Management Facilities Regulation 37/2016, Feb 23, 2016)

- •Transportation of Dangerous Goods Act and Regulations
- •The Workplace Health and Safety Act and Regulations
- •The Ozone Depleting Substance Act
- •Fisheries and Oceans Regulations and Legislation
- •Hazardous Waste Regulation (MR 195/2015)

2

CONSTRUCTION WASTE

ID-WR_03

1



Material	Aluminum, copper, steel, scrap conductors			
avamplas	Cardboard packing and boxes			
examples	Plastic bags and plastic packaging			
Waste				
management	Collected and segregated on-site, transported for off-site recycling.			
method				
Waste	Observe the 4 R's (reduce, reuse, recycle and repurpose). Minimize waste			
reduction	by producing or using only the amount necessary. Where possible, be re-			
technique	used or re-purposed and recycle.			
Material	 Wood - timber off cuts nallets wooden hoves 			
examples				
Waste	Off cuts and pallets to be burnt on-site or disposed of in landfills licensed by			
management	Sustainable Development with capacity to accept and separate construction			
method	wastes.			
Material	 Equipment and vehicle tires 			
examples				
Waste	Tires that cannot be returned to the vendor will be sent to the local			
management	receiving waste management facility where it will be collected for recycling			
method				
Material	Electronic Waster, Computers, circuitry appliances			
examples	Electronic wastes, computers, circuitry appliances			
Waste	Electronic waste will be stored and transported officite to a licensed a			
management	Electronic waste will be stored and transported on-site to a licensed e-			
method				

Applicable Legislation

•Waste Management Facilities Regulation 37/2016, Feb 23, 2016)

WASTEWATER

ID-WR_04



Material examples	Sewage or grey water
Waste management method	 Sewage and grey water will be collected in holding tanks and chemical toilets. In remote locations, an appropriate number of portable toilets will be made available to ensure that each crew has ready access to washroom facilities. The facilities will be serviced and cleaned regularly, and will be adequately secured. All site personnel are to use portable toilets, as provided. On-site disposal of septic waste if employed, must be in accordance with the on-site waste disposal systems regulation (MR 83/2003). Wastewater holding tanks will be installed as per provincial legislation and regulation and a minimum of 100 m from the ordinary high water mark of any waterbody. Wastewater will be removed from holding tanks when they are no more than 90% full by a registered sewage hauler and disposed of at a licensed wastewater treatment facility. All sewage haulers will be registered with the Manitoba Sustainable Development. A copy of the hauler registration will be provided to MH environmental inspector/officer upon request. Septic and solid wastes from work sites must be disposed of at <i>Environment Act</i> licensed wastewater treatment facilities and waste disposal grounds that have sufficient capacity to accept the waste stream.
Applicable legislation	 On-site waste disposal systems regulation (MR 83/2003).

CONCRETE WASTE

ID-WR_05



Material	 Concrete wash water (water remaining from the process of washing concrete from equipment)
examples	Remaining cured or partially cured concrete
Waste management method	 Wash water will not be discharged onto the ground at the project site, washout pits will be constructed to cure concrete and settle out wash water. All water from chute washing activities will be contained in leak proof containers or in an approved settling pond that are situated at least 100 meters from a waterbody. Contain wash out in a temporary plastic-lined (10-mil polyethylene minimum) pit Maintain at least 4" (aboveground) or 12" (below ground) of freeboard in pits All water that has been used for wash out purposes and associated activities will be disposed in an appropriately sized settling pond(s) treated to meet turbidity (total suspended solids [TSS]) and pH requirements prior to discharge. Turbidity will be treated by settlement or filtration; pH will be treated by use of acid, dry ice, carbon dioxide gas or other methods. All water that has been used for wash out purposes and associated activities will be treated to meet the Manitoba Water Quality Standards, Objectives, and Guidelines (Tier 1) for municipal wastewater effluents of 25 mg/L TSS prior to discharge. All water that has been used for wash out purposes and associated activities will be treated to meet the Manitoba Water Quality Standards, Objectives, and Guidelines (Tier 3) for the protection of aquatic life for pH 6.5-9.0, prior to discharge into a watercourse.

CONCRETE WASTE

ID-WR_05



Material examples	 Remaining cured or partially cured concrete
Waste management method	 Cured or partially cured concrete will not be discharged onto the ground at the project site, washout pits will be constructed to cure concrete and settle out wash water. High density polyethylene geomembrane liners (10-mil polyethylene minimum) and either earth or physical berms may be used for a temporary concrete washout for uncured or partially cured concrete. Pits should be of sufficient volume for site requirements Maintain at least 4" (aboveground) or 12" (below ground) of freeboard in pits Regularly break-up cured concrete can be transported in non-hazardous waste containers and disposed of at a licensed facility. Any uncured and partly cured concrete will be kept isolated from watercourses/ditches.
Waste Reduction Technique	• Minimize waste by producing only the amount necessary.
Applicable legislation	 Fisheries and Oceans Regulations and Legislation Waste Management Facilities Regulation 37/2016, Feb 23, 2016)



Material examples	Waste disinfectants, waste water from biosecurity cleaning	
Waste management method	 Sediment released from the washing process will be fully contained (i.e., sump pit, berm). When cleaning station sump pits, sump materials (dirt, water and disinfectant solution from washing activities) must be either: Disposed of at an MH approved disposal facility; Or remain on the field where it was used; mixed and buried on-site at a minimum depth of 2 m (requires landowner permission) at least ten metres from a drain or drainage ditch. 	
Waste Reduction Technique	 Minimize waste by producing only the amount of disinfection solution necessary to be used prior to solution expiry. 	

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Appendix B Summary of Consultation

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Appendix B: Summary of consultation

Introduction

Below is a summary and evidence of Manitoba Hydro's consultation with potentially affected persons, organizations, Indigenous communities, and federal and provincial authorities regarding the Waste and Recycling Management Plan (the Plan), including any concerns that were raised, steps that Manitoba Hydro has taken or will take to address those concerns.

Consultation

Draft environmental protection and management plans, including this Plan were uploaded to the Project website and a web page was created in October 2018, including a fillable comment form to provide feedback.

As Manitoba Hydro completed draft plans, Indigenous communities and organizations, landowners, interested parties and the public were notified. Input was sought between May of 2018 until present. Manitoba Hydro sought feedback on most plans in October of 2018. This was done through the Project website, MMTP Monitoring Committee website, e-campaign, emails, and letters to landowners.

The construction environmental protection plan and associated management plans, including this Plan, have been discussed at two MMTP Monitoring Committee meetings on May 17, 2018 and October 10, 2018. As noted above, the Project website was shared with communities via email and the Plan was also posted on the MMTP Monitoring Committee website.

Concerns raised and steps taken to address concerns

Manitoba Hydro received feedback on this Plan from a MMTP Monitoring Committee Representative Dakota Tipi First Nation (Table 1) and a MMTP Monitoring Committee Representative from Peguis First Nation (Table 2). Manitoba Hydro reviewed the feedback, updated the plan where appropriate including the list of revisions table and provided commenters with a table including their comments and Manitoba Hydro's responses. As a result of this no further feedback has been received from these communities/organizations with regard to this Plan. Table 1 Comments from a MMTP Monitoring Committee Representative from Dakota Tipi First Nation

Section	Comments from Dakota Tipi First Nation	Manitoba Hydro response, steps taken and rationale
Overall	I reviewed the cultural and heritage resources protection plan, I'm very satisfied with hydro respect and transparent aspect to the plan, as well with the other 10 plans, Dakota Tipi first nation and myself look forward to a respectful positive outcome for all living spirits that will be involved in the construction of the MMTP project	Manitoba Hydro also looks forward to continuing to work with Dakota Tipi First Nation and thanks the Committee Representative for their review of the plans

Table 2 Comments from a MMTP Monitoring Committee Representative from Peguis First Nation

Section	MMTP Monitoring Committee representative comments from Peguis First Nation	Manitoba Hydro response, steps taken and rationale
	I like how they have put in the 3 R's – Reduce, reuse and recycle. Question/Concern: However, I did not notice any mention of the 5 R as it is part of the 3 R's. The 5 R hierarchy priorities reduction, then reuse and recycling, then material or energy recovery. And after all other options are exhausted, residual management.	It is not anticipated that energy recovery initiatives will occur on this project during construction.
Interested in Sections 3.3,	Feedback: I see the Training going hand in hand with the whole monitoring process for Environmental Monitoring. Could we perhaps set up a plan with Mb Hydro to have training made	MMTP Monitoring Committee monitors, and other monitors hired for MMTP will receive safety and

Section	MMTP Monitoring Committee representative comments from Peguis First Nation	Manitoba Hydro response, steps taken and rationale
5.0 and 6.0	available to our Community Members, such as we had opportunity with Enbridge training?	mitigation training.
	Feedback: Perhaps add in an Appendix at the back- detailing definitions or Acronym/Abbreviations.	Good suggestion. Manitoba Hydro will take it under consideration.

Draft environmental protection and management plans, were uploaded to the Project website and a web page was created in October 2018. A recent screen shot of the Manitoba Hydro Project Website is below (Figure A).

Environmental protection and management - draft plans

The draft plans are used as guides for contractors and field personnel during the construction of MMTP. They ensure environmental legislation requirements are met and the environment is protected.

- Clearing Management Plan (Draft) (PDF, 882 KB)
- NEW Blasting Management Plan (Draft) (PDF, 382 KB)
- Erosion and Sediment Control Plan (Draft) (PDF, 8.8 MB)
- Golden Winged-Warbler Habitat Management Plan (Draft) (PDF, 741 KB)
- Cultural and Heritage Resources Protection Plan (Draft) (PDF, 5.8 MB)
- Navigation and Navigation Safety Plan (Draft) (PDF, 5.5 MB)
- Waste and Recycling Management Plan (Draft) (PDF, 3.2 MB)
- NEW Construction Emergency Response Plan (Draft) (PDF, 1.2 MB)
 - NEW Dorsey Converter Station Emergency Response Plan (Draft) (PDF, 1.7 MB)
 - NEW Glenboro Station Emergency Response Plan (Draft) (PDF, 1.3 MB)
 - NEW Riel Converter Station Emergency Response Plan (Draft) (PDF. 3 MB)
- Rehabilitation and Invasive Species Management Plan (Draft) (PDF, 7.3 MB)
- Biosecurity Management Plan (Draft) (PDF, 2.2 MB)
- Construction Access Management Plan (Draft) (PDF, 86.4 MB)
- Construction Environmental Protection Plan (Draft) (PDF, 55.8 MB)
- Environmental Monitoring Plan (Draft) (PDF, 2 MB)
- Integrated Vegetation Management Plan (Draft) (PDF, 815 KB)

If you would like to provide us with your feedback on these draft plans, complete and submit this form.

If you cannot view these documents or you need accessible formats, contact us.

We will be adding new and updated plans as we incorporate feedback. Sign up to get notified of these changes:

Email

Figure A screen shot of Manitoba Hydro project page website

A fillable comment form to provide feedback was created in October 2018. A screen shot of the fillable comment sheet can be found below (Figure B).

Environmental protection and management – draft plans feedback

First name
Last name
Address

Phone

Email

Do you represent an Indigenous community or organization?

Yes

Draft plan(s) you reviewed (select all that apply):

Access Management

	Biosecurity Management
	Clearing Management
	Construction Environmental Protection
	Cultural and Heritage Resources Protection
	Environmental Monitoring
_	Erosion and Sediment Control
	Golden Winged-Warbler Habitat Management

For each plan you selected above, share your comments, concerns, and suggestions for how your concerns might be addressed.



Figure B Fillable comment form to provide feedback

Draft environmental protection and management plans were uploaded to the MMTP Monitoring Committee website in October 2018. A screen shot of the MMTP Monitoring Committee website is below (Figure C).



Figure C MMTP Monitoring Committee website screenshot

Below is a screen shot of the e-campaign that was sent to 825 recipients (Figure D.



Figure D e-campaign screenshot

Below is the content from the letter sent to landowners (Figure E).



2018 10 24

«Landowner» «Owner_address» «City», MB «POSTAL_CODE»

Manitoba-Minnesota Transmission Project: Draft environmental protection and management plans

«Landowner»,

As part of planning for the Manitoba-Minnesota Transmission Project (MMTP), Manitoba Hydro is seeking feedback on draft environmental protection and management plans. The following is a link to the document library that contains these plans: https://www.hydro.mb.ca/projects/mb_mn_transmission/document_library.shtml.

The information you have shared regarding your land through discussions with me, Manitoba Hydro property agents, or with our Environment Officer Evan Johansson, have and will inform the details of these plans.

We would like to hear your feedback regarding these plans in a manner that works best for you. The website has a link to a comment form for the plans. Please feel free to call me at «Liaison_phone_number» to share your feedback directly or to set up a site meeting with Evan Johansson please call 204-360-3731, if you have not had the opportunity to do so. We are accepting feedback until November 30, 2018.

We will be adding new and updated plans to the website as we incorporate feedback. I encourage you to visit the Project website (<u>www.hydro.mb.ca/mmtp</u>) for more information or to sign up for project updates.

Please note that Manitoba Hydro will not be moving forward with construction until it has received regulatory approvals.

Yours truly,

«Liaison»

360 Portage Avenue (5) • Winnipeg Manitoba Canada • R3C 0G8 Telephone / N^e de téléphone : 1-877-343-1631 MMTP@hydro.mb.ca

Figure E Content from the letter sent to landowners

Below is a screen shot of an email sent to the MMTP Monitoring Committee (Figure F).

From: Coughlin, Sarah Sent: Friday, October 19, 2018 5:31 PM To:



Subject: RE: MMTP Monitoring Committee Meeting October 10, 2018

Please find attached draft minutes for the October 10, 2018 MMTP Monitoring Meeting. Please submit any changes/comments by October 31, 2018 and mark your calendars for **November 14**, **2018** - the next MMTP Monitoring Meeting at Dakota Tipi First Nation offices near Portage la Prairie, Manitoba.

At the October 10, 2018 meeting the group was asked to provide comment on a series of draft environmental management and protection plans. Manitoba Hydro is seeking comments on these draft plans from MMTP Monitoring Committee members. Attached you'll find a short description of each to help determine if the plan is of interest to you. Each of the these draft plans guides contractors and field personnel while constructing the Manitoba-Minnesota Transmission Project in a manner that meets environmental legislation requirements and protects the environment. We'd like to hear comments or concerns in a manner that works best for you. Please feel free to call me at (204)360-3016 to share your comments directly or to set up a meeting with us. You can also visit our project website at where a comment form has been provided for the plans. We are accepting comments until November 30, 2018. The draft plans are linked here: https://www.hydro.mb.ca/projects/mb_mn_transmission/document_library.shtml

Thank you and I look forward to seeing you on November 14!

Sarah Coughlin Senior Environmental Specialist Licensing & Environmental Assessment **Transmission, Manitoba Hydro** 360 Portage Ave, Winnipeg, MB w (204) 360-3016 c (204) 918-9848 scoughlin@hydro.mb.ca

Figure F Screen shot of an email sent to the MMTP Monitoring Committee

Below is a follow-up email sent to the MMTP Monitoring Committee (Figure G).

From: Coughlin, Sarah Sent: Thursday, November 01, 2018 11:30 AM Cc: MMTP Subject: Manitoba Minnesota Transmission Project Draft Environmental Protection Plan Review

Good morning. As part of our ongoing engagement on the Manitoba Minnesota Transmission Project we would like to notify you that we have posted Draft Environmental Protection and Management Plans on the Project website (<u>https://www.hydro.mb.ca/projects/mb_mn_transmission/document_library.shtml</u>) and are looking to gather feedback on these plans by November 30th.

Please note that notification that these plans have been posted is also being shared with landowners, participants of the MMTP Monitoring Committee, and those that have signed up for e-blast notifications so you may have already received this notice through another communication avenue.

Each of these draft plans, guides contractors and field personnel while constructing the Manitoba-Minnesota Transmission Project in a manner that meets environmental legislation requirements and protects the environment. It is noted below where the plan is new or updated since provided initially through the regulatory process:

- draft Environmental Monitoring Plan (updated)
- draft Construction Environmental Protection Plan (updated)
- draft Cultural and Heritage Resources Protection Plan (updated)
- draft Biosecurity Management Plan (new draft plan)
- draft Clearing Management Plan (new draft plan)
- draft Right-of-Way Habitat Management Plan for Managing Critical Golden-winged Warbler Habitat during Construction and Operation(no change)
- draft Erosion and Sediment Control Plan (new draft plan)
- draft Navigational Safety Plan Summary (new draft plan)
- draft Rehabilitation and Invasive Species Management Plan (updated)
- draft Waste and Recycling Management Plan (new draft plan)
- draft Access Management Plan (updated)

Feel free to contact me ((204)360-3016) should you have feedback you would like to provide, or you are welcome to make use of the comment forms that are available on the website as well.

We look forward to hearing your feedback or responding to questions about this notification.

Sarah Coughlin Senior Environmental Specialist Licensing & Environmental Assessment Transmission, Manitoba Hydro 360 Portage Ave, Winnipeg, MB w (204) 360-3016 c (204) 918-9848 scoughlin@hydro.mb.ca

Figure G Follow-up email sent to the MMTP Monitoring Committee

Below is a screen shot of an email sent to interested parties (Figure H) and a list of the interested parties (Table 3)

As part of our ongoing engagement on the Manitoba Minnesota Transmission Project we would like to notify you that we have posted Draft Environmental Protection and Management Plans on the Project

website (<u>https://www.hydro.mb.ca/projects/mb_mn_transmission/document_library.shtml</u>) and are looking to gather feedback on these plans by November 30th. You are receiving this email as you were a participant in the Clean Environment Commission Hearings and the National Energy Board hearing process for the Project.

(please note that notification that these plans have been posted is also being shared with landowners, participants of the MMTP Monitoring Committee, and those that have signed up for e-blast notifications so you may have already received this notice through another communication avenue)

Most of these draft plans were shared prior to, or during, the hearing processes. It is noted below where the plan is new since the hearing process, or updated since that time. Each of these draft plans, guides contractors and field personnel while constructing the Manitoba-Minnesota Transmission Project in a manner that meets environmental legislation requirements and protects the environment.

- draft Environmental Monitoring Plan (updated)
- draft Construction Environmental Protection Plan (updated)
- draft Cultural and Heritage Resources Protection Plan (updated)
- draft Biosecurity Management Plan (new draft plan)
- draft Clearing Management Plan (new draft plan)
- draft Right-of-Way Habitat Management Plan for Managing Critical Golden-winged Warbler Habitat during Construction and Operation(no change)
- draft Erosion and Sediment Control Plan (new draft plan)
- draft Navigational Safety Plan Summary (new draft plan)
- draft Rehabilitation and Invasive Species Management Plan (updated)
- draft Waste and Recycling Management Plan (new draft plan)
- draft Access Management Plan (updated)

Feel free to contact me (204-360-7677) or Sarah Coughlin (204-360-3016) should you have feedback you would like to provide, or you are welcome to make use of the comment forms that are available on the website as well.

We look forward to hearing your feedback.

Kind regards,

Maggie Bratland

Figure H Sample email sent to interested parties

Table 3 Manitoba Hydro's list of interested parties for the Project includes the following organizations

Interested parties list
Beausejour Community Planning Services
Beef Producers of Manitoba
Bird Atlas
Canadian Parks and Wilderness Society (CPAWS)
City of Steinbach
City of Winnipeg
Consumers Association of Canada
Cooks Creek Conservation District
Dairy Farmers of Manitoba
DOA Outfitters
Ducks Unlimited
Forest Industry Association of Manitoba
Green Action Centre
HyLife, Land Manager

Interested parties list		
Integrated Resource Management Team (Eastern Region)		
Keystone Agricultural Producers		
La Salle Redboine Conservation District		
Local Urban District of Richer, Committee Member-Chairperson		
Macdonald-Ritchot Planning District		
Manitoba Indigenous and Northern Relations		
Manitoba Aerial Applicators		
Manitoba Agriculture (Land Use)		
Manitoba Agriculture (Agri-Resource Branch)		
Manitoba Association of Cottage Owners		
Manitoba Bass Anglers (MBA)		
Manitoba Canoe & Kayak Centre - Winnipeg		
Manitoba Chamber of Commerce		
Manitoba Chicken Producers		
Manitoba Climate Change and Air Quality		
Manitoba Crown Lands		
Manitoba Fly Fishing Association (MFFA)		
Manitoba Forestry Association		
Manitoba Groundwater Management		
Manitoba Habitat Heritage Corporation		
Manitoba Historic Resources Branch		
Manitoba Infrastructure		
Manitoba Infrastructure Highway Engineering		
Manitoba Infrastructure Highway Regional Operations		
Office of Fire Commissioner		
Manitoba Lodges and Outfitters Association		
Manitoba Paddling Association		
Manitoba Parks and Regional Services - Parks and Protected Spaces		
Manitoba Petroleum Branch		
Manitoba Pork Council (Industry Services Co-ordinator		
Manitoba Protected Areas Initiative		
Manitoba Public Health		
Manitoba Resource Development Division Growth, Enterprise and Trade		
Manitoba Sustainable Development		
Manitoba Sustainable Development (Aboriginal Relations)		
Manitoba Sustainable Development (Office of Drinking Water)		
Manitoba Sustainable Development (Water Control Works and Drainage		
Licensing)		
Manitoba Sustainable Development (Water Quality Management)		
Manitoba Trails Association		
Manitoba Trappers Association		
Manitoba Sustainable Development (Fish and Wildlife)		
Manitoba Water Use Licensing		
Manitoba Woodlot Association		

Interested parties list		
Maple Leaf Agri-Farms		
Nature Conservancy of Canada		
Organic Producers Association of Manitoba Co-Operatives Inc.		
Paddle Manitoba		
Portage la Prairie Community Planning Services		
REDBOINE BOATING CLUB		
Rural Municipality of Glenboro South - Cypress		
Rural Municipality of Headingley		
Rural Municipality of La Broquerie		
Rural Municipality of McDonald		
Rural Municipality of Piney		
Rural Municipality of Ritchot		
Rural Municipality of Rosser		
Rural Municipality of Springfield		
Rural Municipality of Ste. Anne		
Rural Municipality of Stuartburn		
Rural Municipality of Tache		
Ruth Marr Consulting		
Save the Seine		
Seine-Rat River Conservation District		
Sharp-Tails Plus Foundation		
Sno-Man Inc		
South East Snoriders		
Southwood Golf & Country Club		
St. Norbert Ward - Winnipeg		
St. Vital Ward - Winnipeg		
Steinbach Community Planning Services		
Steinbach Game & Fish Gun Range Inc		
Town of St. Pierre Jolys		
Town of Ste. Anne		
Trails Manitoba		
TransCanada Pipelines Limited		
Travel Manitoba		
Village of Glenboro		
Wa Ni Ska Tan		
Walleye Anglers Association of Manitoba (WAAM)		
Wilderness Society		
Winnipeg Rowing Club		