

Waste

Management Plan



WASTE MANAGEMENT PLAN

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Plan Maintenance

Responsibility

The accountability for the Waste Management Plan development and maintenance is a combined effort by the Trans Mountain Manager, Emergency Management and Manager, Environment. This accountability is such:

- The document is owned by the Emergency Management Program as a supplemental plan to the Emergency Response Plan (ERP), however it is developed and maintained in cooperation with the Environment Group who is responsible for the implementation of the Waste Management Plan during an emergency.
- The administrative management for the Waste Management Plan will be administered by the Emergency Management Program.

Plan Revisions

All requests for change must be made through the Manager, Emergency Management using the Revision Request Form located in this section of the manual.

Revisions after Release or Exercise

In the event that Trans Mountain experiences a release (worst case or otherwise), or conducts an exercise or training session, the effectiveness of the ERP and its supplemental plans will be evaluated and updated as necessary.

Changes in Operating Conditions

If a new or different operating condition develops, or if new information which would substantially affect the implementation of the ERP and its supplemental plans is identified, then Trans Mountain will modify impacted Plans to address such changes.

Revision Request Form

| | |
|---|------------|
| Requested by: | Date: |
| Dept/ Agency: | Phone No.: |
| Revision Type: ___ Addition ___ Deletion ___ Correction | |
| Manual Section: | Page: |
| Revision (attach separate sheet if necessary): | |
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| | |
| Signature of Requestor: | |
| Send to: Manager, Emergency Management Trans Mountain 2700-300 - 5 th Avenue S.W. Calgary, AB T2P 5J2 Canada Fax: (403) 514-6401 | |

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| To be completed by Manager, Emergency Management | |
| Date Received: | Comments: |
| Date Reviewed: | |
| Issued as Revision: Y/ N | |
| If No, reason for Rejection: | |
| | |
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| | |
| Signature Manager, Emergency Management | |

Control Sheet

| Revision Number | Date of Revision | Change(s) | Name |
|-----------------|------------------|--|--------------|
| 1 | January 2018 | New Plan Issued | J. Kereliuk |
| 2 | April 2018 | Minor wording changes to Sections 1.0, 2.0 | J. Kereliuk |
| 3 | October 2018 | Rebranding from Kinder Morgan to Trans Mountain | K. Malinoski |
| 4 | February 2020 | Updated ERL references to TAS | K. McLernon |
| 5 | April 2022 | Removed acronym WMP Section 2.0, Updated "Environment Unit Lead" to "Environment Unit Leader" | |
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1.0 INTRODUCTION

The management of waste from a release is a priority for Trans Mountain and a key component of supporting incident response for the Incident Management Team which will establish, and be located in, the Incident Command Post (ICP). The appropriate handling, storage, transport, disposal and tracking of waste associated with a release is essential for effective planning and response to a release.

The fundamental concepts of the Waste Management Plan are initiated upon declaration of an emergency through the Trans Mountain Alert System (TAS) process and are maintained until development of an incident specific waste management plan. The incident specific waste management plan evolves from the Waste Management Plan and will be scaled according to the magnitude of the release.

This Plan will function as a “living document” in which information collected will be used to continuously update the response strategies and monitor their effectiveness to achieve the objectives as laid out in the Incident Action Plan (IAP).

1.1 Scope

In the event of an emergency that has the potential for generating waste, the Waste Management Plan will be activated in conjunction with the appropriate ERP.

The Waste Management Plan is considered a subset of Trans Mountain’s Emergency Response Plans (ERP)s and has been developed to align with the Incident Command System (ICS).

1.2 Objectives

The objectives of the Waste Management Plan are to:

- Identify types of waste generated during incident response
- Identify applicable waste regulations and requirements
- Identify methods used for the characterization of waste
- Identify appropriate disposal methods for waste
- Identify appropriate disposal locations for waste

1.3 Implementation of the Waste Management Plan

Activation of the Trans Mountain ERP will occur when an emergency is declared. When an emergency is declared, and a need is identified for waste management, the Waste Management Plan will be initiated.

The Waste Management Plan will be used in conjunction with other appropriate plans for the response phase of the incident until the incident specific waste management plan is developed. These plans will be used during the transition from a response phase to the remediation phase as determined by Unified Command.

Implementation of the Waste Management Plan is a function of the Planning Section’s Environment Unit (EU).

2.0 ROLES AND RESPONSIBILITIES

Responsibility for implementing this Plan rests with the Environmental Unit Leader (EUL) within the Planning Section of the Incident Management Team (IMT), and the Recovery and Protection Branch Director within the Operations Section of the IMT.

2.1 Environmental Unit Leader

The EUL is responsible for environmental matters associated with the response including the appropriate handling and disposal of waste. The EUL is responsible for the implementation of the Waste Management Plan and tracking of waste information to provide to the Situation Unit and Unified Command. Duties for this role can be found in the Trans Mountain ICS Guide.

2.2 Disposal Technical Specialist

The Disposal Technical Specialist is part of the EU and is responsible for developing the incident specific waste management plan that details the minimization, collection, storage, transportation, manifesting, permitting, recycling, and disposal of all liquid and solid wastes generated during the response.

Additionally, this role coordinates closely with the waste technical specialists from regulatory agencies participating in the response, Waste Coordinators and the Disposal Group Supervisor. Specific duties for this role can be found in Trans Mountain's ICS Guide.

2.3 Recovery and Protection Branch Director

The Recovery and Protection Branch Director is responsible for overseeing and implementing the protection, containment, and cleanup activities established in the IAP, including implementation of the Waste Management Plan throughout the Recovery and Protection Branch.

2.4 Disposal Group Supervisor

Under the Recovery and Protection Branch Director, the Disposal Group Supervisor is responsible for coordinating the implementation of the Waste Management Plan with the On-Shore Recovery Group Supervisor, and On-Water Recovery Group Supervisor. Depending on the size and location of the incident, the disposal groups may be further divided into Strike Teams, Task Forces, and Single Resources.

2.5 Waste Coordinator(s)

The Waste Coordinator(s) is part of the EU and provides onsite direction to ensure that waste is appropriately segregated, stored, transported from, and disposed of for each waste storage area in accordance with the Waste Management Plan. A Waste Coordinator is often sourced from a pre-identified third-party contractor and will be assigned to each waste storage area depending on the size of the incident. Waste is only permitted to leave the storage area under authorization from the Waste Coordinator, Disposal Technical Specialist or EUL. Pre-identified third-party contractors are listed in the Confidential Appendix of the ERP.

3.0 REGULATORY REQUIREMENTS

Waste management activities must comply with the applicable regulations for the province or state in which the waste is generated and/or disposed. There are notable regulatory differences between the provinces and states in which Trans Mountain operates, including characterization of waste, requirements for waste generator numbers and shipping documents/licensing requirements for transportation of waste and waste disposal facilities.

In order to ensure compliance with regulatory requirements, all waste will be:

- Characterized prior to disposal according to the applicable jurisdiction
- Considered hazardous waste until characterization has been completed
- Appropriately segregated, labelled, documented and tracked
- Transported using licensed carriers, where required
- Disposed at approved disposal facilities

3.1 Alberta Waste Regulations

Waste management within Alberta is administered by the Alberta Environment and Parks Environmental Protection and Enhancement Act, the Waste Control Regulation and the Alberta Energy Regulator's Directive 058: Oilfield Waste Management Requirements for the Upstream Petroleum Industry.

3.2 British Columbia Waste Regulations

Waste management within the province of BC is governed by the BC Ministry of Environment, *Environmental Management Act* and the Hazardous Waste Regulation.

3.3 Washington State Waste Regulations

Waste Management within Washington State is governed federally by the US Environmental Protection Agency, *Resource Conservation and Recovery Act 40 CFR 239-282*, and at the state-level by the Washington Department of Ecology *Dangerous Waste Regulations WAC 173-303*.

4.0 WASTE MANAGEMENT STRATEGY

4.1 Development of Incident Specific Waste Management Plan

The details of the release and the response efforts will be evaluated to determine the types of waste expected to be generated as a result of a release and its potential quantities. This information will be used to determine the appropriate size and scale of the waste management response effort and will be documented in the incident specific waste management plan.

4.2 Waste Streams and Characterization

All waste generated by the release and subsequent response will be characterized as either hazardous waste or non-hazardous waste in accordance with the appropriate regulation and/or analytical sampling. Professional judgement will be utilized when analytical sampling is not possible. Waste typically generated as a result of a release and subsequent response falls into four (4) main waste streams:

- Contaminated Liquid Waste
- Contaminated Solid Waste
- Non-Contaminated Waste
- Deceased Wildlife

4.2.1 Contaminated Liquid Waste

Waste in this stream includes, but is not limited to, the following:

- Released hydrocarbon product
- Contaminated water
- Hydrovac slurry/sludge
- Decontamination waste (contaminated water)

4.2.2 Contaminated Solid Waste

Waste in this stream includes, but is not limited to, the following:

- Contaminated soils/sediment
- Contaminated boom and sorbent materials
- Contaminated wood, debris and vegetation
- Decontamination waste (oily rags, sponges, mops, etc.)
- Contaminated personal protective equipment
- Expendable response equipment and consumables contaminated

4.2.3 Non-Contaminated Waste

Waste in this stream includes, but is not limited to, the following:

- General refuse (domestic waste)
- Vegetation from clearing activities

4.2.4 Deceased Wildlife

Waste in this stream includes, but is not limited to, the following:

- Contaminated deceased wildlife
- Non-Contaminated deceased wildlife

4.3 Waste Handling and Segregation

In accordance with applicable regulations, wastes will be segregated by their waste stream as they are generated. Typical handling and segregation techniques for the different types of waste streams are detailed below. Specific work instructions for the appropriate handling of waste at each site will be communicated through the incident specific waste management plan.

4.3.1 Contaminated Liquid Waste

Contaminated liquid waste recovered from the response operations will either be pumped into storage tanks or hauled directly to an approved waste disposal facility via vacuum, or hydrovac trucks.

4.3.2 Contaminated Solid Waste

Contaminated solid waste generated from response efforts will be addressed in one of two methods: secured in poly bags and stored in larger waste disposal bins or for oiled soil, vegetation or debris, stored in lined, bermed containment cells, or lined waste disposal bins.

4.3.3 Non-Contaminated Waste

Non-contaminated solid waste will be collected in bags, totes or drums and stored in larger waste disposal bins as warranted. Non-contaminated domestic waste will be collected in household garbage bags and stored in larger waste disposal bins as required.

4.3.4 Deceased Wildlife

Deceased wildlife will be collected by the Wildlife Recovery Team and disposed of in accordance with the Wildlife Management Plan and applicable regulations and permits. Only permitted wildlife recovery specialists are authorized to collect and dispose of deceased wildlife.

4.4 Onsite Waste Storage

Designated waste storage areas will be constructed under the guidance of the Disposal Group Supervisor and Disposal Technical Specialist, ideally within each division associated with the response. All wastes generated throughout the response will be directed to the waste storage areas for collection. Wastes will be transported directly from the waste storage areas to Trans Mountain approved waste disposal facilities at the discretion of the Waste Coordinator. A list of pre-approved disposal facilities can be found in the *Confidential Appendix* of the ERP.

4.5 Documentation and Transportation Requirements

Trans Mountain requires that all waste shipments are accompanied by shipping documents for tracking purposes. The Waste Coordinator will ensure appropriate shipping documents are utilized and completed accurately for each waste shipment. Hazardous waste streams require the use of waste manifests in accordance with the appropriate regulatory jurisdiction while non-hazardous waste streams require the use of a bill of lading to meet Trans Mountain's tracking requirements.

Information collected for tracking purposes will include:

- Date
- Division/location of waste generation
- Description of waste/waste stream
- Volume of waste
- Waste carrier information
- Intended waste disposal facility

Hazardous waste is the most regulated type of waste and requires the use of a waste manifest for hazardous wastes shipped within Canada. Hazardous waste manifests must also include a waste generator number or similar identifier be assigned prior to shipment of the waste. Many Trans Mountain facilities already have been assigned with waste generator numbers which can be used for releases at those facilities. For releases occurring along the ROW, or at facilities, without a waste generator number, a release specific number will be obtained for the response. All waste manifests must be reviewed and signed by the Waste Coordinator prior to the shipment leaving the waste storage area.

Hazardous waste transportation is regulated, requiring waste carriers to have special licensing for the transport of hazardous waste. Only licensed carriers will be used for the transportation of hazardous waste during an incident response. A list of pre-approved carriers can be found in the Confidential Appendix of the ERP.

4.6 Disposal Locations

Appropriate waste disposal facilities will be selected for each waste stream.

The selection of appropriate waste disposal facilities will be dependent on several factors such as regulatory requirements, Trans Mountain requirements, facility authorization and licensing, facility size, capacity and facility location. In the event of an incident, each of these factors will be considered when selecting the appropriate waste disposal facility. A list of pre-approved waste disposal facilities can be found in the *Confidential Appendix* of the ERP.

5.0 COMMUNICATION

Accurate and timely communication of waste tracking information to the Situation Unit is essential to the Planning Section to ensure the recovered product volume is representative of response efforts. Waste Coordinators will prepare and submit daily waste tracking information to the Environmental Unit for submission to the Situation Unit.

6.0 WASTE MANAGEMENT PLAN DEACTIVATION

Waste management activities will continue until waste is no longer being generated. It is likely that waste management activities will continue beyond the Response Phase and continue into the subsequent Remediation Phase.

7.0 RECORDS AND RECORD MAINTENANCE

All related documentation and the incident specific wildlife management plan will be maintained in the incident file as outlined in the ERP.