



Guideline for the Management of Waste Lead and Lead Paint

Revised October 2017

Lignes directrices sur la gestion des déchets de plomb et de la peinture au plomb

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Le présent document contient la traduction française du résumé.

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1 Introduction

Lead is a naturally-occurring element commonly found in rock and soil. There is also widespread use of lead in consumer products and has resulted in elevated levels of lead in the environment. Canadians are exposed to low levels of lead in food, drinking water, air, household dust, soil, and products. Risks to human health and the environment are associated with exposure and release of lead.

Waste products that contain specified levels of lead are considered contaminants under the Northwest Territories' *Environmental Protection Act* (EPA) and must be managed as a hazardous waste. The Guideline for the Management of Waste Lead and Lead Paint is intended to:

- Provide guidance to industrial, commercial, and institutional (ICI) operators in the Northwest Territories (NWT) on the proper management of waste lead and lead paint;
- Increase awareness and provide a brief introduction to the different types of waste lead and lead paint; and
- Support the tracking of hazardous waste from generation to final treatment/disposal.

Section 2.2 of the EPA gives the Minister 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 lead or lead paint. Section 2.3 of this Guideline provides additional information on the roles and responsibilities of other regulatory agencies that may be involved with the management of waste lead and lead paint due to their legislative responsibilities.

This guideline should be read in conjunction with the *Guideline for Hazardous Waste Management* where lead paint is listed as a hazardous waste. The management of waste lead found in batteries is outlined in the [Guideline for the Management of Waste Batteries](#).

This guideline and other hazardous waste guidelines are available on the Department of Environment and Natural Resources (ENR) website (<http://www.enr.gov.nt.ca/en/services/hazardous-waste>) or by contacting ENR at:

Environment Division
Department of Environment and Natural Resources
Government of the Northwest Territories
PO Box 1320
700, 5102-50 Avenue
Yellowknife NT X1A 2L9

Tel: (867) 767-9236 ext. 53176

Fax: (867) 873-0221

1 Introduction

Le plomb est naturellement présent dans les roches et le sol. Il est également largement utilisé dans les produits de consommation; c'est pourquoi on trouve des niveaux élevés de plomb dans l'environnement. Les Canadiens sont exposés à de faibles niveaux de plomb dans la nourriture, l'eau potable, l'air, la poussière domestique, la terre et les produits manufacturés. Les risques pour la santé et l'environnement sont associés à la libération du plomb et à l'exposition à ce dernier.

Les déchets qui contiennent un certain niveau de plomb sont considérés comme des contaminants selon la *Loi sur la protection de l'environnement* (LPE) des Territoires du Nord-Ouest et doivent être gérés en tant que déchets dangereux.

Ces lignes directrices ont été élaborées par la division de l'environnement du ministère de l'Environnement et des Ressources naturelles (MERN) du gouvernement des Territoires du Nord-Ouest (GTNO) pour les secteurs industriel, commercial et institutionnel (ICI).

Les Lignes directrices sur la gestion des déchets de plomb et de la peinture au plomb visent à :

- orienter les exploitants des secteurs ICI des Territoires du Nord-Ouest (TNO) sur la gestion appropriée des déchets de plomb et de la peinture au plomb;
- sensibiliser aux différents types de déchets de plomb et de peintures au plomb et en faire une brève présentation;
- 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 du plomb ou de la peinture au plomb. La section 2.3 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 de plomb et de la peinture au plomb dans le cadre de leurs responsabilités législatives.

Il faut lire ces lignes directrices en utilisant parallèlement les *Lignes directrices sur la gestion des déchets dangereux* qui désignent la peinture au plomb comme un déchet dangereux. Les *Lignes directrices sur les batteries usagées* décrivent la gestion des déchets de plomb contenus dans les batteries.

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

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

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

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

1.1 Definitions

<i>Contaminant</i>	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 property.
<i>Discharge</i>	Includes, but not so as to limit the meaning, any pumping, pouring, throwing, dumping, emitting, burning, spraying, spreading, leaking, spilling, or escaping.
<i>Environment</i>	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).
<i>Generator</i>	The owner or person in charge, management or control of a hazardous waste or a facility or property that generates or contains hazardous waste.
<i>Hazardous product</i>	Any product, mixture, material or substance that is classified in accordance with the regulations made under subsection 15(1) in a category or subcategory of a hazard class listed in Schedule 2 of the Hazardous Products Act (Canada) .
<i>Hazardous waste</i>	A contaminant which is no longer used for its original purpose and is intended for recycling, treatment, disposal or storage as defined in the Guideline for Hazardous Waste Management . This includes waste lead and lead paint as defined in this guideline.
<i>Inorganic lead</i>	In general, lead substances that do not contain compounds of carbon, hydrocarbons or derivatives. These chemical compounds are usually found in powder or crystal form, but some are liquid. Uses include: frits, glasses, insecticides, wood preservatives, specific paints, pigments, plastics and rubber compounds.
<i>Leachate extraction procedure</i>	A test method designed to determine both the organic and inorganic parameters present in solid and multi-phased waste. The test procedure 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.
<i>Lead paint*</i>	Surface coatings that contain lead greater than 5.0 mg/L lead when subjected to the leachate extraction procedure.
<i>Listed waste</i>	Wastes listed in Schedule III of the Guideline for Hazardous Waste Management .
<i>Manage</i>	To handle, transport, store, recycle, treat, destroy or dispose of hazardous waste.

* The Code of Practice "Working with Lead Guideline" that is administered by the Workers' Safety and Compensation Commission defines "Lead-containing Materials" that includes numerical thresholds established for the purpose of occupational health and safety of workers and employers. The definitions in this guideline are established to be protective of the environment.

<i>Metallic lead</i>	The solid metal form of lead, bluish-white or silvery-gray in colour. It is relatively heavy, very soft, highly malleable, ductile, and a poor conductor of electricity. It has a low melting point and is very resistant to corrosion. Uses include: ammunition, electrical storage batteries (lead acid batteries), lead solder, pipes, sheaths for electrical cable and radiation shields.
<i>Organic lead</i>	In general, lead combined with a chemical compound containing carbon. Organic lead compounds are created by combining lead with primarily carbon and hydrogen. These compounds can be found in powder, crystal, paste or liquid form. Uses include tetraethyl lead (used as an anti-knock agent in gasoline), tetramethyl lead, lead naphthanate, lead stearate and lead oleate.
<i>Paint</i>	A surface coating material that dries to a solid film when a layer is applied to a surface. It does not include material that becomes a part of the substrate.

List of Acronyms used in this Document

CALA	Canadian Association for Laboratory Accreditation Inc.
CCME	Canadian Council of Ministers of the Environment
ED	Environment Division
ENR	Department of Environment and Natural Resources (GNWT)
EPA	<i>Environmental Protection Act</i>
GNWT	Government of the Northwest Territories
HPA	<i>Hazardous Products Act (Canada)</i>
HSS	Department of Health and Social Services (GNWT)
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ICI ¹	Industrial, Commercial, Institutional
IMDG	International Maritime Dangerous Goods Code
NWT	Northwest Territories
OHS	Occupational Health and Safety
SSPC	Society for Protective Coatings (Canada)
SCMR	Surface Coating Materials Regulations (Canada)
SDS	Safety Data Sheet

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.

TCLP	Toxicity Characteristic Leaching Procedure
US EPA	United States Environmental Protection Agency
WHMIS	Work Site Hazardous Material Information System
WSCC	Workers' Safety and Compensation Commission

1.2 Effects of Lead in the Environment

Historically, lead was used in many commercial products including: paint, gasoline, insecticides and batteries, to name a few. It is now known that products and structures painted with leaded paint are a source of health and environmental contaminants. Lead in gasoline and household paints are now restricted by federal legislation, as are lead pellet shotgun shells used for hunting migratory birds as well as solder used in food cans.

Lead has been subject to numerous risk management initiatives, and as a result of these efforts there has been a significant decline in the concentration of lead in the ambient air as well as the blood lead levels of Canadians in the past thirty years. Despite the decline in lead levels, new scientific research by Health Canada has concluded that additional measures are still required to further reduce exposure to lead. While lead can be harmful to the health of people of all ages, infants and children are a susceptible subpopulation for lead exposure. The United States Environmental Protection Agency (US EPA) and the World Health Organization have stated that there is no known safe level of lead in infants and children that would not cause neurodevelopmental impacts.

Lead is also toxic to living micro-organisms in the water column, sediment and soil. When lead is released into the environment it will bioaccumulate and enter the food chain. Chronic exposure to relatively low levels of lead may cause chronic health symptoms and disability. As a result lead is still the subject of numerous risk management initiatives across Canada directed towards consumer products, food and the environment.

1.3 Common Sources and Types of Lead

Lead is typically grouped into three main types: metallic lead, organic lead, and inorganic lead.

Metallic lead

Automotive industry: wheel weights, bearings, friction additive in clutch facings and brakes, batteries.

Construction industry: flashing, pipe, sheeting, counterweights, paint additives, tile, roofing material, plumbing materials.

Electronic industry: cathode-ray tubes, radiation shielding, solder, ceramic coated capacitors.

Resource industry: fishing sinkers, rifle bullets, and backstops at rifle and pistol ranges.

Printing industry: letter blocks.

Welding: lead paint, alloys, galvanized metals.

Organic lead

Miscellaneous:	paint, insecticides, fungicides, chemical reagents, gasoline additives, pigments, dyes.
Artists:	lead solder, glaze, and leaded glass.
Automotive industry:	paints, rubbers, dyes, corrosion inhibiting pigment in paints, primers and spent glycol solution removed from cooling systems with heat exchangers made from alloys containing lead as an adhesive.
Aviation industry:	aviation fuel and used oil from aircraft using leaded fuel.
Oil field construction:	joining compound (pipe dope).

Inorganic lead

Miscellaneous:	manufacture of explosives, blasting caps, matches, pyrotechnics, chemical reagents, pigments, and dyes.
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There are three main routes for exposure to lead:

1. Inhalation: breathing in lead dust, fume or vapour where lead products are heated or where cutting and grinding creates dust.
2. Ingestion: eating, drinking, smoking, or any hand to mouth action in areas where lead contamination exists.
3. Skin Absorption: particularly contact with organic forms of lead.

For the purpose of this guideline, only the following wastes containing lead and their management are further addressed:

- lead amended paint, and
- sand or soils used as backstops at rifle and pistol ranges or other lead contaminated soil.

2

Roles and Responsibilities

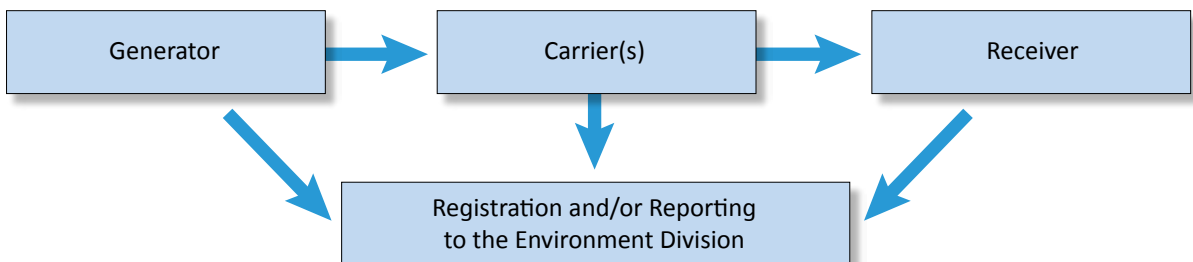
2.1 Environment and Natural Resources

The Department of Environment and Natural Resources (ENR) is the Government of the Northwest Territories (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 EPA (See Appendix 1) and *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 six-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 as a hard copy by the ED.

If hazardous waste is to be transported off the originating site, the generator, carrier and receiver 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.

Figure 1: Movement of Hazardous Waste and Record Keeping



2.2 Generators

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

The owner (generator) of the waste lead or lead paint is responsible for ensuring it is safely removed, handled, packaged, stored, transported, treated and/or disposed in accordance with this guideline and all applicable Acts and regulations. Waste lead and lead paint is listed as a hazardous waste in quantities greater than 5 kg and the ultimate disposal needs to be confirmed on a hazardous waste movement document (waste manifest). Generator numbers, hazardous waste movement documents and a list of registered hazardous waste carriers are available from ED.

The [Guideline for Hazardous Waste Management](#) should also be referenced for further details regarding generator, carrier and receiver responsibilities.

2.3 Other Regulatory Agencies

It is important to contact the applicable land and water board for activities that may require their authorization. The contact information for the Land and Water Boards as well as ENR and other agencies can be found in Appendix 2.

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 WSCC developed the “*Working with Lead Code of Practice*” and a *lead project notification* is required prior to undertaking a lead abatement project. The criterion developed by the WSCC is intended for occupational health and safety. The criterion in the Guideline for Waste Lead and Lead Paint for disposal is different from occupational health and safety, and is developed to be protective of the environment.

Department of Health and Social Services (HSS)

HSS is the GNWT body responsible for public health and safety in accordance with the *Public Health Act*, and *General Sanitation Regulations*. The Office of the Chief Public Health Officer provides public health messaging and guidance based on reviewed information provided by responsible departments. For example, exposure to lead paint in a public place, may have an adverse impact on human health. The Office of the Chief Public Health Officer should be consulted when lead exposure primarily impacts human health.

3

Waste Management

Minimizing or avoiding the creation of pollutants and wastes can be more effective in protecting the environment than treating or cleaning them up after they have been created.

– *Canadian Council of Ministers of the Environment*

3.1 Pollution Prevention

Pollution prevention methods eliminate the creation of environmental contaminants by preventing the waste from being created in the first place. “Pollution control” methods are geared towards treating the waste *after* it’s created. Advances in the paint and coatings industry have resulted in the development of superior paints and coatings that provide corrosion resistance on steel and other structures. Leaded paints are no longer required.

Pollution prevention methods for structures with leaded paint include:

- repainting without complete paint removal; or
- spot painting, overcoating, zone coating, or painting entirely.

3.2 Lead Paint Abatement

3.2.1 Paint Identification and Sampling

It is the owner’s responsibility to identify the presence of lead amended paint. Some paints used before 1950 could contain as much as 50% lead by weight. Starting in the 1950s, the amount of lead in paint began to decrease as other pigments were substituted. In 1976, federal legislation in Canada limited the amount of lead in interior consumer paints to 0.5% by weight (or 5,000 ppm). In 2005, exterior and interior consumer paint products were subsequently reduced to 600 ppm (0.06%) by weight.

The amount of lead in consumer paint products is currently regulated according to the [Surface Coating Materials Regulations](#) (SCMR) under the *Canada Consumer Product Safety Act* to not contain more than 90 mg/kg lead, however certain types of paint products are exempt and may still contain elevated levels of lead. The SCMR lists the types of paint that are exempt from the 90 mg/kg limit and may contain leachable levels of lead as follows.

- (a) as an anti-corrosive or anti-weathering coating on the interior or exterior surface of a building having an agricultural purpose or on equipment having an agricultural purpose;
- (b) as an anti-corrosive or anti-weathering coating on a structure, other than a building, having an agricultural or public purpose;
- (c) as a touch-up coating on metal surfaces;
- (d) in the production of outdoor graphic art, including billboard displays; or
- (e) in an art, craft or hobby activity, except if the surface coating material is used by children.

For more information on the requirements under the *Surface Coating Materials Regulations*, you may contact your regional Health Canada Product Safety Office:

http://www.hc-sc.gc.ca/contact/cps-spc/hecs-dgsesc/ps0-bsp_ab-nt-eng.php.

Elevated levels (not below 0.1% or 1,000 mg/kg) of lead in workplace chemicals can be identified by reviewing the Safety Data Sheets (SDS), which must accompany all hazardous products distributed in Canada. Manufacturers or their product distributors are required to provide an SDS with their hazardous products, however SDS sheets are not required for consumer products.

Common examples of where lead amended paint is found include:

- barges and ships;
- heavy equipment;
- steel painting facilities;
- pipelines;
- fuel storage tanks;
- steel bridges;
- steel towers;
- grain storage bins; and
- rail cars.

Painted tanks or other steel structures should be sampled for confirmation of lead amended paint and lead concentration prior to sandblasting or other maintenance activities.

In addition to lead, industrial or steel coatings such as paint and paint primer, may contain other contaminants to be aware of such as arsenic, polychlorinated biphenyls (PCBs), cadmium, chromium, copper, magnesium and mercury. These are toxic substances if inhaled or ingested.

If the level of lead in the paint is not known and may contain elevated levels of lead it is the owner's responsibility to treat it as lead amended paint, or have a sample taken and analyzed at an accredited laboratory to determine the level of lead in the paint. Health Canada also has [information](#) to help consumers work safely with old lead-based paint (such as when doing renovations):

http://www.healthykanadians.gc.ca/security-secureite/home-maison/lead_paint-peinture_plomb-eng.php.

Waste lead paint is a hazardous waste when the concentration of lead **is greater than 5.0 mg/L lead when subjected to the leachate extraction procedure**, as outlined in **Table 1**. The criteria is meant to be protective of the environment but is not suitable for determining safe levels of exposure to workers, or building occupants as determined by other agencies such as WSCC and HSS.

Table 1: Disposal criteria for lead paint into solid waste facilities

Compound	Disposal Criteria
Lead	Less than or equal to 5.0 mg/L

Paint Samples

A paint sample should be collected from tightly adhered paint and comprised of all layers of paint. It is important to confirm with the laboratory the amount of sample required to complete the analysis. Make sure to scrape down to the metal or wood (substrate), being careful not to include the substrate in the sample. A sturdy plastic bag is an adequate container. The paint should then be analyzed at an accredited laboratory. The analytical data should then be forwarded to ED or the regional Environmental Protection Officer.

Laboratories can be identified through their accreditation associations such as:

- Canadian Association for Laboratory Accreditation Inc. (CALA) (613) 233-5300 <http://www.cala.ca>
or
- Standards Council of Canada (Environmental Laboratories) (613) 569-7808
<https://www.scc.ca/en/accreditation/laboratories>

The [Working with Lead Code of Practice](#) should be referenced when taking samples for lead paint analysis. It is important to contact the laboratory to ensure that an adequate sample is taken for analysis based on the WSCC requirement as well as leachate toxicity testing for disposal.

3.2.2 Lead Paint Removal

Sandblasting should only be considered after a thorough evaluation of the structure and pollution prevention options, due to the potential health and environmental hazards.

Repainting of steel structures for rust protection frequently involves sandblasting of the deteriorated paint, in preparation for a new coating of primer and paint. Painted tanks or other steel structures should be sampled for confirmation of lead and lead concentration prior to sandblasting or other maintenance activities. Consultation with the appropriate regulatory agencies prior to starting lead abatement projects is the responsible work strategy to prevent public, worker and environmental impairment.

Sandblasting Media Hazards

Crystalline (free) silica is carcinogenic to humans when inhaled in the form of quartz or cristobalite from occupational sources. Non-carcinogenic abrasives should be specified for sandblasting.

Alternatively, ultra high pressure water jetting, vacuum power tools, rotary power tools, vacuum head needle guns, and chemical strippers of leaded paint do not produce the same levels of dust. Names of alternate blasting media suppliers are available by contacting the paint associations listed in Appendix 2.

3.2.3 Containment of Lead Paint and Abrasive Debris

Regardless of the lead amended paint removal method, total containment of the leaded paint and abrasive debris or paint strippers is a requirement of the EPA.

The [Working with Lead Code of Practice](#) should be referenced for developing a “Lead Exposure Plan” based on the WSCC requirements.

Containment devices and techniques include, but are not limited to:

- drop sheets or tarps;
- shrouding or free-hanging enclosures;
- total structure enclosures;
- dampening methods; or,
- negative pressure containment.

High-pressure water jetting for paint removal requires that the wastewater must be filtered to remove all paint residues and it must be tested to ensure it meets the appropriate criteria for lead prior to discharge.

A water containment and discharge plan is required by ED prior to receiving discharge authorization. A plan must include at minimum the following:

- Anticipated volume of water;
- Method of containment;
- Frequency of discharge;
- Location of discharge;
- Identification of sensitive receptors (e.g. nearby surface water, residences, ditches);
- Pollution prevention methods (e.g. screens, filters, etc.); and
- Certificate of analysis indicating levels of contaminants such as lead.

3.2.4 Recovery of Lead Paint and Abrasive Debris

Once lead paint debris has been contained, the recovery of paint residues must be undertaken frequently to prevent dispersal by wind. A vacuum is recommended as a rapid on-site collection method. Sweeping and shoveling are also used for cleaning abrasives from the ground covers.

Collection containers must not allow sandblasting wastes to spill or leak into the environment. Open-top drums, with sealable lids, or strong plastic bags are examples of materials that can be used for waste collection and storage pending disposal. Debris collection techniques include:

- capture from surface at point of cleaning (vacuum blasting);
- capture from containment enclosures (sweeping, vacuuming);
- capture from ground or over water (tarps); or
- channeling debris to specified collection points.

3.3 Rifle Range Backstop or Lead Contaminated Soil

The management of soils on land that is contaminated with lead is outlined in the Environmental [Guideline for Contaminated Site Remediation](#).

Sample collection from rifle range backstops should be done by following the procedures provided by an accredited analytical laboratory to ensure representative samples are obtained. Personal protective equipment may be required, consult WSCC Safety Officers. The US EPA developed a document titled, “[Best Management Practices for Lead at Outdoor Shooting Ranges](#)” that may be referenced for information regarding adequate environmental protection protocols for operating a outdoor shooting range. The [Guideline for Hazardous Waste Management](#) needs to be referenced for transportation and disposal of contaminated soil.

3.4 Storage

Lead compounds or materials contaminated with lead must be stored in a safe and secure manner. They should be in leak-proof containers to prevent release into the environment. Depending on the material, the packaging should be designed to prevent contact with precipitation or it should be stored securely indoors.

The [Guideline for Hazardous Waste Management](#) should be consulted for further details regarding storage and registration.

Anyone storing lead waste for a period of 180 days and in quantities exceeding 5,000 kg or L will need to register their storage facility according to Section 2.5 of the [Guideline for Hazardous Waste Management](#).

3.5 Transportation

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.

In the NWT, specific requirements for hazardous waste carriers and the use of hazardous waste movement documents, are detailed in the [Guideline for Hazardous Waste Management](#).

3.6 Disposal

Metallic Lead

Disposal of metallic lead, such as wheel weights or sheeting, can be done by shipping to a lead or metals foundry, or a metals recycler (metallic lead is not listed in the *Transportation of Dangerous Goods Act* or regulations).

Leaded Paint/Soils

Disposal options for leaded paint, sandblast residue, and lead contaminated soils/materials from pistol and rifle range backstops include transport to a registered hazardous waste disposal facility, or a lead or metals foundry. The receiving facility must be registered in the receiving province or territory and approved to manage that waste.

Alternative Management Methods

There are numerous methods for stabilizing hazardous components, such as lead, in soils or other media (e.g. zeolite, concrete) that prevent their movement into the greater environment. The stabilization methods and effectiveness are typically dependent on site specific conditions; therefore a comprehensive listing of alternative management methods is beyond the scope of this guideline. ED may approve subject to conditions, if leachate test results are in accordance with the [Guideline for Hazardous Waste Management](#). Consideration will be given to proposals for alternate management methods that provide a level of environmental protection equivalent to those discussed in this guideline. Alternative management methods must be submitted to ED for review and approval before being utilized.

4

Conclusion

This guideline presents a brief introduction to the management of waste lead and lead amended paint. It is intended to provide direction when making waste management decisions in order 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/node/3054>) or contact:

Environment Division
Department of Environment and Natural Resources
Government of the Northwest Territories
PO Box 1320
700, 5102-50 Avenue
Yellowknife NT X1A 2L9

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

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.

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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 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.

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- 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:

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

Regulatory Agencies

1. Environmental Health

Department of Health and Social Services
5015 49 Street
Box 1320
Yellowknife, NT X1A 2L9
Phone: (867) 767-9066

2. 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

Industrial Safety (Inuvik): 1 (867) 678-2301

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) 713-2500	http://wlwb.ca/
Inuvialuit Water Board	(867) 678-2942	www.inuvwb.ca/
Environmental Impact Screening Committee	(867) 777-2828	http://www.screeningcommittee.ca/

Waste Exchanges

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

Environmental 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
Global Alliance to Eliminate Lead		http://www.who.int/ipcs/assessment/public_health/gaelp/en/
Northern Territories Water and Waste Association	(867) 873-4325	http://www.ntwwa.com
Standards Council of Canada (Environmental Laboratories)	(613) 238-3222	https://www.scc.ca/en/accreditation/laboratories

Paint Associations

Canadian Paint and Coating Association	(613) 231-3604	http://www.canpaint.com/
Master Painter Institute		http://www.mpi.net/
Society for Protective Coatings	(877) 281-7772	http://www.sspc.org/

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