MANDALAY – LUPIN MINE

WASTE MANAGEMENT PLAN

OCTOBER 2025

Mandalay Resources Corporation
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Revision History

Revision #	Date	Section	Summary of Changes	Author
1	March 2025	All	New Document. Significant Update of Previous Lupin Annual Report	K. Leedham, Falkirk Environmental Consultants C. Castro, Falkirk Environmental Consultants
2	April 2025	All	Review	Jon Melnyk, JDS Mining
3	October 2025	All	Review	Felix Mensah-Yeboah, Mandalay Resources Corp.

List of Acronyms

Acronym	Meaning
LMI	Lupin Mines Incorporated
Plan	Waste Management Plan
PPE	Personal Protective Equipment
SDS	Safety Data Sheet
WHMIS	Workplace Hazardous Materials Information System

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1. INTRODUCTION

1.1 OVERVIEW AND PURPOSE

Lupin Mine (the Mine) is located approximately 285 km southeast of Kugluktuk in the Kitikmeot Region of Nunavut and is owned by Lupin Mines Incorporated (LMI), a wholly owned, indirect subsidiary of Mandalay Resources Corporation. The Mine site is situated on the western shore of Contwoyto Lake, approximately 60 km south of the Arctic Circle. It is an underground gold mine that operated from 1982 to 2005 with temporary suspensions of activities between January 1998 and April 2000, and again between August 2003 and March 2004. The Mine resumed production in March 2004 until February 2005 when the Mine was place into Care and Maintenance.

On October 20, 2017, LMI, announced that the Mine would transition from Care and Maintenance to full Closure and Reclamation, beginning in 2018 through to 2020. An application for renewal and amendment of the current water license, as well as a Final Closure and Reclamation Plan was submitted to the Nunavut Water Board on July 27, 2018 which underwent an extensive review process and culminated in the issuance of amended Type A Water License 2AM-LUP2032 on February 29, 2020 by the Nunavut Water Board and approval by the Minister of Crown Indigenous Relations and Northern Affairs Canada on April 9, 2020. LMI continued active preparatory work and initiated year one of the active closure phase in Q1 of 2020. At the beginning of 2022 LMI once again entered Care and Maintenance with limited on-site activities in 2023 through to 2026. Following 2026, the Mine will enter Final Closure Phase.

This Waste Management Plan (Plan) for the Mine and its on-site activities and is intended to:

- Provide guidance for Waste Management components of the Mine;
- Describe responsibilities and tasks involved with Waste Management;
- Identify waste reduction, minimization and segregation measures that are to be implemented;
- Identify appropriate waste handling and storage practices; and
- Establish waste transportation and disposal requirements, including record keeping requirements.

1.2 MANDALAY CORPORATE ENVIRONMENTAL POLICY

Mandalay Resources is committed to maintaining the highest level of integrity in its corporate responsibilities toward resource development and environmental stewardship. Mandalay is committed to environmental protection throughout the exploration, development, operation and eventual closure and rehabilitation of each of its projects by applying sound judgment, by meeting or exceeding legislative requirements and by minimizing adverse impacts its activities may have on the environment. Mandalay views adherence to the policy's environmental guidelines as a continual improvement process.

Additionally, to the extent practical, the Mine will purchase chemicals and materials which, when disposed of, will not be hazardous wastes. At all times, the Mine will strive to minimize hazardous waste generation.

1.3 SCOPE

This Plan applies to all activities in connection with the Care and Maintenance status of the Mine, and it affects all personnel, contractors, and visitors to the Mine. Activities carried out on-site in relation to the Care and Maintenance of the Mine are:

- Monitoring and inspection of facilities and infrastructure for compliance with existing requirements;
- Water Management from runoff or contact water;
- Waste containment and temporary storage resulting from site clean-up or reclamation activities;
- Maintenance of infrastructure and equipment;
- Environmental or geotechnical studies in relation to residual impacts of the Mine;
- Rehabilitation or site preparation for future reclamation activities;
- Maintaining waste infrastructure that support ongoing reclamation works onsite (landfill and sewage disposal facilities); and
- Storage of Hazardous Materials for eventual transport for proper disposal.

1.4 LOCATION AND ACCESS

The Lupin Mine is accessible by air or winter road. Air access is serviced by a gravel airstrip, capable of handling large aircraft. Charter flights from Yellowknife support Mine access when the road is not in service. When the mine was in operation, the Tibbitt Northwest Territories to Contwoyto Winter Road was utilized to support winter operations. When seasonally constructed, this winter road currently ends at the Ekati Diamond Mine and is built and maintained by LMI to further access the site. To achieve closure, the seasonal winter road will be re-established seasonally to support reclamation, closure works and equipment demobilization once the closure activities have been completed. The general location of the Mine in relation to the proposed winter road is shown in Figure 1-1.

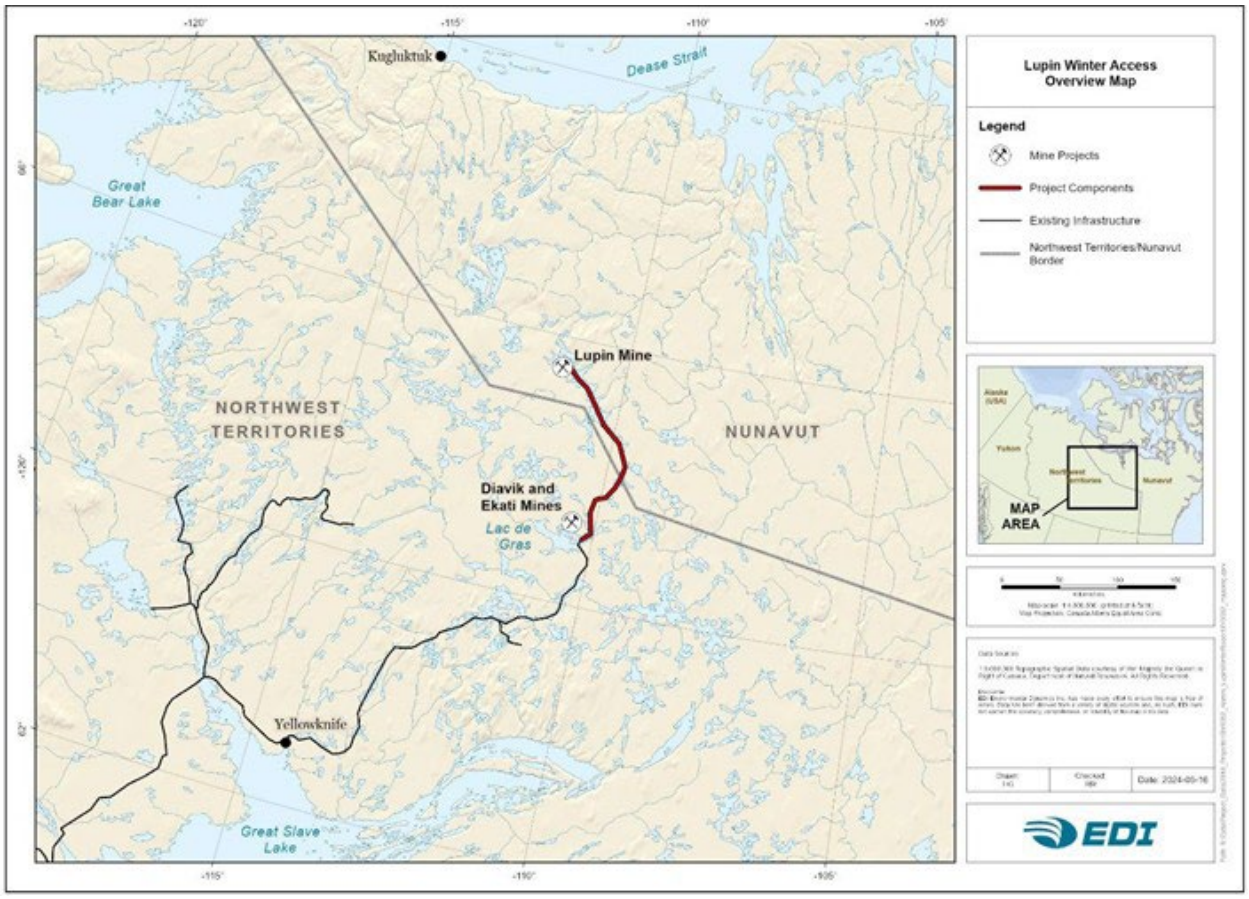

Figure 1-1: General Location of the Lupin Mine

1.5 Regulatory Framework and Standards

The Nunavut Water Board administers Water License 2AM-LUP2032 for the Mine. This License also describes wastes management considerations for the Mine.

Waste management in Nunavut is governed by several key laws, including the Nunavut *Public Health Act*, the Nunavut *Environmental Protection Act*, the federal *Environmental Protection Act*, and the federal *Transport of Dangerous Goods Act*. These laws work together to ensure safe and sustainable waste disposal practices while protecting public health and the environment.

The Government of Nunavut *Environmental Guideline: General Management of Special and Hazardous Waste* (2023) was referenced extensively in the production of this Plan. A copy of this guideline will also be kept at the Mine. It is included as Appendix C for reference.

Table 1-1 lists additional documents that guided the development of this Plan and others that can be referenced for additional details.

Table 1-1: Relevant Guidance Documents for the Plan, including Legislation, Guidelines, Permits, and Licenses

Document[1]	Authority
Cross-border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations (XBR, 2021)	Government of Canada
Environmental Emergency Regulations (2019)	Environment and Climate Change Canada
Environmental Guideline for the General Management of Hazardous Waste in Nunavut (March 2023)	Government of Nunavut
Environmental Guideline, Contaminant Spill Remediation (March 2023)	Government of Nunavut
Environmental Guideline, Spill Contingency Planning and Reporting Regulations (March 2023)	Government of Nunavut
Environmental Guideline, Ozone Depleting Substances (March 2023)	Government of Nunavut
Environmental Protection Act, R.S.N.W.T. (Nu) 1988	Government of Nunavut
Nunavut Waters and Nunavut Surface Rights Tribunal Act (2002) and Nunavut Water Regulations (2013)	Government of Canada
Property Owner's Guide to Contaminant Spill Prevention and Reclamation (March 2023)	Government of Nunavut
Registration Form Hazardous Waste Generator[2]	Government of Nunavut
Transportation of Dangerous Goods Act, Official Consolidation (C.S.Nu.,c.T-90, 2024)	Government of Nunavut
Transportation of Dangerous Goods Act (2012)	Government of Canada
Transportation of Dangerous Goods Regulation (SOR/2001-286)	Government of Canada
Water License 2AM-LUP2032	Government of Nunavut

Document[1]	Authority
Department of Environment, Government of Nunavut, Environmental Guideline for Waste Asbestos (January, 2011)	Government of Nunavut

[1] *Not in hierarchical order.*

[2] *registration_form_hazardous_waste_generator.pdf*

1.6 ROLES AND RESPONSIBILITIES

1.6.1 Staff, Contractors, Suppliers, and Visitors

All personnel conducting activities on-site, including staff, contractors, suppliers, and visitors are required to implement this Plan as it pertains to their activities. Specifically, these responsibilities include:

- Disposing of domestic waste in designated containers and adhering to all waste management practices;
- Responding to spills in accordance with the Spill Contingency Management Plan;
- Cooperating with their supervisor and/or Lupin Mine management to adhere to the waste management program; and
- Carrying out only those duties and tasks that the staff/contractor/supplier/visitor is experienced at and trained to perform.

1.6.2 Managers and Supervisors

Managers and supervisors are responsible to ensure that staff, contractors, consultants, and visitors have been trained in waste management expectations and procedures. They have the responsibility to ensure that waste management practices and activities are followed in accordance with this Plan and updated if necessary.

1.6.3 Plan Management and Implementation

A copy of this Plan is maintained at the Mine in an accessible location.

The Plan will be reviewed annually and updated as needed. When material changes occur, the updated document will be issued externally as needed.

All workers and contractors involved in the activities at the Mine will be trained on proper waste handling and disposal while on-site.

2. IDENTIFICATION OF WASTE TYPES

As no mining is occurring during Care and Maintenance, no mineral waste will be produced. Anticipated wastes that will be produced on-site, as categorized by the Government of Nunavut, include:

- Non-hazardous wastes (domestic) generated primarily at the camp;
- Potentially hazardous waste;

- Special Waste (such as batteries and lightbulbs);
- Hazardous/Listed wastes.

2.1 Identification of Non-Hazardous Wastes

Waste derived from care and maintenance activities tends to be non-hazardous domestic waste in connection to camp activities. Examples of this type of waste include organic food waste and paper. Sewage and other greywater will be produced from workers and camp operations.

Other non-hazardous waste can be derived from demolition and the maintenance shop. Demolition waste includes non-recyclable scrap metal (including non-returnable drums that have been crushed), scrap wood, and concrete. Maintenance shop wastes include drained and crushed oil filters, as well as punctured and drained aerosol cans. Workers are expected to be familiar with these types of non-hazardous waste from experience and dispose of them accordingly using the standard disposal infrastructure available onsite.

2.2 Identification of Potentially Hazardous Waste, Special Waste, and Hazardous Wastes

Hazardous Waste is defined as any waste material or substance that is flammable, corrosive, toxic, or reactive. It can be generated from industrial processes or produced by households. This includes wastes that are mixtures of hazardous and non-hazardous materials. Hazardous Waste may be in a solid, liquid, or gaseous form, and can pose serious risks to human health and the environment.

Common examples of hazardous wastes can include:

- heating fuel;
- some paints;
- batteries;
- motor oil;
- asbestos-containing materials; and
- mercury-containing products like fluorescent light bulbs.

To determine if a solid waste is a hazardous waste, workers will:

- Check the Safety Data Sheet (SDS).
- Check the Canadian Center for Occupational Health and Safety website for SDS if one is not available on-site.

The list of hazardous materials should be reviewed if there are material changes in Mine activities.

Prior to disposal, in situations where there is uncertainty about whether a waste is hazardous, special, or non-hazardous workers are expected to consult with their manager to confirm.

3. MANAGEMENT OF WASTES

The section below details how different types of waste will be handled throughout the project. Pollution prevention is the most effective and proactive management practice to eliminate and reduce the generation of waste. The amount of waste produced at the Mine will be minimized to the extent practicable. Where feasible and appropriate options are available, efforts will be made to re-use,

repurpose, or recycle materials.

A summary of the types of expected waste, management approaches, and disposal options are provided in Table 5-1.

3.1 Safety Considerations

Appropriate safety precautions will be taken when handling all wastes onsite. Precautions will vary depending on the type of waste. Appropriate Personal Protective Equipment (PPE) will be worn, if recommended, when handing special or hazardous wastes. Anyone handling special or hazardous waste will be adequately trained.

Section 10 of *Nunavut Environmental Guideline: General Management of Special and Hazardous Waste* (2023; Appendix C), describes what PPE should be worn, if any, when handling each type of waste.

Additionally, the SDS of a particular material will identify PPE required for the safe handling of that material.

3.2 Non-Mineral (Non-Hazardous) Waste Management

Appropriate waste disposal containers to allow for appropriate waste separation are available at the Mine. The Mine is be equipped with appropriate containers to accommodate all types of waste that may be produced on-site until its final disposal. All storage containers will be durable and in good condition and will minimize attractants and interactions with wildlife and crews and minimize potential impacts to the environment.

3.2.1 Incineration

Domestic waste, kitchen waste, paper, and cardboard are disposed of via the on-site incinerator. The incinerator is located to the SE of the camp.

Other waste, such as scrap wood and metal will be separated and stored in a designated area that is kept tidy and properly labelled.

3.2.2 Landfill

The Mine is authorized to dispose of relevant inert, non-hazardous, and non-combustible waste generated by the Project in the onsite Landfill. Any asbestos containing materials will be handled and disposed in underground mine workings or buried in a landfill in accordance with the most recent regulations and best management practices.

Non-hazardous solid waste, including food waste, paper, and cardboard are incinerated. Incinerator ash is disposed of in the landfill.

Demolition debris (e.g., scrap wood, non-recyclable scrap metal, concrete), and maintenance shop wastes are disposed of in the landfill.

No hazardous wastes, bulk liquids, or bulk petroleum products (waste solvents, used oil, undrained or uncrushed oil filters or aerosol cans, batteries, mercury vapor lamps, mercury switches, used greases) are placed in the landfill.

3.2.3 Sewage and Greywater

Sewage and camp greywater is directed to the Sewage Lakes Disposal Facility, as authorized per 2AM-LUP2032, Part E,8. Sewage and greywater is collected from tanks at the camp and pumped to the Sewage Lakes Disposal Facility via vac truck. Effluent discharged from the Sewage Lakes Disposal Facility will meet effluent quality limits described in Part E,9.

3.3 Special and Hazardous Waste Management

All hazardous and potentially hazardous wastes will be handled and stored in accordance with applicable regulations and best management practices. Primarily, the Nunavut Environmental Guideline: General Management of Special and Hazardous Waste (2023) will be used as a guide.

All hazardous and potentially hazardous wastes will be labelled and stored in accordance with Workplace Hazardous Materials Information System (WHMIS) and will be transported in accordance with the most current Transportation of Dangerous Goods Regulations. The storage of such materials will occur at the camp facility.

Special and Hazardous waste is managed considering regulatory requirements and as per license conditions. All hazardous waste will be eventually transported via a certified carrier for final disposal at an authorized disposal facility offsite.

3.3.1 Used Oil and Waste Fuel

Used oil, waste fuel and glycol, oily water, and used oil filters will be managed in accordance with current regulations. These waste materials will be separated and sorted appropriately. Storage of used oil and waste fuel will be stored at the camp facility and will be backhauled to Yellowknife for final disposal.

Storage will occur in a container that was manufactured for the purpose of storing petroleum products. Such containers will be inspected, tightly sealed, closed, and handled to prevent leakages or spill and will be stored in an area where access is controlled and monitored. Storage containers and areas will be labelled according to WHMIS.

3.3.2 Waste Antifreeze (and other chemicals)

Antifreeze will be stored in accordance with the Nunavut guidelines for the Management of Special and Hazardous Wastes (2017). Storage best management practices include:

Antifreeze storage will include:

- Storage in containers (preferably originals) that are sound, sealed, and not damaged or leaking and should be sealed or closed at all times.
- Waste antifreeze will never be stored with food or in used food containers such as bottles or cans.
- Storage in an area where access is controlled and monitored.
- Storage containers and areas will be labelled according to WHIMIS.

3.3.3 Batteries

All used batteries, including general purpose batteries (flashlight, lantern batteries), dry cell (lithium-ion, nickel, and alkaline) and wet cell (lead-acid) will be collected, sorted, and labelled according to type and

stored temporarily in a well-organized manner that prevents the release of any hazardous constituents to the environment. Used batteries are stored in appropriate containers in the Mechanical Shop, with the aim to ship offsite for disposal.

3.3.4 Used Light Vehicle Tires

Tires that cannot be returned to the vendor shall be disposed of in the Mine landfill or will be stored for eventual transport via a certified carrier for final disposal in at an authorized disposal facility.

3.3.5 Empty Drums and Scrap Metal

All empty metal drums shall be taken to a secure and bermed designated area, crushed and placed in the landfill. To the maximum extent practical, scrap metal generated by demolition activities at the Lupin Site shall be sold for metal recycling where appropriate.

3.3.6 Non-aerosol Cans (except acute hazardous waste)

During use, the container will be emptied of all material by its normal means (e.g., pouring, pumping). The container will then be inspected to ensure that less than 1 inch or 3% by weight of the total capacity of the container remains in the container (0.3% if the container is greater than 110 gallons). If more than this amount of material remains in the container, it will be used or emptied into a satellite accumulation drum. If the container has an inner liner, the container is empty when the inner liner has been removed. Once emptied using this procedure, the container will be disposed of as solid, non-hazardous waste in the trash.

3.3.7 Aerosol Cans

Aerosol cans are punctured and drained into hazardous waste drums prior to disposal of the empty can. Once the residual materials have been drained from the can, it is burnt and the can itself is discarded in the trash as non-hazardous waste and is disposed of in the landfill.

3.3.8 Compressed Gases

If disposed of improperly, gases such as acetylene and propane are considered hazardous wastes, due to their ignitability. Compressed gas cylinders are considered empty when the tank pressure approaches atmospheric pressure. Empty tanks are stored for back-haul when winter road construction allows.

3.4 Management of Spills

Spill response materials may be generated in the event of an unplanned release from vehicles on-site or transiting the road. Implementing a robust safety program will minimize waste of this type from being generated; however, in the event of an unplanned release the volume of waste generated may vary depending on the magnitude of the spill.

Note that under the Spill Contingency Planning and Reporting Regulations, any person storing contaminants in an underground facility with a capacity equal to or greater than 4,000 litres or kilograms, or any person storing contaminants in an aboveground storage facility with a capacity equal to or greater than 20,000 litres or kilograms, is required to file a plan.

There are multiple spill kit drums strategically placed throughout the mine to support a coordinated spill

response.

In the event of a reportable spill, the Mine Manager, or designate, will report the spill via the 24-hour Spill Report Line at: (867)-920-8130 or spills@gov.nt.ca.

Appendix A details the Reportable Quantities, dependant on the contaminant in question.

Appendix B includes a Spill Report Form that can be used to report the details of the spill.

3.5 Management of Contaminated Soils

3.5.1 Materials Contaminated with Petroleum Products

Soils contaminated from spills of petroleum products (including diesel, gasoline, oils, used oil, and grease) shall be excavated until there is no visible sign of contamination, and disposed underground, via the Crown Pillar as detailed in 2AM-LUP2032.

3.5.2 Materials Contaminated with Metals

Materials contaminated with metals require excavation only if the material would be considered a remnant of hazardous materials. These materials should be managed according to the procedures for hazardous materials. Metal-contaminated material that is not remnant of hazardous materials may be left in place, placed in the Tailings Containment Area or placed in the Crown Pillar.

3.5.3 Materials Contaminated with Solvents

Materials contaminated with solvents containing greater than 10% chlorinated and/or fluorinated hydrocarbons shall be excavated until there is no visible sign of contamination and disposed of as a hazardous material. Material contaminated with solvents other than those containing greater than 10% chlorinated and/or fluorinated hydrocarbons shall be excavated until there is no visible sign of contamination and managed as petroleum-contaminated soil.

4. TRANSPORTATION OF WASTES

The transportation of all hazardous and potentially hazardous wastes from the camp back to Yellowknife will be done by a certified hauler. The certified hauler's operations shall be compliant with all applicable regulations.

The shipment of all hazardous wastes from the Mine requires conformance with transportation regulatory requirements, including Transportation of Dangerous Goods Regulation, WHMIS. Emergency response information, including SDS for hazardous or potentially hazardous materials, shipped from Lupin Site, shall be maintained on-site. Workers involved in transportation of hazardous materials shall receive proper training.

4.1 Storage and Packaging of Hazardous Waste Prior to Shipment

Site personnel will store and package hazardous waste for shipment in a manner that is consistent with the requirements for storage and handling of that material in accordance with Part 5 of the Transportation of Dangerous Goods Regulations. Storage locations and configuration will be selected to support the regular inspection of storage containers and prevention of spills and accidents. Appropriate placards, as

required under the transport of hazardous materials must be supplied by the transporter.

4.2 Labelling

The Mine Manager will ensure the appropriate labeling of all hazardous waste when it is placed in the storage area. Drums must be labeled as "Hazardous Waste" and the label must include the date of the start of the accumulation and the contents of the drum. A log tracking the amount, accumulation date, and nature of all hazardous wastes placed in the storage area, including any used solvents or antifreeze generated at the Mine which is determined to be hazardous.

4.3 Manifests

All required information on a hazardous waste manifest for off-site shipment of waste shall be filled out by someone appropriately trained to do so.

The manifest form must be signed by one of the following:

- Mine Manager;
- Purchaser; or
- Designee.

The transporter must sign and date the manifest upon accepting the waste for shipment. A copy of the signed transportation manifest and record of disposal will be retained for at least three years.

4.4 Record Keeping and Reporting

The Mine will maintain records of all Hazardous Waste manifests backhauled for disposal and copies of the record of disposal. A waste manifest tracking system will be used. Copies of manifest forms will be retained.

The Mine will retain all records of any test results, waste analysis, or other determinations made to categorize potentially hazardous wastes onsite.

The Mine will retain records of any arrangements made with local police, fire, hospitals or emergency response teams, emergency response contractors, and with the local health department, which are appropriate for the types of hazardous wastes handled at the Mine and the potential need for the services of these agencies.

4.5 Inventory

An inventory of fuels, lubricants and chemicals used at the Mine are updated annually and are reported in *Section (F) Hazardous Waste and Chemical Storage,* of the 2AM-LUP2032 Annual Report.

4.6 Plan Review and Continual Improvement

The Waste Management Plan will be reviewed annually and modified as necessary to reflect current operations, regulatory requirements, and best management practices.

5. WASTE MANAGEMENT OVERVIEW

The table below provides an overview of the management approach, and a brief impact assessment of the various waste streams found at the Mine.

Table 5-1: Waste Stream Summary

Waste Stream		Management Approach		Impact Assessment	
	Reduce/ Reuse/ Recycle Options	**Treatment**	**Disposal Option**	**Potential Effects**	**Mitigation and Remedial Measures**
Non – Mineral Wastes					
Treated Sewage effluent	N/A	N/A	Sewage/greywater are collected from tanks at camp and pumped to the Sewage Lagoons via Vac Truck.	Attract wildlife Contamination nutrient enrichment of nearby waterbodies	Frequent disposal
Camp Greywater	Efforts to conserve water in camp will be encouraged.	N/A	Sewage/greywater are collected from tanks at camp and pumped to the Sewage Lagoons via Vac Truck.	Attract wildlife Contamination / nutrient enrichment of nearby waterbodies	Use strainers in the camp kitchens to prevent food waste in greywater Secure waste storage to minimize attraction
Organic and putrescible waste	Order minimal amounts of food, to meet the camp demands and reduce excess waste. Where appropriate, re-purpose food leftovers in new meals	N/A	Incineration	Attract wildlife	Prompt incineration with proper storage until incineration,
Wood scraps and pallets	Utilize construction methods and planning that minimize materials and allow for product reuse.			N/A	

Waste Stream		Management Approach		Impact Assessment	
Plastics (large items, such as 10gallon buckets)	Utilize construction methods and planning that minimize materials and allow for product reuse.	Reuse or recycle as appropriate	Backhaul to Yellowknife for recycling or landfill disposal.	N/A	
Scrap metal	Utilize construction methods and planning that minimize materials and allow for product reuse.	Reuse or recycle as appropriate	Backhaul to Yellowknife for recycling or landfill disposal.	Potential for pollution in even of vehicle incident while transporting	Safe vehicle operation
Special and Hazardous Wastes					
Used oil and Waste Fuel	Bulk fuel will reduce reliance on disposable containers that tend to produce more waste	N/A	Proper onsite storage until final disposal at KBL in Yellowknife.	Potential for pollution, particularly aquatics and threat to human health	Proper handling and storage
Lubricants, filters, spent sorbent materials	Only required amounts will be purchased	N/A	Proper onsite storage until final disposal at KBL in Yellowknife.	Potential for pollution, particularly aquatics and threat to human health	Proper handling and storage
Antifreeze	Only required amounts will be purchased If possible, collect antifreeze and return it to heating systems after maintenance Possibly, filter and use additive to extend life of product	N/A	Proper onsite storage until final disposal at KBL in Yellowknife.	Potential for pollution, particularly aquatics and threat to human health	Proper handling and storage.

Waste Stream		Management Approach		Impact Assessment	
Miscellaneous Batteries, paint cans, aerosols)	Recycling options are available in Yellowknife.	N/A	Backhaul for recycle in Yellowknife	Potential for pollution. Aerosols can explode in landfills or if heated.	Proper handling and storage.
Hydrocarbon contaminated water from secondary containment facilities (snow/ice, or drip trays)	Cover containment areas to reduce ingress of rain and snow to reduce volumes of contaminated water.	N/A	Pump and store in adequate, sealed, properly labelled containers. Backhaul to Yellowknife to KBL Hazardous Waste TS.	Potential for pollution, threat to human health	Proper handling and storage. Routine inspection of secondary containment facilities.
Incinerator ash/residue	Waste reduction in general will result in less product to incinerate	N/A	Storage in sealed container and backhaul to KBL.	Ash contains chemicals that could cause harm to human health	Wear adequate PPE when handling.

6. REFERENCES

Government of Nunavut. 2017. Environmental Guideline: General Management of Special and Hazardous Waste. Accessed at https://www.gov.nu.ca/sites/default/files/publications/2024-05/Hazardous%20Waste%202023-03.pdf

APPENDIX A. Spill Reportable Quantities

Spills of the following quantities must be reported to the **NU 24-hr Spill Line:**
867-920-8130 / spills@gov.nt.ca

Contaminant	Quantity
Explosives	Any amount
Compressed gas (flammable)	Any amount of gas from containers with a capacity greater than 100 L
Compressed gas (non-corrosive, non-flammable)	Any amount of gas from containers with a capacity greater than 100 L
Compressed gas (toxic)	Any amount
Compressed gas (corrosive)	Any amount
Flammable liquid	100 L
Flammable solid	25 kg
Spontaneously combustible solids	25 kg
Water reactant solids	25 kg
Oxidizing substances	50 L or 50 kg
Organic peroxides	1 L or 1 kg
Poisonous substances	5 L or 5 kg
Infectious substances	Any amount
Radioactive substances	Any amount
Corrosive substances	5 L or 5 kg
Miscellaneous products or substances, excluding PCB mixtures	50 L or 50 kg
Environmentally hazardous substances	1 L or 1 kg
Dangerous wastes	5 L or 5 kg
PCB mixtures of 5 or more parts per million	0.5 L or 0.5 kg
Other contaminants	100 L or 100 kg

Source: (Government of Nunavut: ENVIRONMENTAL GUIDELINE General Management of Special and Hazardous Waste)

APPENDIX B. NU/NWT Spill Report Form

Fillable Form: NT NU Spill Report Form.pdf

Northwest Territories | Nunavut | Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE
TEL: (867) 920-8130
FAX: (867) 873-6924
EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR	REPORT TIME	☐ ORIGINAL SPILL REPORT, OR ☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER ____-____
B	OCCURRENCE DATE: MONTH – DAY – YEAR	OCCURRENCE TIME		
C	LAND USE PERMIT NUMBER (IF APPLICABLE)	WATER LICENCE NUMBER (IF APPLICABLE)		
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION	REGION ☐ NWT ☐ NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES MINUTES SECONDS	LONGITUDE DEGREES MINUTES SECONDS		
F	RESPONSIBLE PARTY OR VESSEL NAME	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION		
G	ANY CONTRACTOR INVOLVED	CONTRACTOR ADDRESS OR OFFICE LOCATION		
H	PRODUCT SPILLED	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER	
	SECOND PRODUCT SPILLED (IF APPLICABLE)	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER	
I	SPILL SOURCE	SPILL CAUSE	AREA OF CONTAMINATION IN SQUARE METRES	
J	FACTORS AFFECTING SPILL OR RECOVERY	DESCRIBE ANY ASSISTANCE REQUIRED	HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT	
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS			

L	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE
M	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE

REPORT LINE USE ONLY

N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130

LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC | SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN | FILE STATUS ☐ OPEN ☐ CLOSED

AGENCY	CONTACT NAME	CONTACT TIME	REMARKS
LEAD AGENCY			
FIRST SUPPORT AGENCY			
SECOND SUPPORT AGENCY			
THIRD SUPPORT AGENCY			

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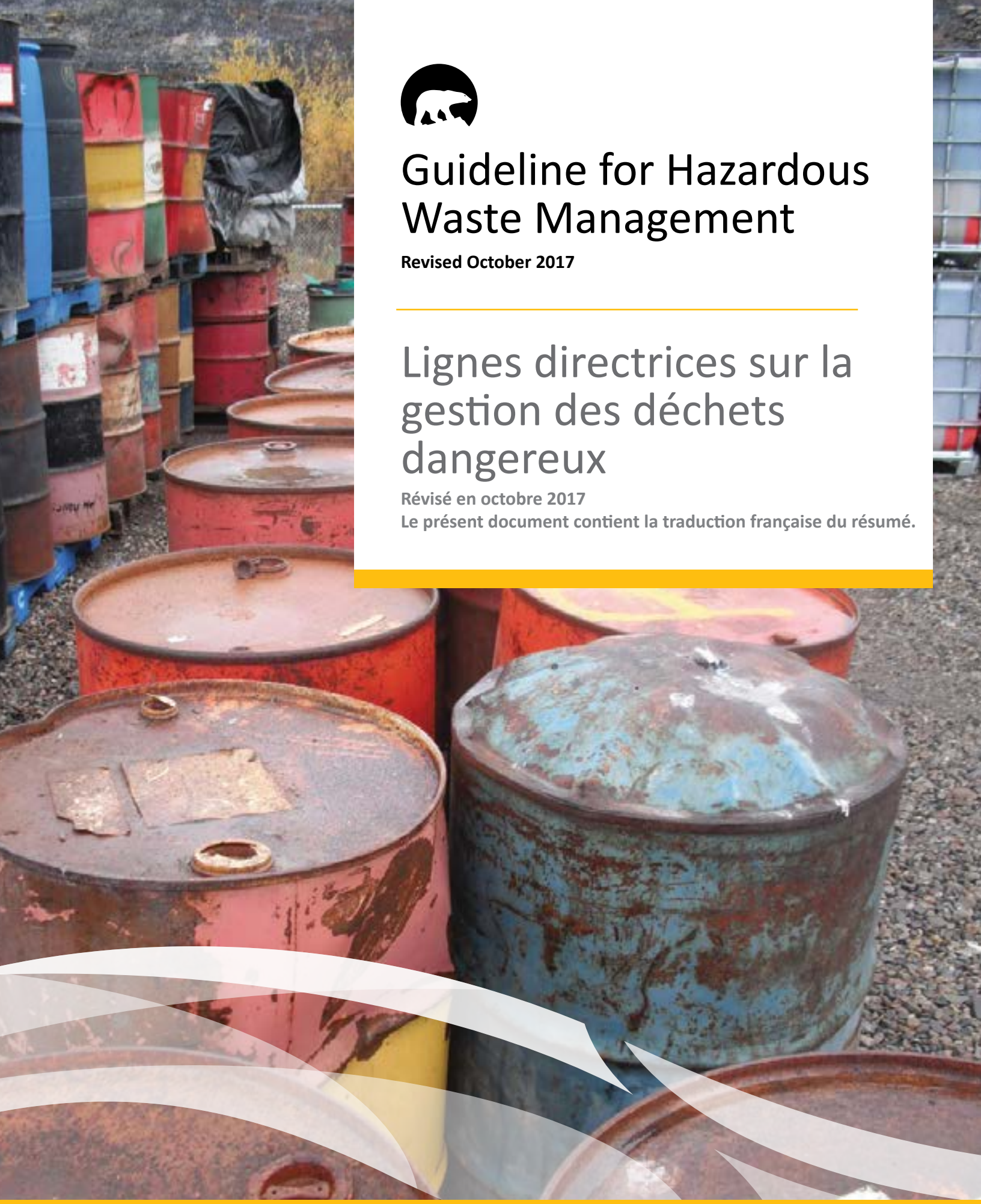
APPENDIX C. Government of Nunavut - Environmental Guideline: General Management of Special and Hazardous Waste



Guideline for Hazardous Waste Management

Revised October 2017

Lignes directrices sur la gestion des déchets dangereux

Révisé en octobre 2017

Le présent document contient la traduction française du résumé.

Government of Northwest Territories
Gouvernement des Territoires du Nord-Ouest

Contents

1 Introduction

Industrial, commercial, and institutional (ICI) sectors often produce residual materials during their operations that are considered waste. Some wastes are more hazardous than others, due to their chemical, physical or biological properties. Hazardous waste is the term used to describe waste materials that require special handling and disposal/treatment to prevent adverse impacts on human health and the environment.

This guideline has been developed by the Environment Division of the Department of Environment and Natural Resources for the ICI sector. The purpose of this document is to:

- provide guidance to industrial, commercial, and institutional operators in the Northwest Territories (NWT) on the proper management of hazardous waste;
- increase awareness of the different types of hazardous waste; and
- support the tracking of hazardous waste from generation to final treatment/disposal.

Section 2.2 of the *Environmental Protection Act* (EPA) gives the Minister of Environment and Natural Resources of the Government of the Northwest Territories (GNWT) the authority to develop, coordinate and administer guidelines (See Appendix 1). This guideline does not alleviate the need to comply with any other Act or regulation applicable to the management of hazardous waste. Section 2.6 of this Guideline provides additional information on the roles and responsibilities of other regulatory agencies that may be involved with the management of hazardous waste due to their legislative responsibilities.

This guideline is for the general management of hazardous waste and should be read in conjunction with hazardous waste guidelines for specific substances that are available on ENR's website.

For more information regarding hazardous waste please visit our website (http://www.enr.gov.nt.ca/en/services/hazardous-waste) or contact:

Environment Division
Department of Environment and Natural Resources
Government of the Northwest Territories
7th floor, Scotia Centre
5102 50 Avenue

Mailing Address:
PO Box 1320
Yellowknife NT X1A 2L9

Tel: (867) 767-9236 ext. 53176
Fax: (867) 873-0221

1 Introduction

Au cours de leurs activités, les secteurs industriel, commercial et institutionnel (ICI) produisent souvent des matières résiduelles qui sont considérées comme des déchets. Certains déchets sont plus dangereux que d'autres en raison de leurs propriétés chimiques, physiques ou biologiques. On parle de déchets dangereux pour décrire les déchets qui exigent une élimination ou un traitement spécial pour prévenir toute répercussion négative sur la santé ou l'environnement.

Ces lignes directrices ont été élaborées par la division de l'environnement du MERN du GTNO pour les secteurs ICI. Les lignes directrices sur la gestion des déchets dangereux visent à :

- orienter les exploitants des secteurs ICI des TNO sur la gestion appropriée des déchets dangereux;
- sensibiliser aux différents types de déchets dangereux;
- encourager le suivi des déchets dangereux, de leur production à leur élimination ou traitement final.

La section 2.2 de la LPE confère au ministre de l'Environnement et des Ressources naturelles l'autorité de mettre au point, de coordonner et d'administrer des lignes directrices (voir l'annexe 1). Ces lignes directrices ne suppléent à aucune autre loi ou réglementation applicable à la gestion des déchets dangereux. La section 2.6 de ces lignes directrices contient des renseignements complémentaires sur les rôles et responsabilités d'autres organismes de réglementation qui pourraient participer à la gestion des déchets dangereux dans le cadre de leurs responsabilités législatives.

Ces lignes directrices concernent la gestion globale des déchets dangereux et doivent être consultées parallèlement aux lignes directrices sur les déchets dangereux relatives aux substances spécifiques.

On peut consulter ces lignes directrices ainsi que celles sur les autres déchets dangereux sur le site Web du MERN ou en communiquant avec le MERN (http://www.enr.gov.nt.ca/en/services/hazardous-waste) aux coordonnées suivantes :

Division de l'environnement
Ministère de l'Environnement et des Ressources naturelles
Gouvernement des Territoires du Nord-Ouest
5102, 50e Avenue
Centre Scotia, 7e étage

Adresse postale :
C. P. 1320
Yellowknife NT X1A 2L9

Tél. : 867-767-9236, poste 53176
Téléc. : 867-873-0221

1.1 Definitions

Carrier	Any person engaged in the transport of hazardous waste.
Cement returns	Excess cement circulated to the surface after downhole cementing.
Consignor	A person who offers a consignment of hazardous waste for transport.
Contaminant	Any noise, heat, vibration or substance and includes such other substances as the Minister may prescribe that, where discharged into the environment, (a) endangers the health, safety or welfare of persons, (b) interferes or is likely to interfere with normal enjoyment of life or property, (c) endangers the health of animal life, or (d) causes or is likely to cause damage to plant life or to property.
Contaminated water	Waste water or snow that contains any of the contaminants listed in Schedule I in a concentration greater than the corresponding amount.
Contaminated site	Areas of land, water, groundwater, or sediments that have levels of contaminants exceeding the remediation criteria described in the GNWT's *Guideline for Contaminated Site Remediation*.
Dangerous goods	Any product, substance or organism referred to in the prescribed classes of dangerous goods or included by its nature in any of the prescribed classes of dangerous goods in the schedule provided by the applicable transport authority.
Dioxin TEQ	The dioxin toxicity equivalent (TEQ) value which is determined by adding the products of the measured concentrations of each dioxin and furan constituent listed in Column I of Schedule II multiplied by the toxicity equivalency factor (TEF) listed opposite in Column II.
Discharge	Includes, but not so as to limit the meaning, any pumping, pouring, throwing, dumping, emitting, burning, spraying, spreading, leaking, spilling or escaping.
Drilling cuttings	The solid materials, fragments of rock and other materials brought to the surface during the drilling process.
Drilling mud	A suspension, usually in water but sometimes in oil (diesel), used in rotary drilling, consisting of various substances in a finely divided state (commonly bentonitic clays and chemical additives), introduced continuously down the drill pipe under pressure and through openings in the drill bit and transported back up in the annular space between the pipe and the walls of the hole to a surface pit or tank where it is conditioned and reintroduced into the wellbore. It is used to lubricate and cool the bit, carry the cuttings up from the bottom, and to prevent blowouts and cave-ins.
Drilling fluids	Any liquid mixture of clay, water, sediment, drilling muds, chemical additives, or other wastes that are pumped downhole while drilling and are specifically related to drilling activity.

Drillng waste	Waste substances associated with drilling a well or directional drilling including: a) Drilling cuttings; b) Drilling fluids; c) Drilling mud; d) Flowback fluid; e) Fracturing fluid; or f) Cement returns.
Effluent	Liquid material, treated or untreated, discharged into the environment.
Empty container	A container from which all: a) Hazardous waste has been emptied, to the greatest extent possible, using regular handling procedures. Its contents shall not exceed 0.1% of the container's original capacity or 0.2 litres, whichever is less. This does not include toxic gas in Class 2.3 of the TDGR or containers which previously came in direct contact with: i. Substances in Class 6.1 Packing Group I materials of the TDGR; or ii. Severely Toxic Contaminants. b) Flammable vapours have been reduced to less than twenty percent (20%) of the lower explosive limit for the material by purging, venting, or by the introduction of an inert material.
Environment	Means the components of the Earth and includes a) air, land and water, b) all layers of the atmosphere, c) all organic and inorganic matter and living organisms, and d) the interacting natural systems that include components referred to in paragraphs (a) to (c).
Flowback fluid	The flow of fracturing fluid back to the wellbore after treatment is completed.
Fracturing fluid	The fluid used to perform a particular hydraulic fracturing treatment and includes the applicable base fluid and all additives.
Generator	The owner or person in charge, management or control of a hazardous waste or a facility or property that generates or contains hazardous waste.
Hazardous to the aquatic environment	Any product or substance classified as hazardous to the *aquatic* environment according to the classification system outlined in Chapter 4.1 Hazardous to the Aquatic Environment of Part 4 ENVIRONMENTAL HAZARDS provided in the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Hazardous waste	A contaminant which is no longer used for its original purpose and is intended for recycling, treatment, disposal or storage and is: a) A dangerous good according to the TDGR; b) Leachable waste; c) Hazardous to the aquatic environment; d) Waste containing dioxins and furans; e) Contaminated soil/snow/water from a contaminated site; f) Drilling waste; g) Listed waste; or h) Any other waste deemed hazardous. Hazardous waste does not include a material that is: a) Authorized for on-site disposal by the applicable regulator for the specific activity in which the hazardous waste was generated; b) Household hazardous waste being transported to a municipal collection depot; c) Included in Class 1, Explosives or Class 7, Radioactive materials of TDGR; d) Exempted as a small quantity; e) An empty container; or f) Goods that are defective, surplus, or otherwise not usable for their intended purpose and that are in the process of being returned directly to a manufacturer or supplier.
Hazardous waste management facility	A facility which is used for the collection, storage, treatment, recycling or disposal of hazardous waste.
Incompatible waste	Hazardous wastes which, when in contact with one another or other substances under normal conditions of storage or transportation, could react to produce heat, gas, fire, explosion, corrosive substances or toxic substances.
Landfill	A designated area of land where residual waste is placed, compacted, and covered.
Leachable waste	A substance that may contain any of the contaminants listed in Schedule I in a concentration greater than the corresponding amount when subjected to the leachate extraction procedure.
Leachate extraction procedure	A test method designed to determine both the organic and inorganic parameters present in solid and multi-phased waste. It is designed to simulate the characteristics a material may exhibit if placed in a landfill. Test determined by Method 1311 Toxicity Characteristic Leaching Procedure (TCLP) Test, US EPA or Leachate Extraction Procedure 164-GP-1-MP Canadian General Standards Board.
Listed waste	Wastes listed in Schedule III.
Long term storage	The storage of hazardous waste for a period of 180 days or more but does not include materials in transit.
Manage	To handle, transport, store, recycle, treat, destroy or dispose of hazardous waste.

Movement document	Means the form set out in Schedule VII.
Process residuals	Solid, semi-solid or sludge waste resulting from industrial operations.
Receiver	A person or company registered with the Environment Division, or by the applicable province or territory, authorized to receive and manage specified types of hazardous waste.
Record of disposal	A physical copy of the information outlined in Schedule VIII.
Severely toxic contaminants	Contaminants listed in Schedule IV.
Small quantity	Hazardous waste that is generated in any month is not greater than the amount in column II of Schedule V corresponding to the type of hazardous waste, or the aggregate quantity accumulated at any one time is not greater than the amount in column II of Schedule V corresponding to the type of hazardous waste.
Transport authority	The regulations controlling the management of dangerous goods under that mode of transport. These include: • Road and rail – *Transportation of Dangerous Goods Act* (TDGA) *and Regulations* (TDGR); • Air – *International Civil Aviation Organization Technical Instructions* (ICAO); and • Marine – *International Maritime Dangerous Goods Code* (IMDG).
Treatment or Treat	The handling or processing of a hazardous waste in such a manner as to change the physical, chemical or biological character or composition of the hazardous waste to eliminate or reduce: (a) one or more hazards of the waste; and/or (b) the volume.
Used oil	Means any oil, including lubrication oil, hydraulic fluid, metal working fluid and insulating fluid, that is unsuitable for its intended purpose due to the presence of impurities or the loss of original properties, but does not include waste oil derived from animal or vegetable fat, a petroleum product spilled on land or water or waste from a petroleum refining operation.
Waste containing dioxins and furans	A waste containing Dioxin TEQ in a concentration greater than 0.001 mg/kg.

List of Acronyms used in this Document

AER	Alberta Energy Regulator
CALA	Canadian Association for Laboratory Accreditation Inc.
CAPP	Canadian Association of Petroleum Producers
CCME	Canadian Council of Ministers of the Environment
ED	Environment Division
ENR	Environment and Natural Resources
EPA	*Environmental Protection Act*
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
GNWT	Government of the Northwest Territories
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ICI[1]	Industrial, Commercial, Institutional
IMDG	International Maritime Dangerous Goods Code
OROGO	NWT Office of the Regulator of Oil and Gas Operations
SCC	Standards Council of Canada (Environmental Laboratories)
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxicity equivalent value
TDGA/TDGR	The *Transportation of Dangerous Goods Act* and Regulations (Canada)
WHMIS	Work Site Hazardous Material Information System

[1] Industrial — Resource development activities, construction, fabrication, light and heavy manufacturing.
Commercial — Retail stores, mechanical shops, property managers, service and repair businesses, etc.
Institutional — Federal, Territorial, Municipal government departments and agencies, non-profit agencies.

2 Roles and Responsibilities

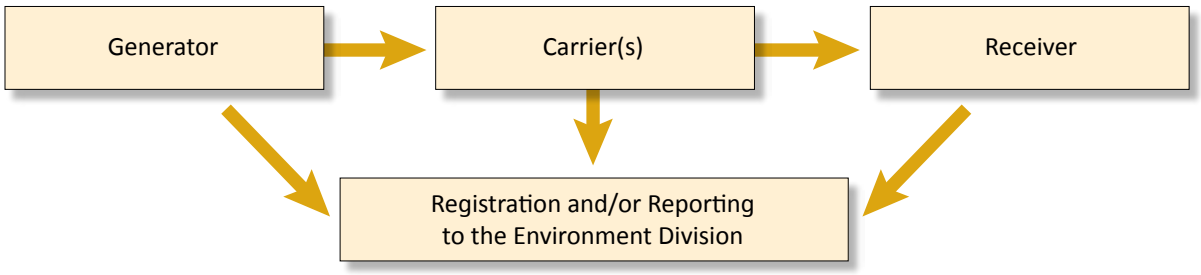
2.1 Environment and Natural Resources

The Department of Environment and Natural Resources (ENR) is the GNWT agency responsible for initiatives which control and prevent the discharge of contaminants, including hazardous wastes, and their impact on the natural environment. ENR is responsible for ensuring that environmentally acceptable management procedures, emission levels and disposal methods are maintained. Legislative authority is provided by the *Environmental Protection Act* (EPA) (See Appendix 1) and the *Pesticide Act*.

The Environment Division (ED) of ENR monitors the movement of hazardous waste from the generator to final disposal at the receiving facility through the use of a specified 6 part form called a hazardous waste movement document. A movement document form, or an equivalent record of disposal, must accompany all hazardous waste in transit regardless of the means of transport. Hazardous waste movement documents are provided by the Environment Division.

If hazardous waste is to be transported off the originating site, the generator must be registered with ED. Once registered, an identification number will be assigned which is required to complete the movement document. A carrier or receiver may either be registered in the NWT or in the province or territory in which the company is based. The basic framework for the off-site movement of hazardous waste and reporting is outlined in Figure 1.

Figure 1: Movement of Hazardous Waste and Record Keeping



The definitions of hazardous waste vary across Canada, although most provinces and territories register generators, carriers, receivers and utilize the hazardous waste movement document. The definition of hazardous waste in the NWT is unique because it includes waste types such as, contaminated soil and drilling waste which are frequently managed under different regulatory frameworks in other jurisdictions. It is important to confirm their ultimate disposal on a hazardous waste movement document or an equivalent record of disposal.

The environmental risks associated with these waste types may be mitigated through various forms of on-site management and their disposal may be specifically authorized by the applicable regulator. It is important to review all the sections of this Guideline as it pertains to the proposed activities.

2.2 Generators of Hazardous Waste

The responsibility for proper waste management rests with the generator and should be considered part of the cost of doing business.

The generator is ultimately responsible for ensuring hazardous waste will be properly managed from the time it is generated to final disposal. Hazardous waste must be properly packaged, stored, transported, treated and disposed of. Contractors frequently manage waste on behalf of the generator; however, the generator is responsible for ensuring, in advance, that the waste management method is acceptable.

In general, the generator is responsible for the following:

- Packaging, classifying, quantifying, labelling, and storing hazardous waste properly (See Sections 4.2 and 4.3).
- Registering their hazardous waste management facility if applicable (see Section 2.5).
- Ensuring analysis (if required) is performed by a laboratory accredited by CALA or SCC (See Associations in Appendix 4).
- Ensuring the proper disposal of hazardous waste by an acceptable method. Appendix 2 of this Guideline describes how to determine if a receiver is authorized to receive the type of hazardous waste.
- Ensuring workers are trained in the management of hazardous waste including emergency/spill response in the event of a discharge.
- Complying with all other regulatory requirements for hazardous waste management including transportation, occupational health, and public health and safety.

When hazardous waste is to be transported off-site, the generator is required to:

- register as a generator of hazardous waste;
- ensure the waste is transported by a registered hazardous waste carrier to a receiver authorized to receive the type of hazardous waste; and
- ensure a movement document, or an equivalent record of disposal, is properly completed and accompanies the shipment (see Sections 4.5 and 4.6).

Hazardous waste management flowcharts for generators are shown in Figures 3 and 4 of Section 4.

2.3 Carriers of Hazardous Waste

Carriers must be registered with ED prior to transporting hazardous waste. Hazardous waste must be transported in accordance with the appropriate transport authority as defined below.

Air	International Civil Aviation Organization (ICAO)
Marine	International Maritime Dangerous Goods Code (IMDG)
Road, Rail	Transportation of Dangerous Goods Regulations (TDGR)

In general the carrier is responsible for the following:

- Completing Part B of the hazardous waste movement document (or alternate record of disposal) and retaining it during transit to authorized receiving facilities.
- Maintaining the appropriate placards on the transport vehicle.
- Ensuring staff are trained in the applicable mode of transport, and qualified to safely transport hazardous waste.
- Reporting spills that occur during transit to the NWT/Nunavut Spill Report Line at (867) 920-8130.

2.4 Receivers of Hazardous Waste

Hazardous waste management facilities that manage hazardous waste from other generators are registered as receivers. The operator of a hazardous waste management facility in the NWT is required to register the facility with ED to manage specified hazardous waste types. See Section 2.5 for information about registering a hazardous waste receiving facility. In the NWT, some current examples of receiving facilities may include municipal disposal sites for asbestos, authorized used oil burners for used oil and waste fuel, or hazardous waste transfer facilities.

Receiving facilities outside the NWT need to be authorized by the province or territory of destination to receive the specific type of hazardous waste. There is a wide range of facilities to manage various types of hazardous waste. A comprehensive listing is beyond the scope of this Guideline. See Section 4.6 for more information.

2.5 How to Register as a Hazardous Waste Generator, Carrier, Storage Facility, or Receiver

First, determine what type of hazardous waste you have. Figure 3 on page 26 may be referenced for assistance. Then, determine your hazardous waste management options or what type of registration you may need by referencing Figure 4 on page 27. Registration forms are provided on pages 28 and 30 for generators and carriers respectively. Section 4 outlines basic hazardous waste management practices.

ED requires the following information when applying for a hazardous waste generator or carrier registration number:

Registering as a Generator

- Company name, address, phone number and contact person, including position;
- Location and description of the activity taking place that results in the generation of the hazardous waste; and
- Expected type, quantity and method of storage of hazardous waste.

Registering as a Carrier

- Company name, address, phone number and contact person, including position;
- Proof of transport liability insurance; and
- Confirmation that the company meets the training requirements of the transport authority (certificate of training).

Registering a Storage Facility

A generator may also be required to register their storage facility. If the hazardous waste is not stored on the generator's property, the property owner will need to register their facility as a receiver. A storage facility can be a building, locker, compound or area used to store hazardous waste.

A storage facility must be registered with ED if:

- The facility is used or is intended for the storage of hazardous waste for a period of 180 days or more; and
- Quantities to be stored exceed the quantities set out in Schedule VI for individual waste classes or if the aggregate quantity for all classes of waste stored exceed 5,000 kg or L (except for contaminated soil and drilling waste where quantities exceed 50,000 kg or L).

Under the EPA, the Spill Contingency Planning and Reporting Regulations set the standards for reporting spills of contaminants and preparing spill contingency plans.

ED requires the following information when registering a hazardous waste storage facility:

- Company name, address, phone number and contact person, including position;
- Location and description of the facility;
- Expected types, quantities and method of storage of the hazardous waste;
- Approvals required to operate and occupy the land for that purpose; and
- Confirmation that the proponent has provided building plans to the Office of the Fire Marshal to ensure compliance with adopted codes and standards.

Registering as a Receiver

Facilities which store, treat, reprocess, consolidate, destroy or recycle hazardous waste(s) are classified as hazardous waste management facilities, and must register with ED prior to beginning operation. In addition to the information required for a storage facility ED requires a description of the waste management activities to be conducted.

Note: Facilities that burn used oil must be registered as receivers in accordance with Section 15 of the Used Oil and Waste Fuel Management Regulations. Separate application forms are available at ENR's website (https://www.gov.nt.ca/ecc/en/services/register-incinerate-waste-fuel) or by contacting ED.

A complete list of requirements for all potential hazardous waste management facilities is beyond the scope of this guideline. ED may request further information on a proposal, following an initial review of information provided.

A hazardous waste management facility may also require permits and licences from the applicable Land and/or Water Board or the Department of Lands depending on the activity, or for the deposit of any waste (see Section 2.6). Under these circumstances the review of proposed hazardous waste management activities that overlap with other agencies, occur in parallel without a duplicate review process.

2.6 Other Regulatory Agencies

Other agencies may be involved with the management of hazardous waste. Some of the other agencies that may be involved are identified below.

2.6.1 Department of Infrastructure, GNWT

The Road Licensing and Safety Division is responsible for administering the *Transportation of Dangerous Goods Act* and Regulations (NWT). The Department is also responsible for driver, vehicle and road safety under additional transport legislation.

The transportation of dangerous goods by rail (TDGR), marine (IMDG) or by air (ICAO) is regulated by Transport Canada.

2.6.2 Department of Lands, GNWT

The Department of Lands issues and manages various authorizations for use of public land. Where public land is leased to operators by the GNWT, the lease terms and conditions require proper management of hazardous waste, which is verified by regular inspections by the Department of Lands.

2.6.3 Workers' Safety and Compensation Commission (WSCC)

The WSCC is responsible for administering the NWT *Safety Act* and the Occupational Health and Safety (OHS) Regulations, which address the safety of workers and the work place. The Act states that the employer shall maintain their establishment and take all reasonable precautions to ensure the safety and health of every person in the establishment. The regulations also prescribe standards for protective clothing and equipment to be used by workers. The Work Site Hazardous Materials Information System Regulations were adopted to ensure employee training and safe storage and handling of controlled products at the employer's work site.

2.6.4 Office of the Fire Marshal, GNWT

The Office of the Fire Marshal has authority over the storage of flammable, combustible and hazardous materials under the *National Fire Code*. The National Fire Code is adopted by the GNWT through the Fire Prevention Regulations. Consult with the GNWT Department of Municipal and Community Affairs' regional Assistant Fire Marshal or your community Fire Chief if your activities may require the Office of the Fire Marshal's review.

2.6.5 Chief Public Health Officer, GNWT

The Chief Public Health Officer, GNWT should be consulted regarding requirements under the *Public Health Act* when waste management activities may affect public health.

2.6.6 Office of the Regulator of Oil and Gas Operations (OROGO)

OROGO regulates oil and gas activities on-shore in the NWT for the primary purposes of ensuring safety, environmental protection and conservation of oil and gas resources. OROGO does not regulate oil and gas activities in federal areas, the off-shore, the on-shore in the Inuvialuit Settlement Region, the Norman Wells proven area, or the inter-provincial/territorial transmission of oil and gas (pipelines).

2.6.7 Environment and Climate Change Canada (ECCC)

ECCC is responsible for regulating the management of hazardous waste from federal facilities and lands under the *Canadian Environmental Protection Act* (CEPA). CEPA regulates polychlorinated biphenyls (PCBs) under the PCB Regulations. International and Interprovincial shipments of hazardous waste are controlled under the Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations and the Interprovincial Movement of Hazardous Waste Regulations.

2.6.8 National Energy Board (NEB)

NEB regulates oil and gas activities in federal areas, the off-shore, the on-shore in the Inuvialuit Settlement Region, the Norman Wells proven area, and the inter-provincial/territorial transmission of oil and gas (pipelines).

2.6.9 Natural Resources Canada (NRCAN)

The Explosives Safety and Security Branch of NRCAN is responsible for administering the *Explosives Act* and regulations and pursuing the advancement of explosives safety and security of the public and all the workers involved in the explosives industry in Canada.

2.6.10 Canadian Nuclear Safety Commission (CNSC)

The CNSC regulates and licenses radioactive waste management facilities. The responsibility for ensuring safe transport of radioactive waste is jointly shared between the CNSC and Transport Canada. The TDGR deals with the transport of all classes of dangerous goods, while the CNSC's Packaging and Transport of Nuclear Substances Regulations are primarily concerned with health, safety and security of the public, and protection of the environment related to the special characteristics of radioactive material.

2.6.11 Indigenous and Northern Affairs Canada (INAC)

INAC is the federal agency that has the mandate to manage land and water on designated federal lands, as well as off-shore oil and gas. They also make appointments and provide policy direction to the land and water boards.

2.6.12 Land and/or Water Boards

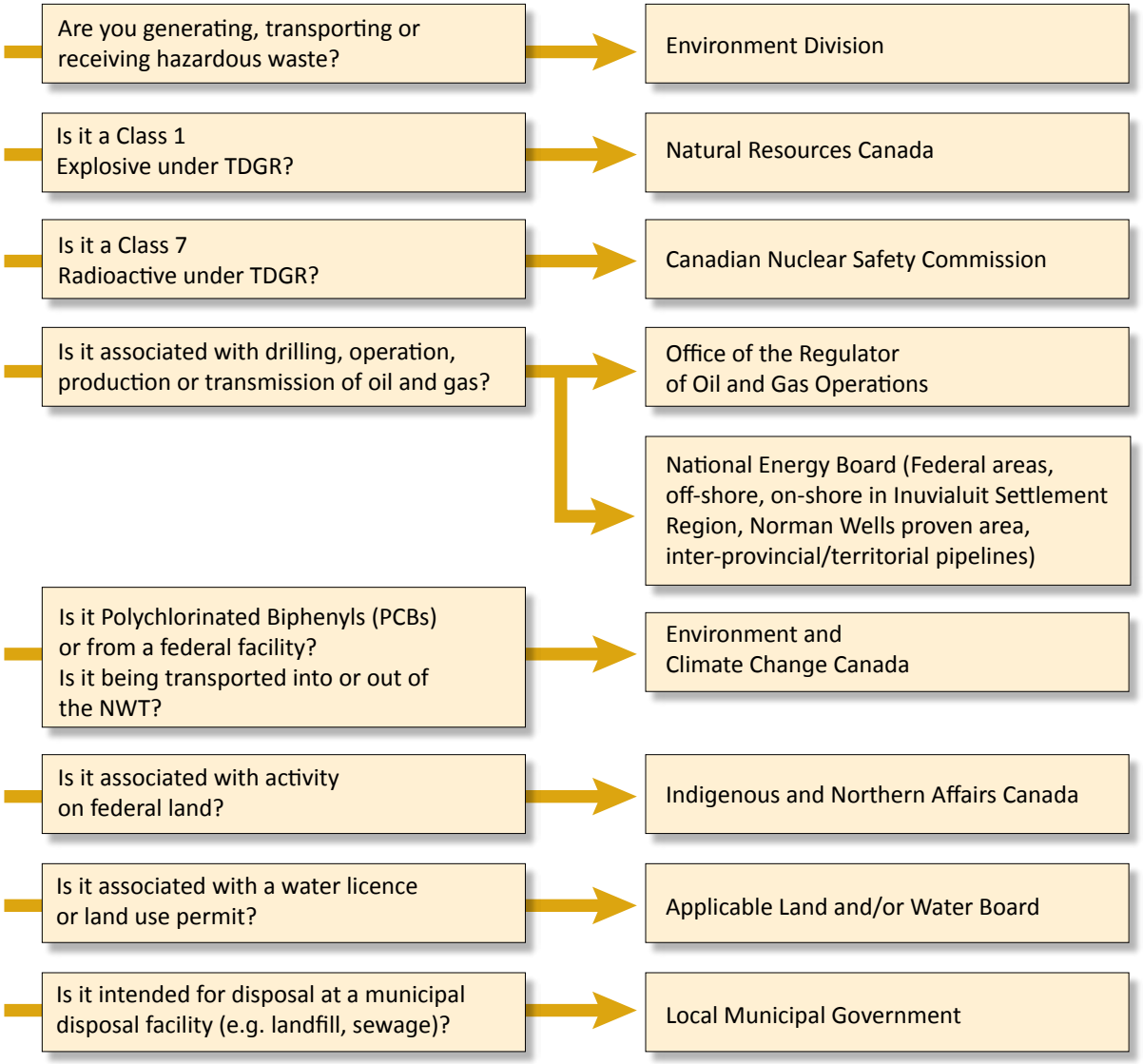
The Land and Water Boards of the NWT were established under the *Mackenzie Valley Resource Management Act* and the *Waters Act*. They have broad authority to regulate the use of land, water, and the deposit of waste. The Land and Water Boards set terms and conditions in permits and licences that pertain to waste disposal. Information about the boards of the Mackenzie Valley can be found at the following website, https://mvlwb.com. Information about the Inuvialuit Water Board can be found at the following link, https://www.inuvwb.ca. Further information about the Land and Water Boards of the NWT can be found at http://www.nwtboardforum.com.

2.6.13 Local Governments

Local municipal governments are incorporated in a number of ways, under a variety of legislation and they assume full authority for decisions about community public infrastructure including disposal facilities such as landfills and sewage lagoons. A complete list of municipal governments can be found at the following website (http://www.maca.gov.nt.ca/en/communitylist).

The contact information for all of the above agencies can be found in Appendix 4.

Figure 2: Regulatory Contacts for Hazardous Waste Management



3 Hazardous Waste Properties and Lists

3.1 General

Hazardous wastes are generated in a wide variety of workplace settings in the NWT and may be gases, liquids, solids or semi-solids. The definition of hazardous waste incorporates several terms that describe the different types of hazardous waste generated. Waste types a) through e) are classified based on their physical properties of being corrosive, flammable, reactive, persistent, bioaccumulative or toxic. Waste types f) and g) are named as hazardous wastes because of the known environmental liability associated with these waste types.

a) A dangerous good according to the TDGR;
b) Leachable waste;
c) Hazardous to the aquatic environment;
d) Waste containing dioxins and furans;
e) Contaminated soil/snow/water from a contaminated site;
f) Drilling waste;
g) Listed waste; or
h) Any other waste deemed hazardous.

In addition hazardous waste does not include a material that is:

a) Authorized for on-site disposal by the applicable regulator for the specific activity in which the hazardous waste was generated;
b) Household hazardous waste being transported to a municipal collection depot;
c) Included in Class 1, Explosives or Class 7, Radioactive materials of TDGR;
d) Exempted as a small quantity;
e) An empty container; or
f) Goods that are defective, surplus, or otherwise not usable for their intended purpose and that are in the process of being returned directly to a manufacturer or supplier.

It is important to check the definition of small quantity and empty container as they relate to the other definitions and schedules in this guideline.

Hazardous waste must not be mixed or diluted with any substance or divided into smaller quantities to avoid meeting the definition of a hazardous waste.

3.2 Hazardous Waste Types

a) Dangerous Goods

The definition of hazardous waste in this guideline incorporates the term "dangerous goods" as defined in the *Transportation of Dangerous Goods Act*. The Transportation of Dangerous Goods Regulations (TDGR) outlines a system for classifying dangerous goods. Therefore, the classification system used in the TDGR should be referred to for the most current criteria when it is applied to hazardous waste classification. There are nine classes of dangerous goods described in the TDGR, however the definition of hazardous waste only includes the criteria for Classes 2, 3, 4, 5, 6, 8, and 9. Class 1 explosives and Class 7 radioactive materials are exempt from the definition of hazardous waste. These materials are regulated by federal legislation. Appendix 3 outlines the properties of the seven dangerous goods chemical classes referenced in the definition of hazardous waste.

b) Leachable Waste

The leachability of solid waste is determined by analysing a representative sample according to the Toxicity Characteristic Leaching Procedure (TCLP), Test Method 1311 (as amended) developed by the U.S. Environmental Protection Agency. The purpose of the TCLP is to determine the mobility of organic and inorganic analytes present in liquid, solid, and multi-phase wastes. The TCLP analysis simulates landfill conditions where, over time, water and other liquids percolate through landfills. The percolating liquid often reacts with solid waste in the landfill, and may pose public and environmental health risks because of the contaminants it absorbs. The test is intended to determine if a waste is suitable for disposal in a landfill or disposal facility. The generator must use process knowledge to select the applicable parameters in Schedule I and ensure the waste types meets the numerical criteria assigned to the parameter.

c) Hazardous to the Aquatic Environment

This classification is intended for packaged products or bulk goods that are bought, sold, or used in a workplace setting. The classification may be found as a label on the product or on the safety data sheets of the product. This hazard classification system is not intended to be referenced as effluent criteria that require authorization from the applicable regulator.

Part 4 Environmental Hazards of the United Nations GHS outlines criteria for substances that are hazardous to the aquatic environment based on the following basic elements:

(a) Acute aquatic toxicity;
(b) Chronic aquatic toxicity;
(c) Potential for or actual bioaccumulation; and
(d) Degradation (biotic or abiotic) for organic chemicals.

d) Waste Containing Dioxins and Furans

Dioxins and furans are polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans. Due to their extraordinary environmental persistence and capacity to accumulate in biological tissues, the release of dioxins and furans from human activity are slated for virtual elimination under the Canadian Council of Ministers of the Environment (CCME) Policy for Management of Toxic Substances and the federal Toxic Substances Management Policy.

In the NWT, dioxins and furans from human activities are most frequently formed as a result of incineration or open burning of garbage, and are also found as solid waste in the ash. They are also found in wood preservatives that used pentachlorophenol.

Waste containing dioxins and furans is classified as a hazardous waste if it contains Dioxin TEQ in a concentration greater than 0.001 mg/kg.

e) Contaminated Soil/Snow/Water

Contaminated soil/snow/water that is being removed from a contaminated site is managed as a hazardous waste in the NWT to ensure the material removed is transported to a registered receiving facility authorized to receive that waste.

Contaminated soil is soil, sand, gravel, rock or similar naturally occurring material that contains levels of contaminants exceeding the remediation criteria found in the Guideline for Contaminated Site Remediation. The hazardous waste management framework is not meant to be applied to activities that follow the tiered process or risk assessment or in-situ remediation according to the Guideline for Contaminated Site Remediation.

Contaminated soil may be exempt from the definition of hazardous waste where circumstances allow for:

- on-site remediation;
- re-use of petroleum hydrocarbon contaminated soil in an asphalt paving plant;
- re-use of soil that meets industrial criteria for landfill cover; or
- re-use of soil as industrial fill once a prior informed consent form has been completed.

Under these circumstances ED needs to be contacted to confirm an alternative record of disposal is completed that provides an equivalent level of accountability to confirm the disposal does not contribute to the likely discharge of a contaminant.

Contaminated snow or water may contain mixtures or emulsions of waste fuel, used oil, solvents, antifreeze, or other types of hazardous waste. Contaminated snow or water is a hazardous waste if it contains any of the contaminants listed in Schedule I in a concentration greater than the corresponding amount.

If the contaminated water is suitable for disposal in a municipal sewage lagoon then it is not considered hazardous waste. It is important to check the municipal sewer by-law or with the municipality about their water licence prior to disposing of contaminated water in a municipal sewage lagoon.

f) Drilling Waste

Drilling wastes are generated from sub-surface drilling activities and are usually made up of two components: drilling fluids and solids (i.e. cuttings). In the NWT, drilling wastes are typically generated from the following activities:

- oil and gas exploration/production;
- mineral exploration; or
- horizontal directional drilling for infrastructure installation.

The management of drilling waste requires careful consideration of the various authorizations that may be required from the applicable regulator. Drilling wastes vary in volume and chemical composition, therefore management methods vary depending on the specific type or method of drilling activity. For drilling that requires the use of fluids, these fluids can be water-based, oil-based and may include a wide variety of added substances.

The following are potential components of drilling wastes:

a) Drilling cuttings;
b) Drilling mud;
c) Drilling fluids;
d) Fracturing fluid;
e) Flowback fluid; and
f) Cement returns.

Regulatory Oversight

This guideline makes a distinction between the on-site, and the off-site, management and disposal of drilling waste. Individual projects may choose to manage their drilling waste on-site or off-site, or some combination of both.

On-Site Drilling Waste Management and Disposal

The regional Land and/or Water Board authorize the disposal of drilling waste onto land or into water, through terms and conditions in either a Land Use Permit (LUP) or a Water Licence (WL) (See Section 2.6.12). The deposit of drill waste by injection into an underground formation or reservoir is authorized by the applicable energy regulator (see section 2.6.6 and 2.6.8). Prior to receiving authorization the operator is required to submit a project proposal which includes details pertaining to waste management and disposal. Approved drilling waste management plans in the NWT may reference suitable drilling waste management guidance developed in other jurisdictions, but may also require additional methods suitable for the NWT.

Off-Site Transportation and Disposal

The off-site transportation and disposal of drilling waste in the NWT requires proper tracking and record keeping. The framework for managing hazardous waste, such as generator, carrier, receiver registration and the use of hazardous waste movement documents (or alternative record of disposal), are used to account for the ultimate disposal of all drilling wastes when they are transported to other receiving facilities. In addition, the generator must also determine if the properties of the drilling wastes require it to be classified as a dangerous good.

The off-site management and disposal of drilling waste in the NWT requires authorization from the applicable regulator. This may be done through the review of, but not limited to the:

a) Receiving site design, operation and capacity;
b) Receiving site approvals and any associated operational requirements;
c) Analytical testing of the drilling wastes or the receiving environment;
d) Information that indicates no hazardous drilling additives or chemicals were used; or
e) Waste management plans that reference suitable drilling waste management practices prior to disposal (i.e. storage, transport, handling, disposal method, etc.).

g) Listed Waste

ED has included a specific list of wastes in Schedule III that are known to have hazardous properties. The waste types listed are common to several types of industrial, commercial and institutional activities. Further testing or application of process knowledge, of these wastes is required to determine if they can be managed as non-hazardous waste. The generator must also use their knowledge of the specific characteristics of these waste types to help determine if they are also classified as dangerous goods.

The small quantity thresholds for various listed wastes are specified in Schedule V.

1. Saturated absorbent materials contaminated with leachable amounts of hazardous waste:
   - Granular sorbent;
   - Sorbent pads/booms;
   - Shop towels (rags);
   - Used activated carbon; or
   - Any material used to contain leaks and spills of hazardous waste.

2. Household hazardous waste is generated from common activities such as home, yard, and vehicle maintenance. Household hazardous waste from a single residence is exempt from the requirements of this guideline, but a collection of consolidated household hazardous waste from numerous residences is managed as hazardous waste. Collections of household hazardous waste are those that are collected and segregated at collection events or have accumulated at municipal facilities over time.

3. Incinerator ash is a process residual generated in incinerators used in various industrial activities. Incinerator ash might contain high levels of metals, dioxins and/or furans. This waste stream must undergo analytical testing for leachable metals as well as dioxins and furans to confirm the absence of contaminants (Schedule I and II) prior to disposal in solid waste facilities in the NWT.

4. Used oil and used oil filters are regulated in accordance with the Used Oil and Waste Fuel Management Regulations that contain criteria for the use of used oil for the purpose of heat recovery, as well as how used oil filters are to be managed. Section 20 of these regulations state the following.
   20. *No person shall dispose of a filter used to filter oil unless, 24 hours before disposing of the filter,*
   (a) the inner chamber of the filter is punctured and the contents are drained; or
   (b) the filter is mechanically crushed or shredded and the contents have been collected.

The management of the following waste types are defined and discussed further in separate guidelines listed below:

5. Waste asbestos, defined in the Guideline for the Management of Waste Asbestos;
6. Biomedical waste, defined in the Guideline for the Management of Biomedical Waste;
7. Lead paint that produces a leachate greater than 5 mg/L, Guideline for the Management of Waste Lead and Lead Paint;
8. Glycol (Antifreeze) solutions, defined in the Guideline for the Management of Waste Antifreeze;
9. Halocarbons, defined in the Guideline for the Management of Ozone Depleting Substances and Halocarbon Alternatives;
10. Waste paint, defined in the Guideline for the Management of Waste Paint;
11. Mercury-containing lamps, defined in the Guide to Recycling Mercury-Containing Lamps.

h) Any Other Waste Deemed Hazardous

A waste might need to be managed as a hazardous waste under circumstances not defined in this guideline. ENR could receive new information that a waste type or chemical is hazardous, but not captured by any of the classifications in this guideline. Additionally, ENR may contact the responsible party directly in writing, or verbally, with specific waste management requirements.

4 Storage and Management of Hazardous Waste

Waste management is intended to reduce or eliminate the effects of waste on the environment, to provide for public and worker safety and to maximize the efficient use of resources. Once hazardous waste has been created, the proper treatment and disposal can be expensive. While it is the responsibility of the waste generator to pay for all disposal costs, various waste management options are available to reduce the cost and volume of waste requiring treatment.

4.1 Pollution Prevention

A more effective and proactive management practice is to eliminate or reduce the generation of the waste. This is referred to as pollution prevention.

> **Minimizing or avoiding the creation of pollutants and waste can be more effective in protecting the environment than treating them, or cleaning them up after they have been created.**
> – *Canadian Council of Ministers of the Environment*

Pollution control options treat waste after it has been created, whereas pollution prevention measures avoid the creation of waste.

Waste generators in the NWT can reduce costs and prevent pollution by implementing reduction, reuse and recycling programs through changes in operational procedures, maintenance practices and raw material usage. An overall waste management plan should incorporate these ideas.

1. Reduce

The aim of reduction is to eliminate the production of a hazardous waste by using raw materials more efficiently. Methods of reduction include substitution or reduction of a raw material, production redesign, process changes, and improved maintenance activities. Methods which are technically and economically practical in any given situation should be used to reduce or eliminate waste streams.

2. Reuse and Recycle

Reusing or recycling hazardous waste in operating processes within the generating facility is another means of pollution prevention. Alternatively, other users may be found to reuse the material that would otherwise require treatment or disposal. ENR encourages the reuse and recycling of hazardous waste in the following ways:

(a) Waste exchanges and associations offer some opportunity for the reuse or recycling of waste. Waste exchanges put potential users of waste materials in contact with waste generators. Appendix 4 lists a number of waste material exchanges and management associations; and

(b) Recycling programs are in place for some hazardous wastes such as used oil, waste fuels, solvents and batteries. For information on recycling programs, contact the waste management associations listed in Appendix 4 or ED.

4.2 General Requirements for Storage Containers

Hazardous waste should be stored in containers as follows:

- In the original containers, where possible, or in containers manufactured for the purpose of storing hazardous waste. The containers must be sound, sealable and not damaged or leaking. The Transport Authority regulates container specifications.
- Clearly labelled according to the Work Site Hazardous Materials Information System (WHMIS) and/or the relevant Transport Authority, if transportation is planned.
- Bulked into specified means of containment that is outlined in the TDGR. If the hazardous waste is not a dangerous good, the means of containment must be suitable to ensure that the contents will remain secure during storage and transportation.
- The containers should be sealed or closed at all times, unless in use.

4.3 General Requirements for Storage Facilities

Hazardous waste must be stored in a safe and secure manner. In general, hazardous waste should be stored according to the following points:

- Drainage is controlled to prevent spills or leaks from leaving the site and to prevent run-off from entering the site.
- Wastes are segregated by chemical compatibility to ensure safety of the public, workers and facility. The National Fire Code as well as TDGR can be referenced for segregation criteria.
- Hazardous wastes are stored in a secure area with controlled access. Only persons authorized to enter and trained in waste handling procedures should have access to the storage site.
- Regular inspections of stored hazardous wastes are performed and recorded. Containers are placed so that each container can be inspected for signs of leaks or deterioration. Leaking or deteriorated containers must be immediately removed and their contents transferred to a sound container.
- A record of the type and amount of waste in storage should be maintained.
- Hazardous waste containers must not be allowed to fill up with water when stored outdoors. Drums frequently accumulate water from rainfall and snowmelt, if stored upright, outside, without proper sealing.
- Empty containers need to be stored on their side to prevent water from entering.
- Storage sites must have emergency response equipment and material appropriate for the hazardous waste stored on site.
- Where the hazardous waste storage site is to be used for long term storage and the amount of waste in storage exceeds the quantity requirements set out in Schedule VI, the site needs to be registered in accordance with Section 2.5 of this guideline.
- Hazardous waste storage sites must meet all local by-law and zoning requirements. It is recommended that the local Fire Chief be advised of the storage facility and its contents for emergency planning and response purposes.

4.4 Hazardous Waste Treatment or Disposal

It is not acceptable for hazardous waste to be abandoned, poured down sewers, dumped on land or discarded at a landfill.

Treating hazardous waste to reduce or eliminate hazards is the final option after implementing appropriate pollution prevention options. It is the responsibility of the generator to treat or dispose of hazardous waste properly. Although a discussion of treatment and disposal methods is beyond the scope of this guideline, the following are general points for consideration:

- The generator is required to determine and follow the proper management method for the hazardous waste generated. Information on proper management methods for hazardous waste types can be found at the following sources:
  - the manufacturer's Safety Data Sheet (SDS) provided with the raw materials;
  - the manufacturer;
  - this guideline and other relevant legislation; and
  - waste management consultants and associations.
- Open burning of hazardous waste is prohibited.
- Mixing different types of hazardous waste in the same container may cause dangerous chemical reactions. It is also important to control the quality of any waste to ensure it can be recycled or disposed of properly. Contaminating wastes with other wastes may prevent reuse/recycling options and increase disposal costs.
- Hazardous waste containers should be emptied, to the greatest extent possible, using regular handling procedures, or by triple rinsing with an appropriate cleaning agent. Rinsings must be managed according to their waste characteristics. Containers must be rendered unusable by puncturing or crushing prior to disposal. This is especially of concern for containers which could otherwise be used for water or food storage.

4.5 Record of Disposal Requirements

A completed six-part hazardous waste movement document (waste manifest) is a record of disposal that accompanies the transportation of hazardous waste from registered generators to carriers to receivers. The completed movement document form provides:

- Detailed information on the types and amounts of hazardous waste shipped;
- A record of who is in charge, management or control of the hazardous waste; and
- Information on the storage, treatment or disposal of the waste and confirmation that the hazardous waste arrived at an authorized receiver.

The generator (consignor), carrier and receiver (consignee) must each complete their portion of the movement document. The information provided on the movement document, as well as other TDGR requirements (i.e. labelling and placarding) are also intended to assist first responders (police, ambulance, fire fighters) with hazard information should a transportation accident occur. Movement documents are available from ED.

Copies of the completed movement document are required to be forwarded according to the instructions on the back of each copy, as follows:

- Copy 1 Sent to ED upon consignment to a carrier by the generator.
- Copy 2 Retained by the generator.
- Copy 3 Sent to ED upon receiving the consignment by the receiver.
- Copy 4 Returned to the carrier by the receiver.
- Copy 5 Retained by the receiver.
- Copy 6 Sent to the generator by the receiver.

A hazardous waste movement document must be used under the following circumstances:

1) The inter-provincial/territorial movement of hazardous waste according to the Interprovincial Movement of Hazardous Waste Regulations.
2) The normal movement of all types of hazardous waste within the NWT (except used oil).
3) The requirement of the use of a movement document in a province or territory of destination.

An alternate record of disposal that contains all the information outlined in Schedule VIII may be utilized under the following circumstances:

1) Used oil transported to a registered used oil burner in the NWT in accordance with the Used Oil and Waste Fuel Management Regulations.
2) The movement document is not required for the particular waste type in the province or territory of destination.

4.6 Disposal of Hazardous Waste Outside of the NWT

Hazardous waste can be sent to a hazardous waste management facility outside of the NWT if the receiving facility is registered in the receiving province or territory and is authorized to manage that waste. Waste types such as contaminated soil or drilling waste may not be considered hazardous waste in other provinces or territories but must still be transported to authorized disposal facilities. Hazardous waste generated in the NWT is commonly transported to Alberta or British Columbia (BC) for treatment or disposal. A list of hazardous waste management facilities in these provinces is available by visiting Alberta Environment and Parks website http://aep.alberta.ca/waste/waste-facilities/hazardous-facilities.aspx or the BC Environmental Industries Associations website (http://www.hazwastebc.com). The list of organizations in Appendix 4 can help to determine the best hazardous waste management option.

It is important for generators to know the differences in hazardous waste regulations between provincial/territorial jurisdictions and ensure that the hazardous waste is disposed of in a manner that satisfies all jurisdictions where the hazardous waste will be generated, transported and disposed.

It is important for generators to use shipping names of hazardous waste that align with the province or territory of destination. If the waste receiving facility is not familiar with the movement document for a particular type of waste it is important to ensure a complete record of disposal is utilized and that the receiving site provides a signed copy that confirms the ultimate disposal. Under these circumstances the generator in the NWT is required to provide the signed copy to ED.

International and interprovincial/territorial shipments of hazardous waste are also controlled under the federal Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations and the Interprovincial Movement of Hazardous Waste Regulations.

4.7 Alternative Management Methods

ED will give consideration to proposals for alternate management methods that provide an equivalent level of environmental protection to those identified in this guideline. Staff in the Environment Division are available to discuss and review proposed hazardous waste treatment and disposal options.

5 Conclusion

This guideline outlines the basics of hazardous waste management in the NWT. It is intended to provide direction when making hazardous waste management decisions to prevent the discharge of contaminants, or situations that contribute to the likely discharge of contaminants. It does not replace the existing legislation which is referenced in the guideline. Please contact the appropriate agency before proceeding. For more information regarding hazardous waste please visit our website (http://www.enr.gov.nt.ca/en/services/hazardous-waste) or contact:

Environment Division
Department of Environment and Natural Resources
Government of the Northwest Territories
7th floor, Scotia Centre
5102 50th Avenue

Mailing Address:
PO Box 1320
Yellowknife NT X1A 2L9

Tel: (867) 767-9236 ext. 53176
Fax: (867) 873-0221

Figure 3: Decision Flow Chart for Determining if a Waste is a Hazardous Waste

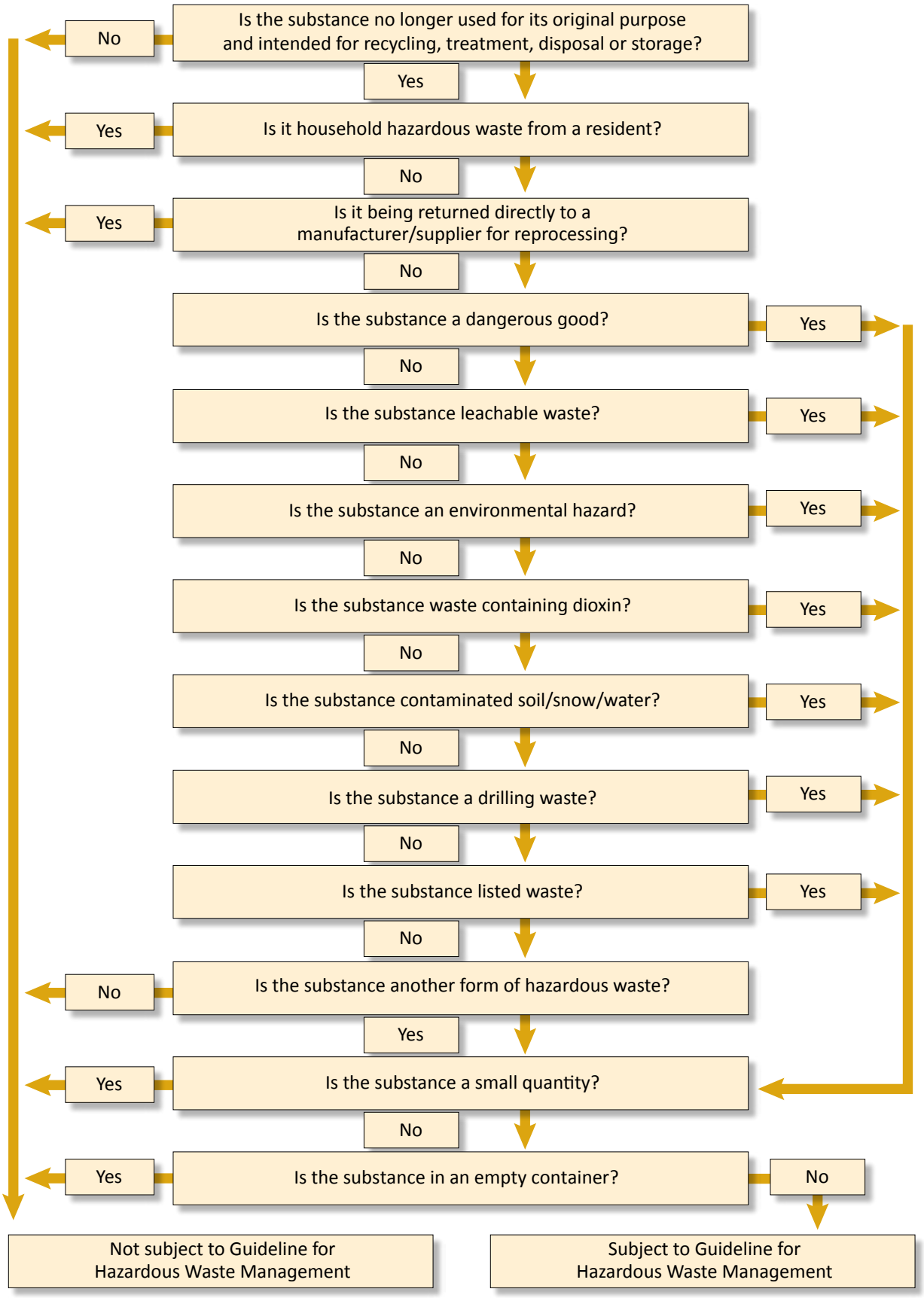
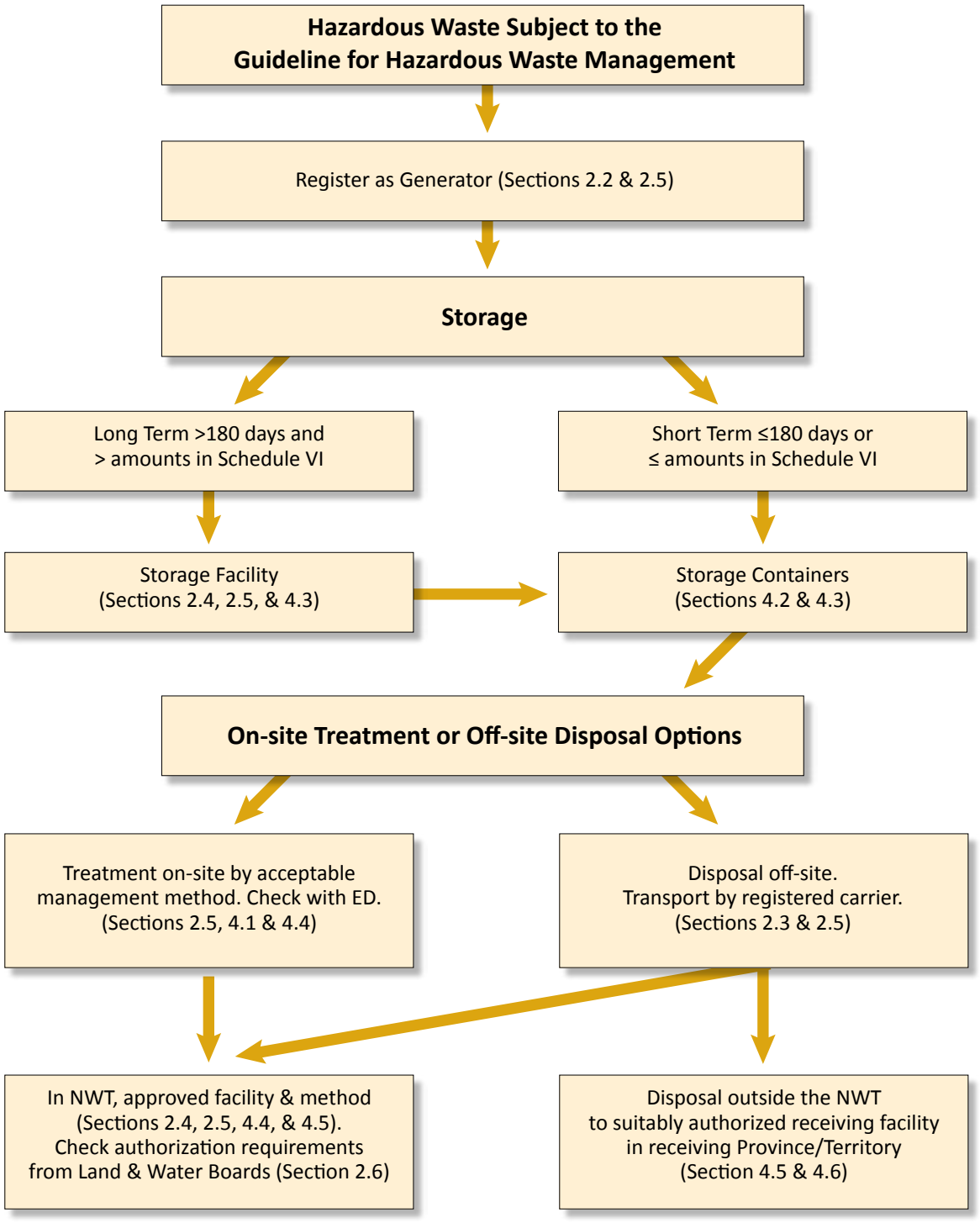


Figure 4: Hazardous Waste Management Process for Generators



Government of Northwest Territories
Gouvernement des Territoires du Nord-Ouest

FORM 1: HAZARDOUS WASTE GENERATOR REGISTRATION FORM

Instructions

1. The following information must be provided in order to register and obtain a generator number in the NWT. Incomplete applications will be returned to the applicant.
2. Completed registration forms are to be forwarded to EnvironmentalProtection@gov.nt.ca, or mailed to:
   Environment Division
   Department of Environment and Natural Resources
   Government of the Northwest Territories
   P.O. Box 1320, Yellowknife NT X1A 2L9
3. Use additional pages to provide information as required.

FORMULAIRE 1 : INSCRIPTION À TITRE DE PRODUCTEUR DE DÉCHETS DANGEREUX

Instructions

1. Veuillez fournir les renseignements suivants pour vous inscrire et pour obtenir un numéro de producteur aux TNO. Les formulaires incomplets seront retournés aux demandeurs.
2. Veuillez expédier les formulaires remplis par courriel (Environmental Protection@gov.nt.ca), ou par la poste :
   Division de l'environnement
   Ministère de l'Environnement et des Ressources naturelles
   Gouvernement des Territoires du Nord-Ouest
   C. P. 1320, Yellowknife NT X1A 2L9
3. Au besoin, utilisez des feuilles supplémentaires pour fournir l'information nécessaire.

Section 1: Contact Information / Coordonnées

Generator Company (Legal) Name: Nom de l'entreprise productrice (nom légal) :		
Mailing Address: Adresse postale :		
Contact Person: Personne-ressource :		Title: Titre de poste :
Phone: N° de téléphone :	Email: Courriel :	
Alternate Contact Person: Personne-ressource supplémentaire :		Title: Titre de poste :
Phone: N° de téléphone :	Email: Courriel :	

Section 2: Description of Waste Types Generated / Description des déchets produits

(Provide a separate table or reference waste management plan. / Utilisez un tableau séparé ou faites référence à votre plan de gestion des déchets.)

Location where waste is generated (coordinates or physical address):
Lieu où les déchets sont produits (coordonnées ou adresse physique) :

Describe types of hazardous waste (if not Dangerous Goods, indicate in description)
Décrivez le type de déchets dangereux (s'il ne s'agit pas de déchets dangereux, veuillez décrire le produit)

Shipping Name (description) Désignation officielle (description)	UN No. N° ONU	TDGR Class Catégorie du RTMD	Quantity generated (kg or L) Quantité transportée (en kg ou en L)	Monthly/Annually Mensuellement ou annuellement

Section 3: I certify that the information provided on this form is correct and accurate. Je certifie que les renseignements fournis dans le présent formulaire sont exacts, fiables, et complets.	
Signature of Contact Person / Signature de la personne-ressource	Date (MM-DD-YYYY) / Date (MM-JJ-AAAA)
Name of Contact Person (Print): Nom de la personne-ressource (caractères d'imprimerie) :	
Title: Titre de poste :	
Phone: N° de téléphone :	Email: Courriel :

Government of Northwest Territories
Gouvernement des Territoires du Nord-Ouest

FORM 2: HAZARDOUS WASTE CARRIER REGISTRATION FORM

Instructions

1. The following information must be provided in order to register and obtain a carrier number in the NWT. Incomplete applications will be returned to the applicant.
2. Completed registration forms are to be forwarded to environmental_protection@gov.nt.ca, or mailed to:
   Environment Division
   Department of Environment and Natural Resources
   Government of the Northwest Territories
   P.O. Box 1320, Yellowknife NT X1A 2L9
3. Use additional pages to provide information as required.

FORMULAIRE 2 : INSCRIPTION DES TRANSPORTEURS DE DÉCHETS DANGEREUX

Instructions

1. Veuillez fournir les renseignements suivants pour vous inscrire et pour obtenir un numéro de transporteur aux TNO. Les formulaires incomplets seront retournés aux demandeurs
2. Veuillez expédier les formulaires remplis par courriel (environmental_protection@gov.nt.ca), ou par la poste :
   Division de l'environnement
   Ministère de l'Environnement et des Ressources naturelles
   Gouvernement des Territoires du Nord-Ouest
   C. P. 1320, Yellowknife NT X1A 2L9
3. Au besoin, utilisez des feuilles supplémentaires pour fournir l'information nécessaire.

Section 1: Contact Information / Coordonnées

Carrier Company (Legal) Name: Nom de l'entreprise productrice (nom légal) :	
Mailing Address: Adresse postale :	
Contact Person: Personne-ressource :	Title: Titre de poste :
Phone: N° de téléphone :	Email: Courriel :
Contact Person: Personne-ressource :	Title: Titre de poste :
Phone: N° de téléphone :	Email: Courriel :

Section 2: Description of Carrier's Activities / Description des activités du transporteur

(Provide a separate table or reference waste management plan. / Veuillez fournir un tableau distinct ou faire référence au plan de gestion des déchets.)

Mode of Transport (check all that apply): Mode de transport (cochez tous ceux qui s'appliquent)	☐ Road / Routier ☐ Rail / Ferroviaire ☐ Ship / Maritime ☐ Air / Aérien
Proof of transport liability insurance is attached (certificate of insurance): Vous avez joint une preuve d'assurance responsabilité civile de transport (certificat d'assurance)	☐ Yes / Oui ☐ No / Non
Proof of training from the applicable Transport Authority is attached: Vous avez joint une preuve de formation de l'agence de transport concernée :	☐ Yes / Oui ☐ No / Non
A spill contingency plan is attached: Vous avez joint un plan d'urgence en cas de déversement :	☐ Yes / Oui ☐ No / Non

Describe types of hazardous waste (if not Dangerous Goods, indicate in description) Décrivez le type de déchets dangereux (s'il ne s'agit pas de déchets dangereux, veuillez décrire le produit)				
Shipping Name (description) **Désignation officielle (description)**	**UN No.** **N° ONU**	**TDGR Class** **Catégorie du RTMD**	**Quantity generated (kg or L)** **Quantité transportée (en kg ou en L)**	**Monthly/Annually** **Mensuellement ou annuellement**

Section 3: I certify that the information provided on this form is correct, accurate and complete.
Je certifie que les renseignements fournis sont exacts, fiables, et complets.

Signature of Contact Person / Signature de la personne-ressource	Date (MM-DD-YYYY) / Date (MM-JJ-AAAA)
Name of Contact Person (Print): Nom de la personne-ressource (caractères d'imprimerie) :	
Title: Titre de poste :	
Phone: N° de téléphone :	Email: Courriel :

Schedule I: Leachate Disposal Standards for Solid Waste / Process Residuals

Item	Parameter	Concentration (mg/L)
1.	Antimony	0.6
2.	Arsenic	2.5
3.	Barium	100
4.	Benzene	0.5
5.	Beryllium	5.0
6.	Boron	500
7.	Cadmium	0.5
8.	Carbon tetrachloride (Tetrachloromethane)	0.5
9.	Chloramines	300
10.	Chlorobenzene (Monochlorobenzene)	8.0
11.	Chloroform	6.0
12.	Chromium	5.0
13.	Cobalt	100
14.	Copper	100
15.	Cresol (Mixture – total of all isomers, when isomers cannot be differentiated)	200
16.	Cyanide	20
17.	2,4-DCP / (2,4-Dichlorophenol)	90
18.	1,2-Dichlorobenzene (o-Dichlorobenzene)	20
19.	1,4-Dichlorobenzene (p-Dichlorobenzene)	0.5
20.	1,2-Dichloroethane (Ethylene dichloride)	0.5
21.	1,1-Dichloroethylene (Vinylidene chloride)	1.4
22.	Dichloromethane (also see – methylene chloride)	5.0
23.	2,4-Dinitrotoluene	0.13
24.	Polychlorinated dibenzo dioxins and furans (TEQ)	0.0000015

Item	Parameter	Concentration (mg/L)
25.	Ethyl benzene	0.24
26.	Fluoride	150
27.	Hexachlorobenzene	0.13
28.	Hexachlorobutadiene	0.5
29.	Hexachloroethane	3.0
30.	Lead	5.0
31.	Mercury	0.1
32.	Methyl ethyl ketone / Ethyl methyl ketone	200
33.	Naphthalene	0.5
34.	Nitrate + Nitrite	1000
35.	Nitrilotriacetic acid (NTA)	40
36.	Nitrite	320
37.	Nitrobenzene	2
38.	Pentachlorophenol	6.0
39.	Pyridine	5.0
40.	Selenium	1.0
41.	Silver	5.0
42.	Tetrachloroethylene	3.0
43.	2,3,4,6-Tetrachlorophenol / (2,3,4,6-TeCP)	10
44.	Toluene	2.4
45.	Trichloroethylene	0.5
46.	Trihalomethanes – Total (also see – Chloroform)	10
47.	Uranium	2.0
48.	Xylene	0.5
49.	Zinc	500

Schedule II: Dioxin Toxicity Equivalency Factors

Column I – Congeners	Column II – TEF*
2,3,7,8-tetrachlorodibenzo-p-dioxin	1.0
1,2,3,7,8-pentachlorodibenzo-p-dioxin	0.5
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin	0.01
octachlorodibenzo-p-dioxin	0.001
2,3,7,8-tetrachlorodibenzofuran	0.1
1,2,3,7,8-pentachlorodibenzofuran	0.05
2,3,4,7,8-pentachlorodibenzofuran	0.5
1,2,3,4,7,8-hexachlorodibenzofuran	0.1
1,2,3,6,7,8-hexachlorodibenzofuran	0.1
1,2,3,7,8,9-hexachlorodibenzofuran	0.1
2,3,4,6,7,8-hexachlorodibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorodibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorodibenzofuran	0.01
octachlorodibenzofuran	0.001

* Toxicity Equivalency Factor

Schedule III: Listed Waste

1.	Absorbent material
2.	Household hazardous waste consolidated at a municipal collection depot
3.	Incinerator ash (bottom/fly ash)
4.	Used oil and used oil filters*
5.	Waste asbestos (defined in the Guideline for the Management of Waste Asbestos)
6.	Biomedical waste (defined in Guideline for the Management of Biomedical Waste)
7.	Lead paint that produces a leachate greater than 5 mg/L (defined in the Guideline for the Management of Waste Lead and Lead Paint)
8.	Glycol (Antifreeze) solutions (defined in the Guideline for the Management of Waste Antifreeze)
9.	Halocarbons (defined in the Guideline for the Management of Ozone Depleting Substances and Halocarbon Alternatives)
10.	Waste paint (defined in the Guideline for the Management of Waste Paint)
11.	Mercury-containing lamps (defined in the Guide to Recycling Mercury-Containing Lamps)

* No person shall dispose of a filter used to filter oil unless, 24 hours before disposing of the filter,
(a) the inner chamber of the filter is punctured and the contents are drained; or
(b) the filter is mechanically crushed or shredded and the contents have been collected.

Schedule IV: Severely Toxic Contaminants

Item	Substances
1.	(4-Chlorophenyl)cyclopropylmethanone, O-[(4-nitrophenyl)methyl]oxime
2.	Benzenamine, N-phenyl-, Reaction Products with Styrene and 2,4,4-Trimethylpentene (BNST)
3.	Chlorobiphenyls
4.	Chlorinated Alkanes
5.	Dibenzofuran
6.	Dibenzo-para-dioxin
7.	Dichloromethane
8.	Hexabromocyclododecane (HBCD)
9.	Hexachlorobutadiene, which has the molecular formula C4Cl6
10.	Hexavalent chromium compounds
11.	Long-Chain (C9-C20) Perfluorocarboxylic Acids (PFCAs), their Salts and their Precursors
12.	Mercury
13.	Perfluorooctane Sulfonate (PFOS), Its Salts and Its Precursors
14.	Polychlorinated dibenzodioxins
15.	Polychlorinated Dibenzofurans
16.	Polychlorinated Naphthalenes (PCNs)
17.	Polychlorinated Terphenyls
18.	Tetrabutyltin
19.	Tetrachlorobenzenes (TeCBs)
20.	Tetrachloroethylene
21.	Tributyltins

Schedule V: Small Quantity Threshold for Types of Hazardous Waste

	Column I: Hazardous Waste Type	Column II: Amount
1.	All hazardous waste unless otherwise specified	5 kg or L
2.	Dangerous Goods Class 6.1, Packing Group I	1 kg or L
3.	Waste batteries	50 kg
4.	Contaminated snow/water	20 kg or L
5.	Contaminated soil	500 kg
6.	Waste Glycol	20 L
7.	Incinerator ash	20 kg
8.	Waste paint	20 kg or L
9.	Used Oil	20 L
10.	Leachable waste containing Severely Toxic Contaminants	1 kg or L
11.	Severely Toxic Contaminants in pure form	n/a hazardous waste in any quantity

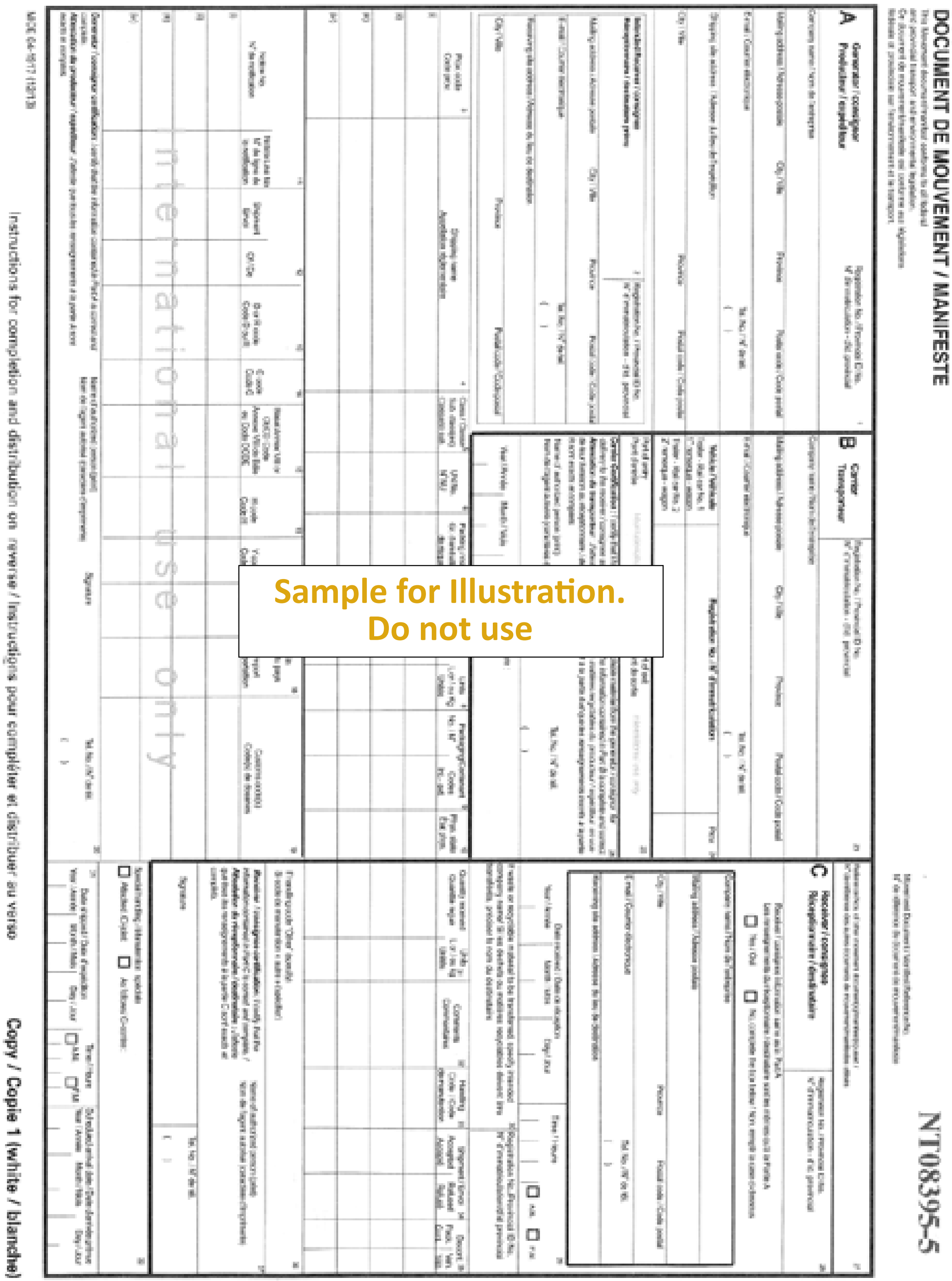
Schedule VI: Registration Volumes

Minimum quantity of hazardous waste[1] necessary for registration as a Hazardous Waste Storage Facility.

Waste Classification TDG		Quantity[2] (Kg or L)
2.1	Compressed Gas (flammable)	500[3]
2.2	Compressed Gas (non-corrosive, non-flammable, non-toxic)	5,000[3]
2.3	Compressed Gas (toxic)	200[3]
3	Flammable Liquids Packing Group I	1,000
3	Flammable Liquids Packing Group II	2,000
3	Flammable Liquids Packing Group III	5,000
4.1	Flammable Solids	5,000
4.2	Substances Liable to Spontaneous Combustion	1 00
4.3	Water-reactive Substances	50
5.1	Oxidizing Substances	1,000
5.2	Organic Peroxides	50
6.1	Toxic Substances Packing Group I	1,000
6.1	Toxic Substances Packing Group II	2,000
6.1	Toxic Substances Packing Group III	5,000
6.2	Infectious Substances	500[3]
6.2	Infectious Substances Category A requiring an ERAP	any amount
8	Corrosive Substances Packing Group I	1,000
8	Corrosive Substances Packing Group II	2,000
8	Corrosive Substances Packing Group III	5,000
9	Miscellaneous	1,000[4]
Other Hazardous Waste Types		
	Polychlorinated Biphenyls	100
	Leachable waste	5,000
	Hazardous to the Aquatic Environment	5,000
	Waste containing dioxins and furans	5,000
	Contaminated soil	50,000
	Drilling waste	50,000
	Used Oil, Glycol, Contaminated Water	5,000
Total Aggregate Quantity of Hazardous Waste[5]		**5,000**

[1] This applies to hazardous waste and not dangerous goods.
[2] Quantity refers to liquids when the amount is expressed in litres (L) and solids when expressed in kilograms (Kg).
[3] Total liquid volume capacity of the container.
[4] PCB storage is regulated by Environment and Climate Change Canada under the *Canadian Environmental Protection Act*. Storage of products containing PCBs in a concentration of 50 mg/kg or more and in an amount of 100 litres or more, 100 kilograms or more, or in a lesser amount if it contains 1 kilogram or more of PCBs.
[5] Except for Contaminated soil and Drilling waste where total aggregate quantity must exceed 50,000 kg.

Schedule VII: Illustration of a Movement Document


DOCUMENT DE MOUVEMENT / MANIFESTE

NT08395-5

A Generator / consignor
Producteur / expéditeur

B Carrier
Transporteur

C Receiver / consignee
Réceptionnaire / destinataire

Instructions for completion and distribution on reverse / Instructions pour compléter et distribuer au verso

Copy / Copie 1 (white / blanche)

**Sample for Illustration.
Do not use**

Schedule VIII: Information Required in a Record of Disposal

1) Generator, carrier, and receiver (disposal, recycling facility) are registered and identified with the following:
   a) Registration numbers (where applicable);
   b) Name of generator, carrier and receiver, mailing address and contact information;
   c) Shipping and receiving site address is identified;
   d) Name of person(s) consigning the waste, transporting, and receiving;
   e) Telephone number; and
   f) Date of shipment and receiving.

2) Intended receiver is declared prior to transportation, and the receiver is authorized to receive that waste.

3) The hazardous waste is identified and the description identifies the:
   a) Common name of the waste (i.e. used oil, contaminated soil);
   b) Amount of waste being transported in metric units (kg or L);
   c) Number and means of containment (e.g., drum, bulk, tank, etc.); and
   d) Physical state, solid, liquid or gas (e.g. S, L, G).

4) Multiple copies are made and the generator, carrier, as well as the receiver all receive a copy of the record of disposal (like 6-part movement document) that confirms who is in control of the waste:
   a) Upon shipment;
   b) During transportation; and
   c) At the receiving facility.

5) ENR receives a completed and signed copy of the record of disposal upon:
   a) Shipment from the generator; and
   b) Receipt at the receiver.

Appendix 1:

Environmental Protection Act

The following is a subset of the *Environmental Protection Act,* R.S.N.W.T. 1988, c. E-3.[1]

1. In this Act,

"contaminant" means any noise, heat, vibration or substance and includes such other substance as the Minister may prescribe that, where discharged into the environment,
(a) endangers the health, safety or welfare of persons,
(b) interferes or is likely to interfere with normal enjoyment of life or property,
(c) endangers the health of animal life, or
(d) causes or is likely to cause damage to plant life or to property;

"discharge" includes, but not so as to limit the meaning, any pumping, pouring, throwing, dumping, emitting, burning, spraying, spreading, leaking, spilling, or escaping;

"environment" means the components of the Earth and includes
(a) air, land and water,
(b) all layers of the atmosphere,
(c) all organic and inorganic matter and living organisms, and
(d) the interacting natural systems that include components referred to in paragraphs (a) to (c).

"inspector" means a person appointed under subsection 3(2) and includes the Chief Environmental Protection Officer.

2.2 The Minister may
(a) establish, operate and maintain stations to monitor the quality of, and the discharge of contaminants into the environment in the Territories;
(b) conduct research studies, conferences and training programs relating to contaminants and to the preservation, protection or enhancement of the environment;
(c) develop, co-ordinate and administer policies, standards, guidelines and codes of practice relating to the preservation, protection or enhancement of the environment;

3. (2) The Chief Environmental Protection Officer may appoint inspectors and shall specify in the appointment that powers that may be exercised and the duties that may be performed by the inspector under this Act and regulations.

[1] The *Environmental Protection Act* (EPA) is updated from time to time. As this is a subset of the EPA, ENR recommends the reader review the official Act.

4. (1) Where the Chief Environmental Protection Officer is of the opinion, based on reasonable grounds, that it is necessary or advisable for the protection of the environment to do so, the Chief Environmental Protection Officer may, by order directed to any person, require that person
   (a) to install safeguards to prevent the discharge of contaminants into the environment;
   (b) to site, transport or store any contaminant in the manner set out in the order; or
   (c) to have on hand at all times the equipment and material necessary to alleviate the effect of any discharge of contaminants that may be specified in the order.

   (2) Where an inspector believes on reasonable grounds that a discharge of a contaminant in contravention of this Act, the regulations or a provision of a permit or licence is likely to occur, the inspector may issue an order requiring any person whose actions may increase the likelihood of a discharge or the owner or person in charge, management or control of the contaminant to take the preventive measures that the inspector considers necessary. R.S.N.W.T. 1988,c.117(Supp.),s.7.

5. (1) Subject to subsection (3), no person shall discharge or permit the discharge of a contaminant into the environment.

   (2) REPEALED, R.S.N.W.T. 1988,c.117(Supp.),s.8.

   (3) Subsection (1) does not apply where the person who discharged the contaminant or permitted the discharge of the contaminant establishes that
   (a) the discharge is authorized by this Act or the regulations or by an order issued under this Act or the regulations;
   (a.1) the discharge
      (i) is authorized by an Act of the Parliament of Canada or the Northwest Territories or by regulations made under any of those Acts, and
      (ii) is not addressed in this Act or the regulations or by an order issued under this Act or the regulations;
   (b) the contaminant has been used solely for domestic purposes and was discharged from within a dwelling house;
   (c) the contaminant was discharged from the exhaust system of a vehicle;
   (d) the discharge of the contaminant resulted from the burning of leaves, foliage, wood, crops or stubble for domestic or agricultural purposes;
   (e) the discharge of the contaminant resulted from burning for land clearing or land grading;
   (f) the discharge of the contaminant resulted from a fire set by a public official for habitat management of silviculture purposes;
   (g) the contaminant was discharged for the purposes of combatting a forest fire;
   (h) the contaminant is a soil particle or grit discharged in the course of agriculture or horticulture; or
   (i) the contaminant is a pesticide classified and labelled as “domestic” under the Pest Control Products Regulations (Canada).

   (4) The exceptions set out in subsection (3) do not apply (a) where a person discharges a contaminant that the inspector has reasonable grounds to believe is not usually associated with a discharge from the excepted activity.

5.1. Where a discharge of a contaminant into the environment in contravention of this Act or the regulations or the provisions of a permit or licence issued under this Act or the regulations occurs or a reasonable likelihood of such a discharge exists, every person causing or contributing to the discharge or increasing the likelihood of such a discharge, and the owner or the person in charge, management or control of the contaminant before its discharge or likely discharge, shall immediately:

(a) subject to any regulations, report the discharge or likely discharge to the person or office designated by the regulations;

(b) take all reasonable measures consistent with public safety to stop the discharge, repair any damage caused by the discharge and prevent or eliminate any danger to life, health, property or the environment that results or may be reasonably expected to result from the discharge or likely discharge; and

(c) make a reasonable effort to notify every member of the public who may be adversely affected by the discharge or likely discharge.

6. (1) Where an inspector believes on reasonable grounds that a discharge of a contaminant in contravention of this Act or the regulations or a provision of a permit or licence issued under this Act or the regulations has occurred or is occurring, the inspector may issue an order requiring any person causing or contributing to the discharge or the owner or the person in charge, management or control of the contaminant to stop the discharge by the date named in the order.

Appendix 2:

Selecting a Hazardous Waste Receiver

The following information is provided as best practice and needs to be interpreted according to the type of hazardous waste being offered.

As a hazardous waste generator, it is important to carefully choose a hazardous waste receiver. Generators are responsible for their waste until it is legally and properly received at a suitably authorized facility.

Selection Factors

Below is a list of considerations when selecting a hazardous waste receiver:

- Ensure waste has been properly classified, either through characterization by a qualified consultant or environmental testing laboratory, or by reviewing the process generating the waste along with the original raw materials used in the process.
- Ensure the hazardous wastes are managed by companies that are capable of appropriately managing the wastes. This is important for hazardous waste disposal outside or inside of the NWT.
- Find out if the hazardous waste receiver has carried out any facility audits. Many waste receivers are required to submit audit reports to the provincial or territorial authority. Request a copy of the receivers most recent audit report. Most competent waste receivers arrange third party audits at their facilities and are willing to share and discuss the results with their potential clients.
- Get references from business colleagues who have used a specific hazardous waste receiver.
- Find out if the hazardous waste receiver has the appropriate authorization to manage your hazardous waste(s). Authorized receivers are required to have a facility registration number issued by the provincial or territorial authority.
- Check the Waste Receiver Assessment Program (http://www.wrapaudit.com/index.php) to see if a Waste Facility Environmental Review has been completed on behalf of other waste generators for the receiving facility.
- Ensure that the treatment/disposal methods proposed by companies are the appropriate and approved technology for your wastes. The receiver should be willing to provide a letter confirming how and when the hazardous waste was managed at the location named in the letter and that the management complied with all relevant regulatory requirements.
- Check the receiver's insurance coverage and review their environmental impairment liability, general liability and vehicle insurance coverage (if applicable).
- Check the Health and Safety record of the receiver and request a clearance letter from the applicable worker (Occupational) health and safety agency.

Note: If the receiver selected does not comply with the requirements of the applicable legislation and are charged with a violation while managing your wastes, the generator may also be held liable.

Appendix 3:

Dangerous Goods Classifications

Class 1: Explosives[1]

Class 2: Compressed Gases

Division 2.1: Flammable Gases
Division 2.2: Non-Flammable Gases
Division 2.3: Toxic Gases

Class 3: Flammable Liquids

Packing Group I: Boiling point ≤35°C and any Flash Point
Packing Group II: Boiling point: >35°C and Flash Point < 23°C
Packing Group III: If criteria for Packing Group I or II are not met

Class 4: Flammable Solids, Substances Liable To Spontaneous Combustion, Dangerous When Wet

Division 4.1: Flammable Solids
Division 4.2: Spontaneously Combustible
Division 4.3: Dangerous When Wet

Class 5: Oxidizers, Organic Peroxides

Division 5.1: Oxidizers
Division 5.2: Organic Peroxides

Class 6: Toxic Substances, Infectious Substances

Criteria for 6.1 Toxic Substances Packing Groups as per the TDGR					
Route of Exposure	**Oral**	**Dermal**	**Inhalation mist**	**Inhalation vapor**	
Unit of Measure	LD50 mg/kg	LD_{50} mg/kg	LC50 mg/L	V	LC50 mL/m^3
Packing Group I	≤ 5	≤ 50	≤ 0.2	≥ 10 X LC50	≤ 1000
Packing Group II	> 5 but ≤ 50	> 50 but ≤ 200	> 0.2 but ≤ 2	≥ LC50	≤ 3000
Packing Group III	> 50 but ≤ 300	> 200 but ≤ 1000	> 2 but ≤ 4	≥ 0.2 X LC50	≤ 5000

Division 6.2: Infectious Substances

Class 7: Radioactive Materials[1]

Class 8: Corrosives

Class 9: Miscellaneous Dangerous Goods

[1] Class 1 and 7 are regulated under federal legislation and not subject to this guideline.

Appendix 4:

Regulatory Agencies, Land and Water Boards, Waste Exchanges, and Associations

Regulatory Agencies

1. Environmental Health
   Department of Health and Social Services
   5015 49th St
   Box 1320
   Yellowknife, NT X1A 2L9
   Phone: (867) 767-9066 ext. 49262

2. Lands Administration
   Department of Lands
   PO Box 1320
   1st Floor Gallery Building (4923 - 52nd Street)
   Yellowknife, NT X1A 2L9
   Phone: (867) 765-6701 Fax: (867) 669-8908

3. Office of the Fire Marshal
   Department of Municipal and Community Affairs
   600, 5201-50th Avenue
   Yellowknife, NT X1A 2S9
   Phone: (867) 873-7469 Fax: (867) 873-0206

4. Office of the Regulator of Oil and Gas Operations
   4th floor, 5201-50th Avenue
   P.O. Box 1320
   Yellowknife, NT X1A 2L9
   Phone: (867) 767-9097 Fax: (867) 920-0798

5. Road Licensing and Safety Headquarters
   Department of Transportation
   5015 - 49th Street
   PO Box 1320
   Yellowknife, NT X1A 2L9
   Phone: (867) 767-9088 ext. 31169 Fax: (867) 873-0120

6. Workers' Safety and Compensation Commission
   Centre Square Tower, 5th Floor
   5022 49 Street
   Box 8888
   Yellowknife, NT X1A 2R3
   General Inquiries phone: (867) 920-3888 Fax: (867) 873-4596
   Toll Free: 1-800-661-0792

7. Indigenous and Northern Affairs Canada
   NWT Region
   4923-52nd Street
   P.O. Box 1500
   Yellowknife, NT X1A 3Z4
   Phone: (867) 669-2500 Fax: (867) 669-2715

8. Canadian Nuclear Safety Commission
   Western Regional Office
   220 4th Avenue S.E., Suite 670
   Calgary, AB T2G 4X3
   Phone: (403) 292-5181 Fax: (403) 292-6985
   Nuclear Emergency (24 Hour) (613) 995-0479
   General Inquiries: info@cnsc-ccsn.gc.ca
   Phone: 613-995-5894 or 1-800-668-5284 (in Canada)

9. Environmental Protection Branch
   Environment and Climate Change Canada
   5019 52nd St,
   P.O. Box 2310
   Yellowknife, NT X1A 2P7
   Phone: (867) 669-4730 Fax: (867) 873-8185

10. Environment Branch
    National Energy Board
    444 Seventh Ave. S.W.
    Calgary, AB T2P 0X8
    Phone: (403) 299-3676 Fax: (403) 292-5503

11. Explosives Regulatory Division, Western Region
    Natural Resources Canada
    Unit 214 755 Lake Bonavista Dr. S.E.
    Calgary, AB T2J 0N3
    Phone: (403) 292-4766 Fax: (403) 292-4689

12. Transport Canada
    Prairie and Northern Region
    4915 - 48th Street
    3rd Floor, YK Centre East
    P.O. Box 1439
    Yellowknife, NT X1A 2P1
    Phone: (888)-463-0521

Land and Water Boards

Gwich'in Land and Water Board	(867) 777-4954	http://glwb.com/
Mackenzie Valley Land and Water Board	(867) 669-0506	http://mvlwb.com/
Sahtu Land and Water Board	(867) 598-2413	http://slwb.com/
Wek'eezhii Land and Water Board	(867) 765-4592	http://wlwb.ca/
Inuvialuit Water Board	(867) 678-2942	www.inuvwb.ca
Environmental Impact Screening Committee	(867) 777-2828	http://www.screeningcommittee.ca/contact.html

Waste Exchanges

Canadianenvironmental.com		http://www.canadianenvironmental.com/
Stobec	(800) 561-6511	http://stobec.com/index.html
Waste Exchange Network		http://www.wastechange.com/canada.html

Associations

BC Environment Industry Association	(604) 683-2751	http://www.hazwastebc.com
Canadian Association for Laboratory Accreditation Inc. (CALA)	(613) 233-5300	http://www.cala.ca
Eco Canada	(800) 890-1924	http://www.eco.ca
Environmental Services Association of Alberta	(800) 661-9278	http://www.esaa.org
Manitoba Environmental Industries Association	(204) 783-7090	http://www.meia.mb.ca
Northern Territories Water and Waste Association	(867) 873-4325	http://ntwwa.com/
Saskatchewan Environmental Industry and Managers Association	(306) 250-4991	http://www.seima.sk.ca/
Standards Council of Canada (Environmental Laboratories)	(613) 569-7808	https://www.scc.ca/en/accreditation/laboratories
Waste Receiver Assessment Program	(403) 269-4351	http://www.wrapaudit.com

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